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CHINESE STUDENTS’ DECISION-MAKING IN HIGHER EDUCATION: THAI MARKET

JITTIKHUN NIYOMSIRI¹

ABSTRACT

This paper presents the findings of an exploratory mixed-methods study into the consumer purchase decisions about higher education in Thailand by Chinese students. The research is based on a theoretical model by Cubillo, Sanchez and Cervino (2006). Four factors in the consumer decisions – personal reasons, country image effect, institution image, and programme evaluation – were examined. The study used a student questionnaire (n = 80) and a focus group (n = 10). Participants were Chinese students at different universities in Bangkok and Chiang Mai. The questionnaire was analysed using a structural equation model. This analysis showed that institution image and programme evaluation were significant factors in the choice of a Thai university, but the country image effect and personal reasons were not. In contrast, the focus group interviews showed that personal reasons like language development, was essential to students as well as institution image and programme evaluation, but country image was less important for their choice.

Key Words: purchase intention, consumer behavior, higher education, decision-making

INTRODUCTION

Currently, there is a mass movement of students studying abroad; the amount of the group doubled from 2.1 million in 2000 to 4.5 million in 2011 globally. The number expected for 2014 is about 5 million, with a rising trend to 2015 (OECD, 2013). Asia alone was the source region of more than half of all students studying outside their home country. Growth of the figure is mainly attributable to China, India, and South Korea. Together these three top nations account for more than 25 percent of internationally mobile students. However, now the pattern of student movement is shifting from English-speaking countries to the trend called intra-regional mobility, where students who study abroad but within their home region (ICEF Monitor, 2014; Sharma, 2014).

Thai government policy positioned the country as an international education hub by creating a strategy based on three strengths: leading academic institutions with international standards, a variety of curricula for all levels of students, and educational exhibitions and activities (Ministry of Education, 2008). Recently the Department of International Trade Promotion responded to the programme and organised the “Thailand International Education Expo: The 10th TIEE” in February 2013, focusing on the theme “Live & Learn in Wonderful Thailand” (Thai Trade Center Los Angeles, 2012).

The decreasing birth rate in many nations including Thailand resulted in less of the population in higher education. Therefore academic institutions pay attention to seeking foreign students instead. Chinese students form one of the target markets, given this huge demographic. Thus, this paper contributes to investigating and understanding factors influencing Chinese students’ decision making regarding higher education in Thailand. Furthermore, the paper provides information on the current international education market situation.

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LITERATURE REVIEW

The concept of marketing of higher education institutions

From an academic viewpoint, international students are hardly perceived as consumers of a university (Bejou, 2005). Many marketers’ research tends to use the concept of exchange, which also reflects the meaning of marketing itself. Educational academies are offer both tangible and intangible services (Liechty and Churchill, 1979). They provide programmes, degrees, social interaction between seniors and juniors, facilities like IT centres, libraries and cafeterias, and other benefits to their students. This is in exchange for tuition fees, donations and other support (Kotler and Fox, 1995). Both sides decide to exchange, and finally end up better off.

The quality of intangible services is defined by the people who provide them, such as lecturers and administrative officers (Gibbs and Murphy, 2009). Liechtly and Churchill (1979) argued that education is the most intangible of all services. With the difficulties of judging the service, students then encounter a high risk during course and university selection process (Ali-Choudhury, Bennett and Savani, 2009).

This paper uses the marketers’ perspective by examining some of the models influencing a decision-making process, especially for higher education selections. Nonetheless, in order to set the framework of this paper, the consumer decision-making process is introduced before touching on the purchase intention, which is the focal point. The concept of programme or educational institution selection by international students is still limited and little explained (Cubillo, Sanchez and Cervino, 2006; Maringe and Carter, 2007). International students in this study consist of Chinese students willing to attain higher education in Thailand, which consists of bachelor, master, and doctorate programmes. A general model of consumer decision-making is presented first, followed by the specific model specifically for the higher education market.

Consumer decision-making in higher education

Consumer decision-making has been studied by various researchers focusing on their own target groups (Kotler, 2003; Mullins et al., 2004). Studying the area of higher education marketing is still in an early stage (Hemsley-Brown and Oplatka, 2006). This is mostly done for a specific institution and based in the UK and Australia, rather than Thailand. The earliest research on consumer decision-making in education was done by Chapman (1981). Chapman explained that students’ decisions are affected by their characteristics as well as the external influences. The consumer decision-making process represented in Figure 1 was developed by Kotler and Armstrong (2006, p. 147). Consumers are passing along five steps when they are in a new and complex purchase situation. The process consists of need recognition, information search, evaluation of alternatives, purchase decision and postpurchase behaviour. It is important that marketers pay attention to every stage, not only purchase decisions.

Figure 1: Consumer decision-making model

![Figure 1: Consumer decision-making model](source: Kotler and Armstrong (2006, p. 147))

Understanding of the process can give higher education institutions insight into students’ perceptions and major needs. This can facilitate organisation to differentiate institutions from
competitors and create a powerful marketing strategy (Wiese, Van Heerden and Jordaan, 2010). Furthermore, knowledge of choice factors influencing the students’ decision will give deep insight into their final decision, which is the aim of this paper.

**Purchase intention in higher education**

Analysing consumers’ intentions is a common method used by marketers to investigate the real behaviour of target buyers (Blackwell, Miniard and Engel, 2006; Ghalandari and Norouzi, 2012). The word intention alone refers to the prior factors that influence and lead clients’ actions (Hawkins and Mothersbaugh, 2010). Azjen (1991) agreed that intention not only encourages people but also affects their purchase actions. According to the previous research, the greater the intention strength, the higher the possibility of purchase behaviour (Kim and Pysarchik, 2000). The highlight of this study is to explore how Chinese students’ choices to study abroad, in this case in Thailand, are impacted by the features surrounding them (Woodside and Martin, 2008).

The specific model of purchase intention developed for the education market is established by Cubillo, Sanchez and Cervino (2006, p. 107). There are five factors affecting the consumer decision-making process: personal reasons, country image effect, city effect, institution image, and programme evaluation. Each type is measured by sub-issues shown in Figure 2. Nevertheless, this researched model is based on existing concept reviews, so the nationality of respondents (students) varies. However, this study tests the model for one race of students, Chinese only. Moreover, the geographic scope is narrowed in order to benefit the Thai higher education market.

**Figure 2: Purchase Intention Model**

As this is pioneering research, some complexity is reduced due to the limited time; therefore factors in the purchase intention model are used with the exception of city image. Cubillo, Sanchez and Cervino, as quoted in Hilden (2013, p. 24), reported that “student’s perception of the destination city will also influence the decision process as well as the country image”. The elimination is also supported by Hilden’s (2013) research on international students’ decision-making process in Finland. Hilden excluded the city image as it is a part of the country image.
Hypothesis one: Personal reasons have a positive influence on students’ purchase intentions regarding higher education

According to Dawes and Brown (2002), Kim (2004), Nora (2004), Yamamoto (2006), and Raposo and Alves (2007), personal factors have the highest positive influences when students select a university. Especially for Asians, reference groups are very effective, for example opinions of siblings, friends, peers, relatives, and teachers (Bourke, 2000; Ceja, 2004; Yamamoto, 2006, p. 561; Pimpa and Suwannapirom, 2008; Wagner and Fard, 2009). In British education, Binsardi and Ekwulugo (2003) found that half of the students sampled trust alumni networks as the key personal marketing strategy for the country.

Hypothesis two: The country image effect has a positive influence in students’ purchase intentions regarding higher education.

Country socioeconomic status, as found by Chung, Fam and Holdsworth (2007), is not an important factor for international students in New Zealand. However, McMahon (1992) noted that a host country’s economic size relative to the home country’s influences student choices. McMahon’s study result showed a negative relation between economic prosperity in home countries and the quantity of international student flows. Moreover, the geographic relationship between host and home countries is viewed as an essential factor (Veloutsou, Lewis and Paton, 2004; Tavares et al., 2008). Some researchers agreed that the country has a greater impact than the institution (Srikatanyoo and Gnoth, 2002). Maringe and Carter (2007, p. 461) stated that students choose to study in England first, and the university comes later. The scope of internationalism and globalisation makes the country issue even more significant in choosing the learning destination.

Hypothesis three: The institution image factor has a positive influence in students’ purchase intentions regarding higher education

Moving on to the institution image, Qureshi (1995), Mazzarol (1998), and Bourke (2000, p. 114) showed that a positive image led to students’ decisions to enrol in institutions. The measured factors related to institution image covered four out of six factors in an education marketing mix presented by Mainardes et al. (2011), which consisted of the education service, price of education, communication in education, place in education, people in education, and process in education. Place in education is represented by facilities on campus. Institution prestige and international recognition are the education service. Communication in education belongs to the communication factor. Finally, people in education is mentioned as a quality of professors. However, creating a strong appearance of an educational institution definitely takes a long time (Kotler and Fox, 1995). Consequently Peng, Lawley and Perry (2000) suggested that marketers put their effort into creating a powerful programme image instead. And they also showed that a programme evaluation is more important than either country or institution image.

Hypothesis four: An effective of programme evaluation is reflected mainly by the costs and finance

The programme falls into the ‘place’ factor of the education marketing mix (Mainardes, 2011, p. 49). And ‘price’ is shown by costs and finance. A study of universities in South Africa stated that financial aid offered ranks only 5th in the list of significant factors (Beneke and Human, 2010). Mazzarol and Soutar (2002) discovered a medium correlation between the fee and
number of student applications, with decreasing tuition fee having a moderate effect on Asian students. On the other hand, the cost of attendance is said to be very essential by the research of Maringe and Carter (2007, p. 469) and Qureshi (1995, p. 166), as it represents the risk encountered by students and their family. According to some other business viewpoints, the education fee is like an investment in a person, the return reflected by salary received in the future. People will invest only when they expect to earn more in the future (Domino et al.).

METHODOLOGY

This study utilises factors affecting purchase intentions developed by Cubillo, Sanchez and Cervino (2006, p. 107) to examine Chinese student decision-making in higher education. Since all methods have their own strengths and weaknesses, mixing them compensates for some disadvantages of each other (Kent, 2008). Data is collected in a sequential process (Creswell, 2009). Beginning with a quantitative approach through questionnaires, and followed with qualitative research using a focus group (Davey, 2005), to determine the levels of significance of each element and capture some advice and opinions that are not covered in the model. In order to provide in-depth understanding of the influences affecting international students’ decisions to study abroad, Rudd, Djafarova and Waring (2012) stated that qualitative analysis is needed.

Questionnaires’ questions are developed from the Cubillo, Sanchez and Cervino (2006) model with the exception of city image, so there are four latent variables measured based on observed variables that emerged from the literature. The survey is divided into Section A and B and is in English only. The former part is personal information and the latter covers the dimensions of each issue. For the second part, answers are in the form of scales, ranked from one to five. According to a five-point Likert scale (Likert, 1932), each item has five response categories running from totally disagree to totally agree: one means totally disagree, two is disagree, three stands for medium or neither agree nor disagree, four is agree, and five means totally agree.

The pilot survey was tested in order to ensure that there were no misunderstandings of words and sentences were easy to interpret, as well as to confirm the investigation was accurate and adequate (Curwin and Slater, 2008). From the pilot review, some sentences were adjusted and the survey was prepared for the next stage, collection.

A non-probability, convenience sampling of 80 questionnaires was conducted through Chinese student respondents who studied in Thailand, mostly in Chiang Mai while others were from Bangkok. In Chiang Mai, forms were completed by Chinese students enrolled in Chiang Mai Rajabhat University and Chiang Mai University. In Bangkok, respondents were from Assumption University of Thailand. Concerning the problem of the return rate, 200 questionnaires were sent out, and resulted in 98 returns. Some surveys were eliminated due to incomplete answers, therefore researchers used only the 80 qualifying questionnaires.

A focus group is a form of qualitative data collection. One focus group was held with ten Chinese students selected by convenience sampling; all of them were registered as Chiang Mai Rajabhat students, but in different academic years. Burns and Bush (2006) recommended focus groups as they can generate insights and attitudes. This method therefore provided a concentrated discussion regarding the most influential factor for Chinese student decision making (Rudd, Djafarova and Waring, 2012, p. 133). Focus groups are planned and arranged for a specific date and time to suit the availability of every respondent. Moreover, respondents are asked to agree to the interview beforehand. Respondents do not need to provide their names and only the information received is examined.

Information was analysed using a structural equation model (SEM) through the AMOS statistics programme to ensure that under the circumstance of a similar cultural background
(Chinese students), students’ decision-making process can still be established using those factors shown in Figure 2 (or not). Initially for SEM, the measurement model is tested using seven fit index statistics: comparative fit index (CFI), goodness of fit index (GFI), adjusted goodness of fit index (AGFI), root mean square error of approximation (RMSEA), root mean square residual (RMR), normed fit index (NFI) and incremental fit index (IFI). The result will show the observed variables’ standardised factor loading for each latent factor. Finally, the factors’ influence effect on purchase intention is verified.

**FINDINGS**

**Quantitative results**

The quantitative model’s explicit variables included personal reasons, country image effect, institution image, and programme evaluation as factors in the consumer decision for a specific institution in Thailand. Figure 4 shows the model fit summary for the SEM test of this framework.

**Figure 4: Model Fit Summary**

This model did not display a strong goodness of fit. The Akaike information criterion (AIC) for the default model was the smallest of all three considered models (AICDefault = 317.186, AICSatuated = 342.000, AICIndependence = 972.162). This indicates that the default model is the best fitting of all three models tested. However, other measures of fit did not indicate that the default model showed a strong fit. GFI and AGFI showed moderate goodness of fit (GFI = 0.784) (AGFI = 0.718). This indicates that 78.4% of variance/covariance can be explained by the model (using the GFI figures). This is not enough for absolute acceptance of the model, but since GFI and AGFI are sensitive to small sample sizes (Byrne, 2010), and this study had a sample size of n = 80, this is not enough to reject the model. The RMSEA value for the default model did not reach the < 0.05 threshold (RMSEA = 0.091). However, many of the fit indicators (including CFI and IFI) approached acceptance levels. Overall, this was not a closely fitting
model, which is explained by the regression weights (as one factor was insignificant). However, it is moderately well fitting at a level that could be explained as descriptive.

**Table 1: Summary of descriptive approximate fit measures for default model**

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Value</th>
<th>Level indicating good fit</th>
<th>Did model deliver good fit?</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIC</td>
<td>316.186 (Default)</td>
<td>(Comparative)</td>
<td>Best fitting model produced was default</td>
</tr>
<tr>
<td></td>
<td>342.000 (Saturated)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>972.162 (Independence)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CFI</td>
<td>0.866</td>
<td>&gt; 0.95</td>
<td>No</td>
</tr>
<tr>
<td>GFI</td>
<td>0.784</td>
<td>&gt; 0.95</td>
<td>No</td>
</tr>
<tr>
<td>AGFI</td>
<td>0.718</td>
<td>&gt; 0.90</td>
<td>No</td>
</tr>
<tr>
<td>RMSEA</td>
<td>0.091</td>
<td>&lt; 0.05 = Close fit</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.05 to 0.08 = Approximate fit</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt; 0.08 = Poor fit</td>
<td></td>
</tr>
<tr>
<td>RMR</td>
<td>0.110</td>
<td>&lt; 0.10</td>
<td>No</td>
</tr>
<tr>
<td>NFI</td>
<td>0.748</td>
<td>&gt; 0.90</td>
<td>No</td>
</tr>
<tr>
<td>IFI</td>
<td>0.869</td>
<td>&gt; 0.90</td>
<td>No</td>
</tr>
</tbody>
</table>

Source for acceptance values: Byrne (2010)

The regression weights for each of the measured variables (Table 2) demonstrate the significant factors in the purchase decision. Significant factors in purchase intention included institution image ($p = 0.019$) and programme evaluation ($p = 0.002$). Personal reasons ($p = 0.979$) and image ($p = 0.079$) were not significant, although image approached significance. Variances are shown in Table 3.

**Table 2: Regression weights for default model**

<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>S.E.</th>
<th>C.R.</th>
<th>P</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase Intention $\leftarrow$ Image</td>
<td>.246</td>
<td>.140</td>
<td>1.755</td>
<td>.079</td>
<td></td>
</tr>
<tr>
<td>Purchase Intention $\leftarrow$ Personal Reason</td>
<td>.003</td>
<td>.104</td>
<td>.026</td>
<td>.979</td>
<td></td>
</tr>
<tr>
<td>Purchase Intention $\leftarrow$ Institution Image</td>
<td>.233</td>
<td>.099</td>
<td>2.348</td>
<td>.019</td>
<td></td>
</tr>
<tr>
<td>Purchase Intention $\leftarrow$ Programme Evaluation</td>
<td>.465</td>
<td>.147</td>
<td>3.163</td>
<td>.002</td>
<td></td>
</tr>
<tr>
<td>PR3 $\leftarrow$ Personal Reason</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PR2 $\leftarrow$ Personal Reason</td>
<td>1.119</td>
<td>.182</td>
<td>6.146</td>
<td>***</td>
<td></td>
</tr>
<tr>
<td>PR1 $\leftarrow$ Personal Reason</td>
<td>.847</td>
<td>.143</td>
<td>5.910</td>
<td>***</td>
<td></td>
</tr>
<tr>
<td>CIE3 $\leftarrow$ Image</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIE2 $\leftarrow$ Image</td>
<td>1.627</td>
<td>.423</td>
<td>3.849</td>
<td>***</td>
<td></td>
</tr>
<tr>
<td>CIE1 $\leftarrow$ Image</td>
<td>.850</td>
<td>.191</td>
<td>4.453</td>
<td>***</td>
<td></td>
</tr>
<tr>
<td>II1 $\leftarrow$ Institution Image</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II2 $\leftarrow$ Institution Image</td>
<td>.786</td>
<td>.113</td>
<td>6.940</td>
<td>***</td>
<td></td>
</tr>
<tr>
<td>II3 $\leftarrow$ Institution Image</td>
<td>1.013</td>
<td>.126</td>
<td>8.068</td>
<td>***</td>
<td></td>
</tr>
</tbody>
</table>
Table 3: Variances for default model

<table>
<thead>
<tr>
<th>Label</th>
<th>Estimate</th>
<th>S.E.</th>
<th>C.R.</th>
<th>P</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE1 &lt;--- Programme Evaluation</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td>PE1 &lt;--- Programme Evaluation</td>
</tr>
<tr>
<td>PE2 &lt;--- Programme Evaluation</td>
<td>1.408</td>
<td>.198</td>
<td>7.098</td>
<td>***</td>
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The estimates indicate that programme evaluation has the highest impact based on regression weight (0.46), followed by institution image (0.23).

In summary, the hypothesis outcomes are as follows:

- **Hypothesis 1**: Rejected. Personal reasons did not have a significant impact on student purchase intentions regarding higher education.
- **Hypothesis 2**: Rejected. Country image did not have a significant impact on student purchase intentions regarding higher education.
Hypothesis 3: Accepted. Institution image did have a significant impact on student purchase intentions regarding higher education.

Hypothesis 4: Accepted. Programme evaluation did have a significant impact on student purchase intentions regarding higher education.

It should be noted that these results are based on a small sample (n = 80). SEM typically requires a much larger sample to work effectively, with minimum samples often being twice as large as standard regression tests. This model was shown to have a poor fit based on approximate fit criteria. Thus, although these results were relatively weak it is possible that this is because of the sample size.

Qualitative results

In addition to the quantitative research, a focus group was also used to assess reasons for choosing to study in Thailand at the higher education level. The focus group discussion included ten Chinese students. This discussion revealed a much wider set of reasons for choosing to study in Thailand than were found in the literature review. Some evidence was also found for these factors. The most important difference is that rather than personal reasons like family relationships, the main reasons found were cultural and language competence and growth. This speaks to a cultural openness and adventurousness that may not be easy to satisfy at home.

Institutional image

Institution image did play a role in some students’ decisions to study in Thailand. One student remarked, “The teachers here help me to improve my knowledge and adapt to a different culture.” A second stated, “Education in Thailand is very systematic.” A third student stated, “Having international dormitory inside the university is great and very convenience.” Another student identified the university as a second home and have everything needed. Others agreed that institution gave them a foreign communication environment, thus they always need to speak English every day. As one student stated, “Environment is important, I stayed in international dormitory surrounded by other foreign students. If I cannot speak with them I will feel very lonely.” This shows that there is a positive image of the institution among the Chinese student.

Programme evaluation

Students are mention highly on programme evaluation in their choice of Thailand or Chiang Mai to study. “The programme schedule allow us to both study and doing activities, which give us a chance of knowing other Thai students.” Other comments are, “I can select three free elective subjects so I chose Thai language and Thai dance, it was one of my best experience”, “My most excited part of the programme was in forth year. I have to work outside in the real company [field experience subject] for the whole semester. I love it so much.”

Some of them are enjoyed on the low-cost of Thai education, one student said that “I paid equally for an international programme tuition in Thailand compared with a normal programme in other countries.” Another student agreed on the reasonable of a low-living cost, “Food and accommodation in Thai is worth for money.” Part of student mentioned, “Scholarship is the main topic, if I did not get it, I cannot afford to the costs.” Therefore, students are considered on a programme evaluation as a significant factor for their education choices.
Country image

Relatively few students explicitly mentioned the country image. One student identified the Thai people characteristic as a factor in their choice, stating that “[Thai] people are kind hearted. They all help me a lot.” Another student identified Thailand as a peaceful country with a positive image. The diplomatic and cultural connections of Thailand and China were also viewed as an issue. As one student stated, “At present China and Thailand has a good connection with economics and trade. It creates many life choices.”

Personal reasons

Cultural competence and intercultural experience was one of the major reasons for choosing to study in Thailand. One student remarked that this study allowed her to “learn and study the local culture,” while another indicated that “language improvement” was a major goal. Another remark was that “As a student who wants to improve languages, learning surroundings are so important. I think Thailand gives more chance for this.”

Other students also agreed that learning the Thai language and about Thai culture, along with making friends from other cultures, was a main reason for studying in Thailand. Students were interested in not only learning Thai, but also learning English and interacting with people from other cultures. One student stated, “There are many foreigners in Thailand, so when we are studying, we can encounter more different cultures from different countries. We can open our mind and spread our wings.” Thus, studying in Thailand is seen as a form of cultural freedom compared to the students’ homeland.

There were some reasons that were more about future experience or life rather than the direct experience of learning. A few students expressed future intentions to work in Thailand or in different countries than China. One student stated that “I want to know the local culture and I want to get an opportunity to get a job in Thailand after I graduate.” For another, the choice was driven more by family needs. “My family wants me to study in Thailand... if I can understand Thai people and culture, I can help my family’s export business in future.” Thus, forward-looking personal choices were also an issue.

Summary

Students all had different reasons for studying in Thailand. However, there are some themes that were shared among them. Students had a positive image of Thailand, viewing it as a peaceful, beautiful culture, nice people, and comfortable place with low living cost. They also had positive images of education in Thailand in general and of the institution. One of the strongest common denominators was that students liked the programme evaluation, including activities and the field experience in the last semester. They also wanted to improve their language skills, particularly English. For some students, this was a future-oriented choice, with students seeking future economic advantages either within their family context or, for example, jobs in Thailand. Thus, while personal reasons did predominate, these were mainly economic or academic reasons rather than those that were family-related. Country image played relatively little role in the decision.

DISCUSSION

The quantitative and qualitative results had relating outcomes. The quantitative results indicated that the significant factors in student purchase decisions for university education in Thailand included institution image and programme evaluation. Personal reasons and country image did not have a significant impact. Moreover, when discussing the reasons for studying in Thailand in the focus groups, the most significant reasons also included programme evaluation and institution image. However, personal reasons did appear as considerable issue and there are
some factor that did emerge included language skills and intercultural contact, and potential future economic gains like being able to work in Thailand or help family firms. Country image is determined to be not important effect for both methods. These findings conflicted with the literature review, which suggested that all four factors would be important. One reason for these conflicts is probably the relatively undeveloped state of the literature on consumer decisions for university choice (Hemsley-Brown and Oplatka, 2006). Most of the studies that have been undertaken have not taken place in the Thai market or among Chinese students, and as a result there could be some variation.

Personal reasons are obviously a major factor in the literature review and the focus groups, though it was not significant in the SEM. The model of purchase intention proposed by Cubillo, Sanchez and Cervino (2006) did identify personal improvement, which is one of the major reasons identified in the focus groups. Specifically, language and intercultural contact was identified as a reason for studying in Thailand, although personal reasons on the whole were not significant in the SEM. The focus groups also showed positive views of Chiang Mai, which was consistent with these authors’ inclusion of a city effect component in their model (Cubillo, Sanchez and Cervino, 2006). Thus, this research may have been less limited had it imposed the full model, rather than following Hilden’s (2013) lead by eliminating the city effect component of the Cubillo et al. (2006) model.

Similarly, institution image was important in the literature review (Qureshi, 1995; Kotler and Fox, 1995; Mazzarol, 1998; Bourke, 2000; Peng, Lawley and Perry, 2000; Mainardes, et al., 2011). It was significant in the SEM and had major support in the focus group. Therefore, it is possible that students were likely to choose Thailand because of the institution image. This could also be true for the programme evaluation. Programme evaluation relates to the students’ views on the specific programme they choose, such as its recognition, suitability, specialisation, and costs and finance (Hemsley-Brown and Oplatka, 2006). It is possible that Chinese students have focus on this area. Furthermore, it is more likely that students choose the institution and programme first, then the country; thus, the country image may have less impact on their choice to study in Thailand generally.

However, a number of studies did identify the country image effect as significant for students (Srikatanyoo and Gnoth, 2002; Veloutsou, Lewis and Paton, 2004; Tavares et al., 2008; Maringe and Carter, 2007). This was not identified as a factor in the SEM and only limit number of student mentioned about the image of Thailand. The reasons for this are unclear, but it may be because of the limited sample size or because of inadequate specification of the country image factor. This is one of the problems of this study, though this was not unexpected given the exploratory nature of this research.

Overall, it is clear that the theoretical model presented by Hemsley-Brown and Oplatka (2006) of consumer decisions for higher education do not fully explain the choices of Chinese students in Thailand. However, cultural variations in context could be part of the reason for this gap, as could other reasons like measurement imprecision resulting from small sample sizes.

CONCLUSION
The purpose of this study was to examine the reasons for Chinese students choosing to complete higher education programmes in Thailand. Thai government policy has positioned Thailand as an international education hub, developing leading academic institutions and academic activities at all levels. As a result of this activity, Thailand has drawn students from around the Asian region. Many students in Asia do choose to study abroad internationally, with students from China, India and South Korea making up more than a quarter of students studying internationally. However, there has been very little study of the decision to study abroad as a
consumer decision. In fact, the decision of where to study is barely considered as a consumer decision at all, even though it is clear that to some extent it is one.

The study adapted the conceptual framework of the student choice of study location proposed by Hemsley-Brown and Oplatka (2006) for an exploratory study of Chinese students in Chiang Mai and Bangkok. The main factors that were studied included institution image, country image, programme evaluation and personal reasons. The study used a mixed-methods approach. A quantitative survey (n = 80) and a focus group (n = 10) were used to collect information about reasons for study. The quantitative study, which was analysed using SEM, showed that institution image and programme evaluation were the significant factors in programme choice. However, feedback from the focus groups suggested that the personal reasons (desire for cultural and language development and encounters with other cultures as well as future employment) is the additional significant factor. These minor conflicting results suggest that students have a number of different reasons for studying abroad. However, much more research is needed in order to understand those reasons.

The main recommendation for universities from these findings is that they should emphasise the opportunity for developing language skills and intercultural competence through cultural encounters. This is an area that was identified as a positive characteristic of Thailand in the focus groups and one that drove the decision to study in Thailand for several respondents. This could help improve the positive image of the Thai educational experience and help bring in more Chinese students.

The main recommendation for the academic field is that more study is needed on the motivations of international students. There was relatively little research available in the literature review and much of this was exploratory research. This led to inadequate guidance for the current study. Focusing more on the decision to study abroad could help explain the choice of university as a consumer decision, as well as the motivations regarding international contact and development of personal cultural competence.

REFERENCES


**APPENDIX**

**Abbreviations**

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<thead>
<tr>
<th>CIE1</th>
<th>Cultural proximity</th>
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<td>CIE2</td>
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DATA MINING AND TACTICS FOR SUSTAINING BUSINESS DEVELOPMENT

DR. KEN W. LI¹

ABSTRACT
Technology has offered various approaches to facilitate analysis of statistical data, such as visual statistical analysis system and data mining. The underlying philosophy of the data analysis empowers data analysts to concentrate on statistical thinking and leave the computational burden to computers. The former offers interactive graphical interface and the latter provides various tools to disclose patterns of big data so as to build models for credit scoring, customer relationship management, consumer behavior and so on. However, both are sometimes over-emphasized in the development of the models without justifying statistical results in line with the content, context and historical background of business data. For example, Traditional Chinese Medicine companies and Hong Kong-style Café have long history and culture in Hong Kong linking with stakeholders in their business. So, the models which have been developed merely by data mining tools may not be reliable or practical to address non-statistical questions inherent in business problems. As such, the author attempts to develop tactics for sustaining business development of Hong Kong-style Café beyond using data mining but incorporating marketing strategies.

Key Words: SWOT analysis, object value system, Hong Kong-style café, statistical methodology

INTRODUCTION
Hong Kong was under great influence of Western culture; Hong Kong-style Café is an example. The cafés offer Western food packaged in Hong Kong style, such as egg custard tarts, pineapple buns, pantyhose tea (brewed in pantyhose instead of traditional tea sock), Yin-yang (a mix of coffee and tea) at affordable prices, so working class go for meals. In addition, the cafés are located at busy areas good for people chatting with their friends. Hong Kong-style Cafés have long history and culture in Hong Kong. Some of the cafés could not sustain their business and closed down eventually but some are constantly expanding their business. To understand these two extreme business situations, it is quite common to adopt data mining approach. But, data mining may not provide practical and exhaustive solution to non-statistical questions that are inherent in business problems especially without taking into account of the history of café and culture in Hong Kong linking with stakeholders in the café business. As such, the author attempts to develop tactics for sustaining business development of Hong Kong-style Café beyond using data mining.

STATISTICAL METHODOLOGY

Data Collection and Data Validation
A questionnaire-based survey on public perceptions of Hong Kong-style Café was reported by Ching and Chung (2011). The survey was conducted by interviewing people on the streets near bus stops or train stations in Hong Kong. Through a personal interview, it was feasible to

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The paper is written on the basis of statistical results in the final year of report of Ching, Hoi .Lan and Chung, Wai .Man (2011) under the author’s supervision, with extended writings, such as implications of statistical results, SWOT analysis, and business tactics.
elaborate difficult and in-depth questions; to achieve a higher response rate; and to facilitate communication between an interviewer and interviewees in order to gather more accurate and genuine responses given by interviewees.

The survey data were inputted into computers and were checked to ensure the data were properly and correctly inputted. They were finally validated; no missing data, meaningless data range, data inconsistency or undefined data codes were found.

**Exploratory Data Analysis**

According to the report of Ching and Chung (2011), out of 333 survey respondents, 56% and 34% were males and females respectively. Most of the respondents were working class. More than 70% of the respondents were below age of 40. About 16%, 18%, 22% 24%, 12%, 3%, and 5% dined at Hong Kong-style cafés for 0, 1, 2-3, 4-5, 6-7, 8-9, and 10 times or more each week. About one-third of the respondents dined at the café for once per week or less because they mostly found cafés dirty and inconvenient relating to service hours and café’s location, poor services, expensive and disgusting food and/or limited choices of food. Apart from these reasons, they preferred dining at Chinese, Western, Japanese, Vietnamese or Thai restaurants because they found food hygiene and taste good as well as restaurant services and environment good.

On the other hand, 219 (66%) of the respondents dined at the cafés more frequently, i.e., twice or more per week because the cafés were at convenient location, and provided long service hours, speedy services, inexpensive and delicious food, and/or a variety of food. In addition, they were under peer pressure and were attracted by café advertisement. The reasons show in great contrast with the reasons for not or seldom dining at Hong Kong-style Café. Among the 219 frequent café diners, about 22%, 48%, 24%, 14%, and 9% had breakfast, lunch, afternoon tea, dinner and midnight snack respectively. About 17%, 63%, and 20% spent $25 or below, $26-$35, and $36-$45 respectively. Their most favorite drinks are lemon drinks (i.e., lemon was added to tea, water, Ribena or Coke), pantyhose tea, coffee, Ovaltine, Yin-yang, soft drinks, chocolate, red bean ice, Horlicks, watercress honey drink, with 23.3%, 22.8%, 10.5%, 8.7%, 8.2%, 6.9%, 5.9%, 5.5%, 5.0%, and 3.2%, respectively. Their most favorite dishes are rice (fried rice, baked rice or steamed rice); noodle (fried noodle, baked noodle, instant noodle or noodle with soup); pasta (spaghetti and macaroni), and others (i.e., bread, congee and snacks) with 42%, 32.4%, 14.6%, and 11%, respectively. When they were asked to give satisfaction ratings: from 1 to 5 (1 for very dissatisfied, 2 for dissatisfied, 3 for neutral, 4 for satisfied and 5 for very satisfied) to items relating to food and café, they gave 3.8, 3.7, 3.7, 3.5, 3.3, 3.4, and 3.4 to the efficiency of processing food order, the food quality, the food taste, the food hygiene, the food price, the café hygiene, and the café services respectively.

The frequent café diners were also asked to choose the most favorite eatery for dining, assuming that the food prices were more or less the same. About 24%, 21%, 14%, 13%, 11%, 10%, 5%, and 2% of them chose Western fast food chain, Hong Kong-style café, Eastern and Western restaurant, Western restaurant, Japanese restaurant, Eastern restaurant, Eastern fast food shop, Chinese restaurant, and Thai/Vietnamese restaurant respectively. They preferred other eateries to Hong Kong-style café because of personal preference (39%), better food taste (31%), better environmental hygiene (15%), better food hygiene (8%), better environment and interior design of eatery (6%), and others (1%). They were asked to express which factors relating to food and café were important to a good eatery using scores: 1 to 5 (1 for least important, … , and 5 for most important), they gave 4.17, 4.12, 4.04, 4.03, 3.97, 3.88, 3.81, 3.6, 3.41, and 3.02 to the food quality, the food taste, the food price, the café hygiene, and the café services respectively. Apparently, the first five items were important factors for a good eatery.
To sum up, people who seldom dined at Hong Kong-style café preferred Chinese, Western, Japanese, Vietnamese or Thai restaurants because of food hygiene, good food taste, good services, and good restaurant environment. On the other hand, the frequent café diners were generally satisfied with Hong Kong-style café but they would rather choose eateries other than Hong Kong-style café if no difference in food prices, mainly because of personal preference, better food taste, better environmental hygiene, better food hygiene, better shop environment and design. The keen competitor of the café is Western fast food chain. The quality, taste, variety, hygiene, and price of food are important factors for a good eatery, whereas the hygiene, services, food quantity, and decoration of an eatery as well as the efficiency of processing food order were relatively less important.

**Statistical Tests**

Ching and Chung (2011) investigated factors that might be related to the frequency of dining at the Hong Kong-style café by conducting Chi-square tests. The test \( \chi^2(6, n = 333) = 14.510, p = 0.024 \) shows statistical evidence to support the relationship between the frequency of dining at the café and genders of café diners, indicating that male respondents dined at the café more frequently than female did. Similarly, statistical evidence \( \chi^2(6, n = 333) = 26.282, p < 0.0001 \) substantiates the relationship between the frequency of dining at the Hong Kong-style café and the ages of café diners, revealing that the respondents aged 18-40 dined at the café more frequently than any age groups.

Ching and Chung further studied factors that might be related to the quality, quantity, and hygiene of food provided by Hong Kong-style café by conducting Chi-square tests. The test \( \chi^2(3, n = 333) = 26.282, p < 0.0001 \) shows statistical evidence to support the relationship between the quality of café food and genders of café diners, indicating that female respondents appreciated the food quality more than male did. Another statistical test reveals statistical evidence \( \chi^2(4, n = 333) = 42.926, p < 0.0001 \) to support the relationship between the quantity of café food and genders of café diners would also exist, revealing that female respondents appreciated the food quantity more than male did. Similarly, statistical evidence \( \chi^2(3, n = 333) = 30.231, p < 0.0001 \) substantiates the relationship between the hygiene of café food and genders of café diners, revealing that female respondents appreciated the hygiene of café food more than male did.

**Data Mining**

To gain insights into the survey data, Ching and Chung (2011) adopted data mining approach by using the Enterprise Miner of Statistical Analysis System. They built a logistic regression model, \( p_i = \frac{1}{1 + e^{-z_i}} \), where \( z_i = \beta_1 + \beta_2x_2 + \cdots + \beta_8x_8 \). By using the regression estimates: \( \beta_1, \beta_2, \cdots, \beta_8 \), scenario analysis could then be performed to yield the probability \( (p_i) \) of dining at Hong Kong-style café under given age group, gender, and occupation of the survey respondent by substituting different values of \( x_i \).

- \( x_2 = 1 \) if the respondent aged 26-35, and 0 otherwise;
- \( x_3 = 1 \) if the respondent aged 56 or above, and 0 otherwise;
- \( x_6 = 1 \) if the respondent was female, and 0 otherwise;
- \( x_7 = 1 \) if the respondent was a clerk, and 0 otherwise;
- \( x_8 = 1 \) if the respondent's occupation was construction-related, and 0 otherwise;
\( x_0 = 1 \) if the respondent’s occupation was education-related, and 0 otherwise;

\( x_{10} = 1 \) if the respondent’s occupation was finance-related, and 0 otherwise;

\( x_{11} = 1 \) if the respondent’s occupation was housewife, and 0 otherwise;

\( x_{12} = 1 \) if the respondent’s occupation was IT-related, and 0 otherwise;

\[ \vdots \]

\( x_{20} = 1 \), if the respondent’s occupation was trade-related, and 0 otherwise.

Tables 1, 2 and 3 summarize the probability of male and female survey respondents dining at Hong Kong-style cafés at least twice a week by age groups and three geographic regions of Hong Kong, i.e., Hong Kong Island, Kowloon and New Territories. The probability of respondent aged 56 or older dining at the cafés in Hong Kong Island for at least twice per week is the highest, attaining 99.7%–100% irrespective of their gender or occupation. This finding is unconvincing as almost all males or all females aged 56 or older are frequent café diners, if adopting highest probability as criterion for illustrating who are frequent café diners as plausible. Furthermore, this implies that neither the occupation nor gender of a survey respondent could predict the probability of dining at the cafés. Nevertheless, if not adopting this criterion, more persuasive results could be found; the probability of male respondent aged 26–35 dining at the cafés in Hong Kong Island for at least twice per week is the highest, attaining 72%–100% irrespective of their occupation. 100% probability refers to the respondents working in the industry of construction or education. Interestingly, the probability of young male professionals aged 26–35 dining at the cafés is much higher than their older counterparts aged 46–55 (i.e., 80% vs 12.7%). Similarly, the probability of female respondent aged 26–35 dining at the cafés in Hong Kong Island for at least twice per week is the highest, attaining 23.6%–100% irrespective of their occupation. 100% probability refers to the respondents working in the industry of construction and education. Surprisingly, these male or female frequent café diners aged 56+ were students achieving 100% probability; this sounds odd. The female survey respondents show more probability variations than their male counterparts.

Table 1: The probability of dining at Hong Kong-style café in Hong Kong Island at least twice a week\(^2\)

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Male respondents</th>
<th>Female respondents</th>
</tr>
</thead>
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<tr>
<td></td>
<td>26-35</td>
<td>56+</td>
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<tr>
<td>Clerk</td>
<td>72.0%</td>
<td>99.9%</td>
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<tr>
<td>Real estate</td>
<td>76.1%</td>
<td>99.9%</td>
</tr>
<tr>
<td>Service industry</td>
<td>87.3%</td>
<td>99.9%</td>
</tr>
<tr>
<td>Transportation</td>
<td>89.1%</td>
<td>99.9%</td>
</tr>
<tr>
<td>Professional*</td>
<td>95.5%</td>
<td>100%</td>
</tr>
<tr>
<td>IT</td>
<td>99.3%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

\(^2\) Notes: The table is summarized from Ching, H.L. and Chung, W.M. (2011) *The model for sustaining the business growth of eastern and western restaurants.*
The probability of male respondent aged 56 or older dining at the cafés in Kowloon for at least twice per week is the highest, attaining 85.5%–100% irrespective of occupation (see Table 2). The probability of female respondent aged 56 or older dining at the cafés in Kowloon for at least twice per week is the highest, attaining 89.1%–100% irrespective of occupation. These findings are implausible as most males or females aged 56 or older are frequent café diners, if adopting the same criterion. But, if ignoring this criterion, the probability of male respondent aged 26–35 dining at the cafés in Kowloon for at least twice per week is the highest, attaining 62%–100% irrespective of their occupation; this sounds meaningful. Similarly, the probability of female respondent aged 26–35 dining at the cafés in Kowloon for at least twice per week is the highest, attaining 69.2%–100% irrespective of their occupation. 100% probability refers to male or female respondents working in the industry of IT. Interestingly, the probability of young male or female professionals aged 26–35 dining at the cafés is much higher than their older counterparts aged 46–55. Surprisingly, these male or female frequent café diners aged 20–29 were retirees achieving 89.5%–92.10% probability. This scenario sounds odd as assuming very young retirement.

Table 2: The probability of dining at Hong Kong-style café in Kowloon at least twice a week

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Male respondents</th>
<th>Female respondents</th>
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<tr>
<td></td>
<td>26-35</td>
<td>56+</td>
</tr>
<tr>
<td>Real estate</td>
<td>62.0%</td>
<td>85.5%</td>
</tr>
<tr>
<td>Professional*</td>
<td>78.8%</td>
<td>93.1%</td>
</tr>
<tr>
<td>Clerk</td>
<td>87.0%</td>
<td>96.0%</td>
</tr>
<tr>
<td>Transportation</td>
<td>92.9%</td>
<td>97.9%</td>
</tr>
<tr>
<td>Service industry</td>
<td>93.9%</td>
<td>98.2%</td>
</tr>
<tr>
<td>Construction</td>
<td>97.6%</td>
<td>99.3%</td>
</tr>
<tr>
<td>IT</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

The probability of male and female respondent aged 26–35 dining at the cafés in New Territories for at least twice per week is the highest, attaining 19.7%–100%, and 13.1%–100% respectively, irrespective of their occupation (see Table 3). This finding is informative as being indicative of café dining varies greatly among occupations. Simply saying, male or female professionals aged 26–35 were less likely to dine at Hong Kong-style café in New Territories as compared to other occupations. 100% probability refers to the respondents working in service industry, irrespective of their genders.

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*Professional occupation: doctors, lawyers, accountants, engineers, etc.
Table 3: The probability of dining at Hong Kong-style café in New Territories at least twice a week⁴

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Male respondents</th>
<th>Female respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>26-35</td>
<td>56+</td>
</tr>
<tr>
<td>Professional</td>
<td>19.7%</td>
<td>0.6%</td>
</tr>
<tr>
<td>Real estate</td>
<td>55.5%</td>
<td>2.7%</td>
</tr>
<tr>
<td>Clerk</td>
<td>81.7%</td>
<td>9.1%</td>
</tr>
<tr>
<td>IT</td>
<td>84.5%</td>
<td>10.9%</td>
</tr>
<tr>
<td>Transportation</td>
<td>98.1%</td>
<td>53.5%</td>
</tr>
<tr>
<td>Service industry</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Construction</td>
<td>100%</td>
<td>99.9%</td>
</tr>
</tbody>
</table>

Among the three geographic regions, more interesting results arise in survey respondents dining at the cafés in New Territories, the probability of café dining varies greatly among occupations, especially in older age group, 56+ (i.e., 0.3% or 0.6%). The probability of male or female respondents who are professionals dining at the cafés in New Territories for at least twice per week is lower than those dining in Hong Kong Island or Kowloon. Moreover, the industries diners work, and diners’ age could be used as two meaningful indicators for classification.

As can be seen, there are risks in using data mining tools. It might mislead those business analysts who are without extensive knowledge of data handling and interpretation but strictly adopting pre-specified rules or criteria. Interpretation here means to interpret data as evidence (Royall, 2000), where the evidence is of statistical nature (Kolsgen, 1996). In addition, the surveyed data are not exhaustive as not having perceptions of people who seldom take bus or train rides, for instance, car drivers. Hence, business analysts must understand how the results are derived and what they are representing; and must also be aware of the capability and incapability or limitations of data mining tools.

Furthermore, data mining cannot provide exhaustive analysis and does not address non-statistical questions. For example, why did the survey respondents seldom or frequently dine at Hong Kong-style café? Why did they prefer restaurant to the café? What are the factors related to the quality, quantity, taste, and hygiene of food provided by the café? Apparently, data mining cannot fulfill as being “usefulness”, “novelty” “simplicity” and “generality” in Kolsgen (1996). To attempt questions like these, business analysts should incorporate exploratory data analysis and conduct statistical tests. The analysts must look more closely at the hidden relation of data and possess an understanding of business context from which the problem arises so as to make recommendations or devise business tactics.

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⁴ The table is summarized from Ching and Chung (2011) The model for sustaining the business growth of eastern and western restaurants. Final Report of Higher Diploma in Business Analysis Project, Hong Kong Institute of Vocational Education, p.91 and p.93.

⁵ Professional occupation: doctors, lawyers, accountants, engineers, etc.
BUSINESS MODEL
In the study conducted by Ching and Chung (2011), stratified sampling was adopted; one sample of Hong Kong-style café was drawn from each of these three strata: Hong Kong Island, Kowloon and New Territories. Out of 42 sampled Hong Kong-style cafés, 64%, 31%, and 5% occupied floor area less than 500 ft², 501-1000 ft², and 1001-1500 ft² respectively. About 35%, 17%, 30%, 6%, and 12% of the cafés provided 11-20, 21-30, 31-40, 41-50, and more than 50 seats respectively. Approximately 9%, 36%, 24%, 19%, 10%, and 2% of the cafés employed 3, 4, 5, 6, 7, and 8 waiters/waitresses. About 12%, 50% 26%, 7%, and 5% of the cafés employed 1, 2, 3, 4 and 5 cooks. Most of the cafés were small. About 74% of the cafés provided food delivery services, whereas 26% did not. Interestingly, Ching and Chung (2011) built two linear regression models; one showed that the café should employ 0.004 waiters/waitresses for each additional square-foot floor area of the café with an intercept, 2.88; and another model revealed that the café should hire 0.002 cooks for each additional square-foot floor area of the café with an intercept, 0.88. These two models could be adopted for reference if businessmen make plans to open a new Hong Kong-style café or expand existing café business because the sampled cafés have run their business for a number of years.

Some Hong Kong-style cafés have expanded their business rapidly and built up their café chain. They are adopting modern management to improve café environment, food quality and hygiene as well as the services towards customer oriented. They utilize resources and have better quality control by setting up a food factory to do all food preparation and subsequently deliver the food to their café chain and cook. This can reduce cost as getting a better deal from bulk purchase of food and paying less shop rental for taking up smaller floor area. They mainly promote their food and services by advertisement (Lau and Chan, 2005).

BUSINESS TACTICS
Although some Hong Kong-style cafés have business expansion, some do close down. This alerts us to the importance of tactics for sustaining business development, so it is necessary for performing SWOT analysis to identify the strengths, weaknesses, threats, and opportunities with the aid of exploratory data analysis. The strengths of Hong Kong-style cafés which are convenient café location, long service hours, speedy services, inexpensive and delicious food, and/or a variety of food, are quantifiable terms appreciated by their diners. As such, the diners purchase café services on the basis of rational decision in terms of their utility (Consoli, 2010; McCormick, 1997), thereby the strengths could be more easily enhanced. The cafés can take the opportunities of expanding their service channels, such as food courts in shopping centers, cafeterias in cinemas or sports stadiums or food booths in train stations. In addition, another opportunity is to offer café food in different food packaging, for instance, meal boxes.

The weaknesses are poor food hygiene and café environment that annoyed the survey respondents. The diners made their choices on the purchase of café services for affordable food prices. So if no price differentials, the treats refer to café diners may switch to other eateries, such as Chinese, Western, Japanese, Vietnamese or Thai restaurants for more superior qualities in terms of better food taste, services and environmental hygiene.

In addition, a relatively higher percentage of survey respondents chose Western fast food chain as compared to Hong Kong-style café. The food chain run by large companies provides superior food quality, services, food consistency and interior decoration as compared to the café (Lau and Chan, 2005). Hence, the food chain is a keen competitor which poses a threat to the café.

To address the issue of weaknesses and threats, food hygiene and café environment could be easily improved but consumers’ bad perception of Hong Kong-style cafés is not easily altered to make purchase decision. However, it would be viable to develop a theoretical basis in accordance with the synthesis of design and marketing perspectives by taking a look at what
values Hong Kong-style café food offers. It is therefore favourable for defining the functional value, symbolic value, sign value as well as exchange value of Hong Kong-style café food on the basis of Jean Baudrillard’s Object Value System (1996).

The functional value of the food which refers to filling up our stomach is consistent with the strengths of Hong Kong-style cafés identified by the exploratory data analysis. Frequent diners (the survey respondents) are working class in Hong Kong (Ching and Chung, 2011). They are busy and industrious for earning money to buy food and build their shelters. They are anxious about fatness and constipation, and are also concerned about having little fiber in their intake of food (Chung and Hau, 2005). So, if Hong Kong-style café food could have plentiful dietary fiber so as to stimulate bowel movement for removing waste material and toxic substances from human bodies. People are more health conscious of excessive intake of salt, oil and sugar for several reasons. Excessive intake of salt is highly associated with cardiovascular disease. High consumption of sugar or oil can lead to obesity (Healthy Diet, 2015; Hong Kong action’s on salt, oil and sugar intake, 2015; Campbell, Johnson and Campbell, 2012). High salt and sugar content in café food were commonly found and the food is greasy. As such, less amount of salt, oil and sugar should be put in café food while maintaining its taste and price. The exchange value is so characterized by nutrition of the café food that other food does not normally address their health concern.

The symbolic value of Hong Kong-style cafés should be appreciated by café diners as “sociable”, closely linking with venues for social and business occasions or networking in addition to eatery. That is probably why the survey respondents expressed the concern of environment of Hong Kong-style cafés. Unfortunately, poor environment is the weakness of the café that should be averted so as to implement regular clean-up schedule and to monitor the environment. The aromas of pantyhose tea, Yin-yang, egg custard tarts and pineapple buns are unique and conspicuous that should be maintained and spread; the aromas can give stimulus and a memory recall of one’s experience (Consoli, 2010), for example, linking with the episode of having meals with parents in cafés in one’s childhood.

Lifestyle and consumption is a part of culture because the ways people spend their money is an indication of constructing and preserving their identity (Mathews, 2001). For example, people seldom visited Lai Chi Kok Amusement Park but they were shocked when the park was to be pulled down. It is simply because the park is a part of Hong Kong culture they want to preserve. The café market could be sustained because of its uniqueness, i.e., Hong Kong culture – a blend of Western and Chinese cultures that other food cannot offer. To promote café business it would be better to arouse the sign value of the café to fulfill their desires (Consoli, 2010). However, customers would not buy products with outdated packaging design as not suiting their contemporary lifestyle and taste (Chong, Lam and Yu, 2006; Mathews, 2001). So a design should offer beyond aesthetically pleasing packaging but creating value (Heskett, 2002) which here refers to the sign value. The design as a cultural artifact is tied together with contemporary lifestyle and taste and a set of meanings they define beyond meeting their needs and expectations while preserving Hong Kong culture – the privilege of dining at the cafés. As such, the treats of Hong Kong-style cafés could be overcome.

The perceptions which influence consumer purchase decision are linked to the emotions and feelings of the diners (Consoli, 2010). It would be better to change the perceptions of Hong Kong-style café diners as striving to improve café design in terms of its logo and environment so as to offer a joyful dining experience in the cafés. A café logo should be designed to establish successful link to Hong Kong culture. In addition, the design of café environment including services should provide a direct link of café food from which diners derive its superficial meaning. If diners can appreciate functional value, exchange value, symbolic value as well as sign value, they would find the café highly different from the traditional ones.
CONCLUSION

Ideally, the aim of using data mining tool is to empower business analysts to concentrate on statistical thinking and leaving the computational burden to the computers, but some business analysts may have lax criteria for accepting a solution as plausible. Exploratory data analysis, statistical tests, statistical models and SWOT analysis can supplement data mining to give a fuller picture of the café business so as to devise practical business tactics. To enhance the competitiveness of café business development, the first tactic aims at expanding their service channels and offering café food in different food packaging. The second tactic focuses on fulfilling the nutritious needs of café diners by providing dietary fiber in the food; and retaining the quality, quantity, taste and prices of food as well as the efficiency of processing food order. The third tactic is to draw diners’ attention to preserving Hong Kong culture. The last tactic is to arouse positive emotions in diners in the ways that wanting to fulfill their desires. All these tactics are devised within the context of design in the way that creating value; anticipating changes; and contributing innovative ideas (Heskett, 2009).

Acknowledgment

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POLITICAL MARKETING IN MOROCCO: FROM THE POLITICIAN TO THE SCIENTIST, WHAT PERCEPTION GAP BETWEEN THE STEREOTYPE AND THE REAL CONCEPTUAL FRAMEWORK?

DR. HOUCINE BERBOU¹, DR. BADIA OULHADJ² AND MS. HAJAR MAKRY³

ABSTRACT

At a time when Moroccan researchers still undecided on the appropriate definition of Political Marketing, the debate around this subject is initiated already, whether on their side the opinion makers, the media and the politicians themselves. Among supporters and opponents of the adoption and the use of this discipline’s strategies, each one according to his own definition of Political Marketing, few months before 2016’s elections in Morocco, the debate around this emerging science, is growing increasingly. Through an exploratory survey, we tried to highlight the common perception in analytical comparison, with what was overdraft, until today by international research. The purpose is an essay of definition adapted to the needs of this particular Moroccan context. Considering that rare are the academic researches that has been initiated in Morocco, around the concept, this paper is an analysis of the gap, among common perception, and scientific conceptual framework of this discipline.

Key Words: Political Marketing in Morocco, Political Marketing definition, Political actors

INTRODUCTION

The overall research framework (Business Marketing serving, Political Organizations: Transposition of Branding practices, from the company to the political socialist organizations in Morocco) of this article aims to introduce an efficient tool to the political scene in Morocco. Therefore, it’s not a matter of redefinition of the concept, but it’s a matter of determining a useful definition, that meets the expectations of the Moroccan politician on one side and facilitate the implementation of this tool, on the other. Political science has different perspectives from which electoral politics can be analyzed. One of these perspectives is the political marketing. Over the past 20 years, the field of political marketing has gained importance as an academic discipline.

Political marketing is a new terminology in the literature of political science. It is used in political democratic systems in which mass support is significantly important to maintain power. Marketing is increasingly affecting the working style of political parties. However, we believe that the political actors are far from having a global and progressive understanding of not only marketing approaches but also Political Marketing. This idea is part of the sub-hypothesis (We can’t implement the results of political marketing researches, advanced in a different political context and circumstances) of the initial working hypothesis, that we will try to examine through this research project.

Looking into Political Marketing in Morocco, from an angle of comparison, between the perception of politicians and the conceptual framework of scientists, on this stage of the thesis, attempts to confirm one of the thesis hypothesis. This hypothesis expound that the difficulty of implementation of Political Marketing approaches is a direct result of wrong understanding and unscientific perception of the concept?

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Using a qualitative approach, we interviewed political actors, party leaders, political journalists, political analysts, party communication managers, also trade unionists, on what they mean by Political Marketing, each one according to his position on the Moroccan political scene, his experience and his own perception of the concept. We decided to include Trade unionists, in our sample, because they are involved in the electoral process during the elections of the House of Councilors.

The goal is to accomplish a comparison with what was built up to today as scientific basis and theoretical framework of Political Marketing, order to verify the validity of our initial sub-Hypothesis, who interprets the wrong understanding of the concept as brakes to the transposition of Political Marketing approaches.

What arouses and motivates this research as well is the fact that we are laying the foundation the Scientific Political Marketing in Morocco, consequently, speaking about a specific Political Marketing to the Moroccan geopolitical context, is supported by the fact that Moroccan socialist politics has its peculiarities, its own needs and thus the systematic transposition of a definition developed elsewhere under different contextual aspects, would not be worthwhile.

**KEY ISSUES**

This paper is a response to a fundamental question, which is to bring out the perception gap between what perceive the politician and what highlights the scientist about political marketing. This fundamental question gave rise to set of questions, which were the “guiding path” of our survey.

- What was built until today throughout the world, in terms of conceptualization and definition of political marketing, political Marketing Strategy and Political Marketing theory?
- How Moroccan political actors, perceive Political Marketing approaches?
- Do the socialists Moroccan parties have a professional and advanced Political Marketing Strategy?
- Do they have the professional human skills needed to implement a Political Marketing Strategy?
- How do the actors of the Moroccan socialist politics define the Political Marketing?

**Departure materials**

Order to answer the central question that motivated this research, we proceed initially to a documentary research order to draw up some theoretical definitions of political marketing that marked our readings.

**Tasting the waters**

In a second step we carried out an internal exploratory survey. This study was conducted among what is considered as one of the biggest socialist party in Morocco (The Socialist Union of Popular Forces (USFP) is considered as the biggest socialist party considering its membership, the number of seats won in 2011’s parliament elections and the number of seats won in last regional and municipal councils elections (2015) and considering the number of votes that it has obtained in this last election (2015), compared to other Moroccan socialist parties.) Our mission was to find framing elements (The strategic approaches, internal organizational arrangements, electoral practices, preparations of electoral programs, the allocation of budgets, nominations of candidates etc.) for our survey.
A qualitative approach to achieve our empirical objectives

In a third stage and through a qualitative survey, based mainly on exploratory interviews, we sought to bring out the perception of political practitioners and to test the waters of the Moroccan political socialist scene.

Considering, that the purpose of the interview, as an approach, is not necessarily to be representative but to reconstruct the universe in which we are working and the challenge of the qualitative approach had rather a relational dimension than a size dimension and that the interview should be incorporate and embodied, in the frame of the survey, Our concern was not about multiplicity of interviews but rather was about bringing out them with what we have already collected from authors & scientists.

Using semi-structured interviews based on framing elements resulting from our exploratory study, we interviewed stakeholders from Moroccan political scene, socialist practitioners (party leaders, trade union leaders, party communication managers, candidates) and observers (political journalists and political scientists). Our goal, as we mentioned it before, is to bring out the perception (although the interviews had focused on several points, we will only treat the points related to the perception of the concept) that these actors have about Political Marketing, the approaches of Political Marketing strategy and mainly their acceptance of the theory. Our research is based on two main purposes, related to the construction of a definition of Political Marketing that matches the characteristics of the Moroccan political scene.

On one hand we tried to identify the perception that these actors have about Political Marketing, while pushing them to define the concept, according to their practices as politicians, their needs as candidates, their observations as journalists and their analysis as political scientists.

On the other hand, we sought to examine whether these actors, work with real political marketing strategies, by interrogating them about the tools they use to communicate with voters and citizens, the approaches they adopt to build their programs, the approaches with what they promote their achievements and give credibility to their promises.

Before going to the concretization of our empirical objectives, we strengthened our project by theoretical materials; the idea is that the initial weapons should be theoretical. What is Political Marketing? What is Political Marketing theory? And what is Political Marketing Strategy?

DEFINING POLITICAL MARKETING

The process by which political candidates and their ideas are directed at voters in order to satisfy their potential needs and thus gain their support for the candidate and ideas in question (Shama, 1975) This definition of political marketing mirrored its commercial counterpart in that political marketing was seen as a process rather than an organizational philosophy, with the focus on political candidates satisfying voters as the central exchange partners rather than a wider focus on relationships. Political marketing seeks to establish, maintain and enhance long-term voters’ relationships at a profit for society, so that the objectives of the individual political actors and organizations involved are met. This is done by mutual exchange and fulfillment of promises (Henneberg, 1996).

Political marketing is the application of marketing principles and procedures in political campaigns by various individuals and organizations. The procedures involved include the analysis, development, execution, and management of strategic campaigns by candidates, political parties, governments, lobbyists and interest groups that seek to drive public opinion, advance their own ideologies, win elections, and pass legislation and referenda in response to the needs and wants of selected people and groups in a society.
The same principles that operate in the commercial market are valid in the political market: Successful companies have a market orientation and are constantly engaged in creating value for their customers NEWMAN (1999).

In other words, marketers must anticipate the needs of their customers and constantly develop innovative products and services to keep their customers satisfied. Politicians have a similar orientation and are constantly trying to create value for citizens by improving the quality of life and create the most benefits at the least cost (Kotler et Kotler, 1981 and 1999). This definition, presented by NEWMAN and supported by Kotler, who defines the Political Marketing, based on a projection of the concept on the business environment has challenged us to dig a little deeper on the commercial marketing.

Kotler and Levy, who introduced a new way of thinking, expanding the field of the marketing (which concerned only the commercial market of profit organizations) to a marketing which also applies to non-profit organizations, define marketing as a concept designed to serve for the satisfaction of human needs. It is none other than the function of the organization which keeps you in constant touch with its customers, read their needs, develop their "products" while building their adequate communication strategy.

Lock and Harris define the political marketing as both a discipline and an activity. As a discipline, political marketing is the study processes of exchange between political entities and their environment and between themselves. As an activity, marketing policy is, again according to Lock and Haris, more focused on positioning and communications, and the methods through which these strategies may be realized, including the search for information into attitudes, awareness and response of target audiences.

Lock and Haris worked on the differences between political marketing and business marketing and identified seven major differences; we include those who are most adaptable to the Moroccan context Lock and Haris (1996).

During any election, voters decide (vote) on the same day (with trivial exceptions such as postal and proxy votes). There are almost no purchasing decisions with same temporal characteristic and certainly none which affect as large a number of people.

While some might argue that there are long-term individual costs or regret (in the economist’s sense) in electoral choices, the fact that there is no price directly or indirectly attached to voting or the choice of party sharply differentiates it from a purchase.

Despite being normally constrained to making only one valid choice, the conventional utility maximizing framework subject to budget constraints fits electoral choice poorly and the link to personal outcomes subsequently is at best tenuous. Although the actual act of voting may not have a price attached to it, apart from emigrating, a voter has to live with the collective choice, even though it might not have been his or her own preference. This shows the sharp distinction between public choice issues and consumer markets.

The political party or candidates are a complex intangible “product” that the voters cannot unbundle. As a consequence most voters have to judge on the overall packaged concept or message.

Lock and Haris argue that, while there are other complex products or services which consumers are unable to unbundle, the range of concepts and issues in the political bundle distinguish it from such situations. Furthermore, in the case of complex product or service choice, consumers are usually able to change their minds, albeit at a cost, if they believe that they have made a mistake. Voters have to wait until the next election.

While there may be means of influencing the direction of a local or national party (with clear parallels with conventional product modifications or brand extensions), the possibility of introducing a new brand in the form of a new party is relatively remote. Apart from communism in the past, international brands do not really exist.
In most marketing situations, brand leaders tend to stay in front. In the UK, while governments may win successive elections, there seems to be an increasing trend for them to fall behind in opinion polls between elections. This is of course connected with the fact that governments have to make difficult and sometimes unpopular decisions, particularly when choosing between controlling expenditure and raising taxes.

**POLITICAL MARKETING THEORY**

Marketing theory has been influenced by many different disciplines but it has also contributed, in a reciprocal relationship, to the development of other academic areas within management studies. Essentially, the different aspects of political marketing theory can be exemplified by two questions: “How to do marketing in politics” and “How to know in politics”.

Whilst to first question is focused on managerial aspects of marketing (without implying a purely normative focus), the second is concerned with an epistemological stance per se and is therefore not limited to marketing applications. These two questions (and the underlying research activities associated with them) are not independent of each other, rather they are bound in a dialectic relationship: although one can describe political marketing practice without necessarily employing a marketing epistemology (as well as one can look at political phenomena through a marketing lens without focusing on marketing aspects), the two are intertwined.

Managerial concerns of political marketing management usually imply (consciously or unconsciously) an application of a marketing-oriented epistemology, while theoretical sense making uses the actual explanandum (in this case political marketing practice and our understanding of it) as a ‘check-and-balance’ system regarding its appropriateness of explanatory efforts. These two elements together, in the dialectical integration as synthesis, provide the core for a holistic theory of political marketing (Henneberg, 2002).

**MARKETING STRATEGY**

A marketing strategy is a plan of action that is used to implement a series of activities that will ensure success in the marketplace. A successful marketing strategy begins with the recruitment of viable candidates.

Once a candidate has been recruited, a marketing strategy is developed and implemented. The role of a marketing strategy is to reinforce the candidate’s “position” in the minds of the constituencies that will affect his or her success in the political marketplace established; a marketing strategy is developed and implemented. At the heart of that strategy will be the use of political advertising. Recall that the position of the candidate is based on his or her image and the platform that is developed. (Henneberg, 2004)

**HOW POLITICAL STAKEHOLDERS PERCEIVE POLITICAL MARKETING?**

The set of semi-structured interviews was carried out all over October 2015. While choosing our sample, we adopted a non-probabilistic approach. We selected units that characterize our population, namely, Head of Parties (General Secretaries), head of trade unions, communication managers within the parties’ headquarters, candidates, activists, political analysts, political journalists, editors of partisan newspapers, and national and provincial directors of election campaigns.

Our exploratory posture over a period exceeding 18 months, at the socialist political scene, immunized us against the risk of subjectivity that can induce the Purposive Sampling, a non-probabilistic method we have adopted. We assume this method as long as this study is considered as preparatory study in relation to this stage of the thesis and can be compared to pre-testing of the questionnaire.

Using semi-structured interviews was about encouraging speeches and discussions, especially during interviews with highly specialized politicians. Conducted within central
headquarters (headquarter of parties, newspapers, trade unions, faculties) or by email, our interviews have an average duration of 30 minutes. Confidential but not anonymous, some were accompanied by voice recordings other by writing reports. In total, 20 people contacted, 14 interviewed. Our sample consists mainly of political actors and their attitudes differ from practitioners to observers.

**KEY IDEAS, SYNTHESIS OF RESULTS**

<table>
<thead>
<tr>
<th>THE AXES OF INVESTIGATION</th>
<th>Actors-Practitioners</th>
<th>Actors-Observers</th>
</tr>
</thead>
</table>
| **Political Marketing Strategy.** | - Activists individual Initiative  
- Lack of Professional strategies  
- "Volunteer" particularity work within socialist parties  
- Lack of outsourcing and cooperation with experts and specialized companies in Marketing  
- Concentration of communication actions, on printed materials and Event marketing (strikes, sit-ins, conference-debate, press conference).  
- Awareness of the importance of "communication" is recent and up to date.  
- Deficiency of departments composed of professional staff trained in this discipline  
- The majority of person in charge of "Communication” are journalists | - Absence of collective skills and competencies.  
- Individual character of efforts  
- They still consider that the only mode of communication is the speeches and the declarations of the General Secretary.  
- Conservative parties exceed the socialist parties in the use of marketing tools, comparing the USFP (Progressive Party) to the PJD, a conservative party  
- Traditional Moroccan society is not ready for modern trends of political Marketing  
- communication process of the socialist parties, is a a process of actions and not reaction process |
| **Digital Marketing** | - The technological revolution has stimulate the use of communication  
- Using mainly Facebook, but through important individual initiatives Intensified and important  
- individual efforts and initiatives, but not framed by thoughtful strategies | - The majority of socialist parties do not have a website, and those who do, rarely update it.  
- The socialist parties in morocco are late on the strategic and intelligent use of new technologies compared to conservator parties |
| **Perception Of « Political Marketing »** | - Avoids pronouncing the term "Marketing", either explicitly rejecting the commercial character of the concept, or implicitly by speaking only about political communication.  
- Promotion of candidate's achievement, party promotion.  
- A package of communication actions which aims to help us to have many adherents many militants to defend the moral and material interests of the working class.  
- Political marketing is an advertising discourse too; the only | - Ordinated Actions to reach the audience and build a new image.  
- A new communicative action for the Moroccan political scene.  
- A set of tools that allows you to cover a larger geography in longest time possible  
- The politician ability to present his positions and his social project within a framework that attracts the citizen, to be more attentive and more interested.  
- Communication actions that produce a persuasive effect. |
difference is at the communication supports.
- A set of measures and communication tools designed to promote the image of the candidate and his achievements.

CONCLUSIONS AND RESULTS’ DISCUSSIONS

Through our review article, we were able to collect a number of definitions regarding our research issues, which have sprung from different contexts, belonging to different authors. All these definitions focused (each one according to the author expression style) on the section of analyzes and surveys of Political Marketing toolbox, on the characteristics of continuity and durability of marketing actions and highlighted the anticipatory nature of marketing actions. We were unable to find these commonalities during our interviews with political actors. Political Marketing has been described during the most progressive Politicians’ statements as communication actions aiming at enhancing and promoting the History, the accomplishments, the willing and the potential of the political organizations. We insist on the term "Communication actions" that during the majority of interviews was quoted (by the interviewers) to describe their marketing strategies and to define Political Marketing.

We conclude, referring to our review article, that strategic analysis tools wasn’t mentioned within the statements by political actors. The communication actions planned or practiced are instantaneous and contextualized and do not result from a strategic protocol.

The volunteering particularity of activism in Moroccan left-wing organizations, low budgets, inexperience and inability of people in charge of "communication and information" in parties and trade unions headquarters, induce that Marketing efforts do not result from a thoughtful vision and a collective competency.

Research in Political Marketing in Morocco, must make clear the role of Political Marketing, which is much more than "promotion actions". It must also expose its toolbox and emphasize its category of approaches and tools belonging to the rank of strategic analysis.

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KHOUFAIFI Mohammed, member of the national board of the UMT, Monday, November 26th
National headquarter of the UMT Casablanca.
LACHGUAR Driss, First Secretary of the Socialist Union of Popular Forces (USFP)
MANAR SLIMI Abderrahim, Political scientist, Faculty Rabat Agdal, Thursday, October 29th.
MOUNIB Nabila, General Secretary of the Unified Socialist Party (PSU)
MOUKHARIK Miloudi, General Secretary Moroccan Labour Trade union, Monday,
November 26th National headquarters of the UMT Casablanca.
SADDAS Fatiha, Member of the Political Office USFP, Rabat Friday, October 23th, 2015
SEDJARI Ali, Political scientist, Faculty Rabat Agdal, Friday, October 23th 2015
K23-2221

FINANCIAL RATIO ANALYSIS - A CASE STUDY OF NESTLÉ INDIA LTD

MR. DISHANT DARJI¹ AND MR. DHARMIL SAKARIA²

ABSTRACT

In this paper, we have exhibited the use of actual financial data for financial ratio analysis. We construct a financial and Industry analysis for Nestle India Ltd. The aim of the paper is to show the current status of the Food processing Industry and within the Food processing Industry, a ratio analysis on Nestle—a private multinational company. This paper provides insights on a widely used financial tool, ratio analysis. In this paper an attempt has been made to undertake ratio analysis for an actual company. This paper also gives insights over the food processing sector of India. The paper demonstrates the difficulties in applying the principles of ratio analysis to the actual business situation. We have selected Nestle as it is a multinational company in the growing food processing industry. This case study illustrates the complexity of financial analysis. Food processing sector is one of the major sectors which is growing gradually and has a wide scope in India.

Keywords: Food processing Industry, Financial data, financial tool, Insight, Analysis, Multinational Company, Emerging sectors, Major sector, Wide scope.

FOOD PROCESSING INDUSTRY OF INDIA

India is the world’s 2nd largest producer of food next to China, and has the potential of being the biggest with the food and agricultural sector. In India, one of the largest industries is the Food processing industry and it is ranked fifth in terms of production, consumption, exports, and expected growth. As Indians continue to feast the food industry keeps itself on a high. Fuelled by what can be termed as a perfect ingredient for any industry—large disposable incomes—the food industry has been witnessing a marked change in consumption pattern, especially in terms of food.

Accounting for about 32% of the country’s total food market, the food processing industry is one of the largest industries in India. The total food production in India is likely to double over the next 10 years, with country’s domestic food market currently estimated to reach US$258 billion by the end of 2015. The Food processing industry forms an important segment of the Indian economy in terms of the contribution to GDP, employment and investment, and is a major driver in the country’s growth in the near future. This industry contributes as much as 9-10% of GDP in agricultural and manufacturing sector.

The Confederation of Indian Industry (CII) has estimated that the food processing sector has the potential to attract US$33 billion of investment in 10 years and generate employment over 9 million person-days.

India’s food processing sector covers fruit and vegetables, spices, meat and poultry, milk and milk products, alcoholic beverages, fisheries, plantation, grain processing and other consumer product groups like confectionery, chocolates and cocoa products, soya-based products, mineral water, high protein foods etc.

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Segmentation of different sectors in food processing industry:

<table>
<thead>
<tr>
<th>Sector</th>
<th>Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dairy</td>
<td>Whole Milk Powder, Skimmed milk powder, Condensed milk, Ice Cream, Butter and Ghee, Chees.</td>
</tr>
<tr>
<td>Fruits &amp; Vegetables</td>
<td>Beverages, Juices, Concentrates, Pulps, Frozen &amp; Dehydrated products, Potato wafers/Chips, etc.</td>
</tr>
<tr>
<td>Grains &amp; Cerals</td>
<td>Flour, Bakeries, Starch Glucose, Cornflakes, Malted Foods, Vermicelli, Beer and Malt extracts, Grain base alcohol</td>
</tr>
<tr>
<td>Fisheries</td>
<td>Frozen &amp; Canned products mainly in fresh form</td>
</tr>
<tr>
<td>Meat &amp; Poultry</td>
<td>Frozen and packed - mainly in fresh form, Egg powder</td>
</tr>
<tr>
<td>Consumer Food</td>
<td>Snack food, Namkeens, Biscuits, Ready to eat food, Alcoholic and Non-Alcoholic beverages.</td>
</tr>
</tbody>
</table>

Source: Ministry of food processing India, Annual report 2008

The Indian food and grocery market is the world’s sixth largest, with retail contributing 70% of the sales. It is projected to grow at the rate of 104%, touching US$ 482 billion by 2020.

Indian food service industry is expected to reach US$ 78 billion by 2018. The Indian food processing industry accounts for 32% of the country’s total food market, 14% of manufacturing GDP, 13% of India’s exports and 6% of total industrial investment. The poultry sector of India is expected to register double-digit growth in 2015 on the back of stable feed prices and encouraging rural demand.

Investments

According to the data provided by the Department of Industrial Policies and Promotion (DIPP), the food processing sector in India has received around US$6 billion, worth of foreign investments during the period of April 2000—January 2015.

Foodpanda.in has acquired food ordering portal “Just Eat India” in an all-stock deal as it plans to strengthen its presence in India. Gujarat Cooperative Milk Marketing Federation (GCMMF), popularly known as ‘Amul’, plans to invest Rs 5,000 crore (US$ 800.18 million) to set up ten new processing plants as well as expand the current capacity to touch 32 million liters per day (MLPD) capacity by 2020.

Export Data of Processed food and related items:

India’s exports of Processed Food in 2014-15 are Rs.31,563.43 Crores, which includes share of products like:

- Mango Pulp Rs.841.39 Crores
- Dried and Preserved Vegetable Rs.847.11 Crores
- Other Processed Fruit and Vegetable Rs.2,569.93 Crores
- Pulses Rs.1,209.51 Crores
- Groundnuts Rs.4,675.35 Crores
Guargum Rs.9,480.00 Crores, Jaggery & Confectionary Rs.1,161.81 Crores, Cocoa Products Rs.848.62 Crores, Cereal Preparations Rs.3,038.79 Crores, Alcoholic and Non-Alcoholic Beverages Rs.2,231.58 Crores, Miscellaneous Preparations Rs.2,437.77 Crores.

The Indian food processing industry is primarily export oriented. The geographical situation of India gives it the unique advantage of connectivity to Europe, the Middle East, Japan, Singapore, Thailand, Malaysia and Korea. One such example indicating India’s location advantage is the value of trade in agriculture and processed food between India and Gulf region. Major components of the food processing sector are grain, sugar, edible oils, beverages and dairy products. The food processing industry of India contributes to the gross domestic product (GDP) at 2004-05 prices in 2012-13 amounts to INR 845.22 Billion. India’s food processing industry has grown at 8.4% annually for the last 5 years. The total household expenditure on the purchase of food items in 2012-13 was INR 11 Trillion. An average household in India spends INR 41,856 on food.
Exports in US$ Billions

<table>
<thead>
<tr>
<th>Year</th>
<th>Exports</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY11</td>
<td>9.3</td>
</tr>
<tr>
<td>FY12</td>
<td>17.3</td>
</tr>
<tr>
<td>FY13</td>
<td>21.7</td>
</tr>
<tr>
<td>FY14</td>
<td>22</td>
</tr>
<tr>
<td>FY15</td>
<td>21.5</td>
</tr>
</tbody>
</table>

(During FY 2011–15, India’s exports of processed food and related products (inclusive of animal products) increased at a compound annual growth rate (CAGR) of 23.3 per cent to US$ 21.5 Billion)

Foreign Direct Investment

The government of India is planning to offer 100% Foreign Direct Investment (FDI) and Income Tax benefits in the food processing sector.

Foreign Direct Investment (FDI) in the country’s food sector is poised to hit the US$ 3 billion mark. In the last one year alone, FDI approvals in food processing have doubled. The cumulative FDI inflow in food processing reached US$ 2,804 million March ’06. The sector received approvals worth US$44 million. Nearly 30% of the FDI in this sector comes from European countries such as Netherlands, Germany, Italy and France. Some of the successful ventures from the European countries are Perfetti, Cadbury, Godrej-Pilsbury, Nautricia international, Manjini comaco, etc.

Agencies for Food Processing Industry

<table>
<thead>
<tr>
<th>Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ministry of Food Processing Industries</td>
</tr>
<tr>
<td>Food Safety and Standards Authority of India (FSSAI)</td>
</tr>
<tr>
<td>Agriculture and Processed Foods Export Development Authority</td>
</tr>
<tr>
<td>National Institute for Food Technology and Entrepreneurship Management</td>
</tr>
<tr>
<td>All India Food Processors Association</td>
</tr>
<tr>
<td>Commodity Boards under the Ministry of Commerce and Ministry of Agriculture</td>
</tr>
<tr>
<td>Indian Grape Processing Board</td>
</tr>
</tbody>
</table>

Government Initiatives

Since Aug 1991, when liberalization started taking place, various proposals of different projects in the segments of food and agro processing industry have been proposed. Besides this, Proposals for joint ventures has also been approved by the government; foreign collaboration, industrial licenses and 100% export oriented units envisaging an investment. Resulting into a foreign investment over Rs. 10,000 crores.

The processed food sector has increased the level of processing of perishables from 6% to 20%, value addition from 20% to 35% and share in global food trade from 1.5% to 3% by 2015. To achieve these targets, an investment of Rs100,000 crore (US$ 16 billion) is required by the end of 2015.

The Government has formulated and implemented several schemes to provide financial assistance for setting up and modernizing of food processing units, creation of infrastructure,
support for research and development, and human resource development in addition to other promotional measures to encourage the growth of the processed food sector.

Ms. Harsimrat Kaur Badal, Union Minister for Food Processing Industries, Government of India has inaugurated the first of its kind a mega international food park at Dabwala Kalan, Punjab in Rs136 crore (US$ 21.76 million).

Ministry of Food Processing Industries has a scheme for human resource development (HRD) in the food processing sector. The HRD scheme is being implemented through State Governments under the National Mission on Food Processing. The scheme has the following four components: Creation of infrastructure facilities for degree/diploma courses in food processing sector; Entrepreneurship Development Program (EDP); Food Processing Training Centers (FPTC); Training at recognized institutions at State/National level.

The Ministry of Food Processing Industries has taken some new initiatives to develop the food processing sector which will also help to enhance the incomes of farmers and export of agro and processed food among others. The government has also approved the setting up of five of Mega Food Parks in the states of Bihar, Maharashtra, Himachal Pradesh and Chhattisgarh.

**Market Key Players**

The major player’s operations in the Indian food and beverages industry include Dabur India limited, Godrej Industry Limited, Hindustan lever Limited, Britannia Industries Limited, ITC Limited, Nestle, PepsiCo, Inc, Cadbury Schweppes PLC, Future group, RPG enterprise and Godrej Agrovet Limited.

India is the world’s largest producer of milk, and second largest of fruits and vegetables, and the third largest fish producer and it ranks second in inland fish production. With a huge agricultural sector, abundant livestock, and cost competitiveness, India is fast emerging as a sourcing hub for processed food. India produces 200 million tones (MT) of food grains each year.

**A CASE STUDY OF NESTLE INDIA LTD**

**Company Overview**

Nestle was started back in 1866 by an Anglo-Swiss condensed milk Company, when the first European condensed milk factory was opened in Cham, Switzerland. It was founded by Henry Nestle. The Anglo-Swiss Condensed Milk Company, founded by Americans Charles and George Page, merged with Nestlé after a couple of decades as fierce competitors to form the Nestlé and Anglo-Swiss Milk Company.

The World War I created new demand for dairy products, largely in the form of government contracts. To keep up, Nestlé purchased several existing factories in the United States and, by war’s end, it had owned 40 factories worldwide.

Nestle India Ltd, one the biggest players in FMCG segment, has a presence in milk & nutrition, beverages, prepared dishes & cooking aids & chocolate & confectionery segments. The company is engaged in the food business. The food business incorporates product groups, such as milk products and nutrition, beverages, prepared dishes and cooking aids, chocolates and confectionery. Nestle India manufactures products under brand names, such as Nescafe, Maggi, Milkybar, Milo, Kit Kat, Bar-One, Milkmaid and Nestea.

The company has also introduced products of daily consumption and use, such as Nestle Milk, Nestle Slim Milk, Nestle Fresh 'n' Natural Dahi and Nestle Jeera Raita. Their milk products and nutrition includes Nestle Everyday Dairy Whitener, Nestle Everyday Ghee, Nestle Milk, Nestle Slim Milk and Nestle Dahi. Beverages Include Nescafe Classic, Nescafe...
Sunrise Premium, Nescafe Sunrise Special and Nescafe Cappuccino. Nestle India is a subsidiary of Nestle S.A.

The company has presence across India with 7 manufacturing facilities and four branch offices spread across the region. The four branch offices in the country help facilitate the sales and marketing of its products. They are in Delhi, Mumbai, Chennai and Kolkata. The company's head office is located in Gurgaon, Haryana.

Nestle India Ltd was incorporated in the year 1956. The company set up their first production facility in the year 1961 at Moga in Punjab. In the year 1967, they set up their second plant at Choladi in Tamil Nadu as a pilot plant to process the tea grown in the area into soluble tea. In the year 1989, they set up a factory at Nanjangud in Karnataka.

The company acquired the Healthcare Nutrition business of Specialty Foods India Pvt Ltd with effect from January 1, 2010. In the year 2011, the company increased the installed capacity of Milk Products & Nutrition by 14,561 MT to 162,107 MT, Prepared dishes & Cooking aids by 21,430 MT to 226,447 MT and Chocolate & Confectionery by 3,283 MT to 36,052 MT.

Condensed Statement of Financial Performance 2010 to 2014

<table>
<thead>
<tr>
<th>Year</th>
<th>Sales (Cr)</th>
<th>Net Earnings (Cr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>6254.7</td>
<td>818.67</td>
</tr>
<tr>
<td>2011</td>
<td>7514.6</td>
<td>961.55</td>
</tr>
<tr>
<td>2012</td>
<td>8334.5</td>
<td>1,067.90</td>
</tr>
<tr>
<td>2013</td>
<td>9101.05</td>
<td>1,117.10</td>
</tr>
<tr>
<td>2014</td>
<td>9854.84</td>
<td>1,184.60</td>
</tr>
</tbody>
</table>

Net Sales annually have increased in last 5. The firm has made a rapid growth in terms of sales of around 150% at the end of 2014 compared to the financial year 2010. A total sale per annum of the last 5 years has been shown in Table-1 and the graph for the Net sales is shown on Graph-1.

Graph-1
Below in the table-2 is presented the Net earnings of Nestle India Ltd per annum over the last 5 years. The Company seems to be expanding each and every year, as the company has made a rapid growth in terms of net earnings of around 140% in last 10 years. The graph for the respected data has been shown in Graph-2.
The researchers have undertaken a detailed financial ratio analysis with an objective of understanding the company better and draw important inferences which may act as gridlines for better performance. For this we have compared 5 years and the important ratios such as: Debt-Equity Ratio, Long Term Debt-Equity Ratio, Current Ratio, Quick Ratio, Total Assets Turnover, Fixed Assets Turnover, Inventory Turnover, Debtors Turnover, Interest Cover Ratio. The formula for the respective financial ratios are presented at Appendix-1.

The different ratios are present in Table-2, which is shown below:

### Table-2

<table>
<thead>
<tr>
<th>Key Ratios of Nestle India Ltd</th>
<th>Dec 10</th>
<th>Dec 11</th>
<th>Dec 12</th>
<th>Dec 13</th>
<th>Dec 14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Debt-Equity Ratio</td>
<td>0</td>
<td>0.76</td>
<td>0.58</td>
<td>0.5</td>
<td>0.01</td>
</tr>
<tr>
<td>Long Term Debt-Equity Ratio</td>
<td>0.01</td>
<td>0</td>
<td>0.34</td>
<td>0.54</td>
<td>0.23</td>
</tr>
<tr>
<td>Current Ratio</td>
<td>0.62</td>
<td>0.55</td>
<td>0.54</td>
<td>0.65</td>
<td>0.53</td>
</tr>
<tr>
<td>Quick Ratio</td>
<td>0.27</td>
<td>0.27</td>
<td>0.22</td>
<td>0.39</td>
<td>0.25</td>
</tr>
<tr>
<td>Total Assets Turnover</td>
<td>7.86</td>
<td>3.35</td>
<td>2.93</td>
<td>2.56</td>
<td>3.45</td>
</tr>
<tr>
<td>Inventory Turnover</td>
<td>12.33</td>
<td>10.49</td>
<td>11.55</td>
<td>12.37</td>
<td>11.67</td>
</tr>
<tr>
<td>Debtors Turnover</td>
<td>98.22</td>
<td>84.1</td>
<td>82.12</td>
<td>105.92</td>
<td>107.49</td>
</tr>
<tr>
<td>Interest Cover Ratio</td>
<td>1.075.28</td>
<td>283.82</td>
<td>60.6</td>
<td>46.58</td>
<td>125.8</td>
</tr>
<tr>
<td>ROE (%)</td>
<td>113.97</td>
<td>90.31</td>
<td>69.52</td>
<td>53.62</td>
<td>45.51</td>
</tr>
<tr>
<td>ROI (%)</td>
<td>9.65</td>
<td>7.28</td>
<td>5.74</td>
<td>6.03</td>
<td>6.48</td>
</tr>
</tbody>
</table>

- **Long Debt-Equity Ratio:** As we can see, Long term debt equity of the firm is 0 in December 2010 which means the firm does not owe any debts in the market, which means there are no debts, and anything divided by 0 is 0. In the following years the company has very low level of debts.
- **Current Ratio:** The current ratio of Nestle India Ltd indicates that the company has greater liabilities than compared to its current assets in the last 10 years, which is not a good sign.
Quick Ratio: Referring to the quick ratio of Nestle India ltd. The company has enough resources and assets to pay its debts over the next 12 months, without having much difficulty.

Total Assets Turnover: Total Assets Turnover ratio has reduced from 7.86 to 3.45, though the company needs to be examined from the viewpoint of better utilization of assets.

Fixed Assets Turnover: The fixed asset turnover of Nestle India Ltd. Indicates that it has been growing better since December 2004-2015, from 5.61% to 1.99%, which indicates the company has increased its fixed assets.

Inventory Turnover: Inventory Turnover ratio has remained on an average of 11, which indicated the company is more or less stable during the last 5 year.

Debtor’s turnover: A higher Debtor’s turnover ratio is supposed to be good for the company, which indicates the company has to collect money from the market, here as we can see the company is enjoying great current debtors.

Interest Coverage Ratio: Interest Coverage Ratio has seen wide fluctuations, the minimum being 45.58 and maximum at 1075.28, nevertheless even the minimum level is extremely comfortable.

Return on Equity/Return on Net Worth: The return on equity (ROE) measures the return earned on the capital provided by the Equity holders. The net income is the income available for distribution to ordinary shareholders after deducting any preferred dividends.

From 2010 to 2014, the company’s growth on equity funds has been degrading from 113.97% to 45.51%. This indicates the company has not been able to grow consistently in the last 5 years.

Return on Investment: The return on Investment (ROI) measures the appreciation earned on an investment related to investment’s cost the business. It is also referred as the return on total capital.

The Return on Investment (ROI) is comfortably placed ranging from 5.74 to 9.65 in the last 5 years.

**Working Capital**

<table>
<thead>
<tr>
<th>Year</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>WC</td>
<td>-656.91</td>
<td>-115.85</td>
<td>-175.31</td>
<td>112.12</td>
<td>-117.75</td>
</tr>
</tbody>
</table>

Working Capital: The Working Capital appears negative except of the year 2015 which is 112.12. It means company is enjoying its credit resources form the market.

<table>
<thead>
<tr>
<th>Appendix 1- Key Ratios</th>
<th>Formula of the ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt-Equity Ratio</td>
<td>Total Long Term Debts ÷ Share Holder's Fund</td>
</tr>
<tr>
<td><strong>LONG TERM DEBT-EQUITY RATIO</strong></td>
<td>Long term Liabilities ÷ Equity</td>
</tr>
<tr>
<td>Current Ratio</td>
<td>Current Assets ÷ Current Liabilities</td>
</tr>
<tr>
<td>Quick Ratio</td>
<td>Liquid Assets ÷ Current Liability</td>
</tr>
<tr>
<td>Total Assets Turnover</td>
<td>Net Sales ÷ (Current Assets + Fixed Assets)</td>
</tr>
<tr>
<td>Fixed Assets Turnover</td>
<td>Sales ÷ Net Fixed Assets</td>
</tr>
<tr>
<td>Inventory Turnover</td>
<td>Net Sales ÷ Average Inventory at Cost</td>
</tr>
<tr>
<td>Debtors Turnover</td>
<td>Total Sales ÷ Accounts Receivable</td>
</tr>
<tr>
<td>Interest Cover Ratio</td>
<td>(Net Profit Before Interest And Income Tax ÷ Fixed Interest Charges)× 100</td>
</tr>
<tr>
<td>ROE%</td>
<td>Profit After Tax ÷ Equity Share Capital</td>
</tr>
</tbody>
</table>
ROI% = (Gain from Investment – Cost of Investment) / Total Assets

CONCLUSION
In this paper, we have constructed a financial ratio analysis to show the financial performance of the company which appears to be very good, in terms of profitability, fund positions and even working capital management. The company has sound financial potential to grow at a faster pace.

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Indian Brand Equity Foundation, (Online) http://www.ibef.org/industry/indian-food-industry.aspx
ETIQUETTE OF TEENAGERS’ ATTITUDE TOWARDS ONLINE ADVERTISEMENTS - AN EMPIRICAL CORROBORATION FROM INDIA

ABSTRACT
Advertising is an important tool of marketing to make the consumers aware about a product. Although, there are a variety of media ranging from print to electronic, World Wide Web as a media for advertising is becoming popular in the recent years. Since, Internet is a form of one to one communication, the audience is directly targeted. The target audience is the users of internet either for communication or entertainment. The internet on the other hand has both positive as well as negative traits. It can be a very good source of information and on the other a media which exposes all that is unethical to all the audience. When the audience group is a teenager, then internet has always become a subject for discussion about its constructive and caustic impacts on the teenager himself as well the society. When internet itself is a mystery, the advertisements which are uploaded on it also become a mystery especially when the users are teenagers. Hence, the present study aims to capture the attitude of the teenagers about online advertisements and the differences in opinion due to age, gender and educational qualifications. The teenagers’ attitude towards online advertising were captured as responses under five categories such as the general perception, advertising utility, indignity, price perceptions and regulation. To capture the responses from the teenagers being respondents of the study, a well-structured questionnaire was administered to 2500 respondents with a yielding rate of 80.04 % (2001 usable Questionnaires). The geographical area of Tamil Nadu State in India was used as the sampling area. The questionnaire was administered in person to students in identified schools and colleges all over Tamil Nadu. Also, Snowball Sampling Technique was used to collect data from respondents who are stationed far away from the researcher. The data used for the purpose of this study were collected for a period of 6 months from 1st July 2014 to 31st December 2014. The collected data were subjected to statistical analysis using Frequency analysis, Chi-Square test, and Mann Whitney U test. From the statistical analysis, it is clear that, teenagers’ attitude is neutral for almost all factors of online advertising and there is a significant difference in the teenagers’ opinion based on their age, gender and educational qualifications. Although, it is a preliminary study, the findings may be helpful in reframing the contents and message of online advertisements when they are targeted towards teenagers.

Key Words: Advertising, Attitude, Internet, Online, Teenagers

BACKGROUND
Advertising is the most important area of marketing and it is considered tantamount with marketing in People’s mind (Roosta et al., 2009). Nowadays, one of the most important applications of Internet is e-Commerce which is doing business online (Gilaninia et al., 2011). For e-Commerce to be successful, advertisements also need to be done online. Online advertising was started way back in 1994 when Hot Wire used Banner advertisements in their company’s website. From then on, internet was used as the most effective and efficient media for advertising (Dolabi et al., 2008). Online advertising is very popular because it is direct marketing and one by one communication to individual consumers. Due to its popularity, online advertising has created significant growth for its users (Gilaninia, 2009). Hence, online advertising has grown exponentially during the last decade of years. According to global

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entertainment and media outlook (2010), 16% of the total advertising expenditure was taken by Internet in 2010 and it will reach 21% in the next four years.

Advertising have been specified as a paid form of non-personal communication which introduces a good or services through different media for profit or non-profit by institutions or individuals (Abasi et al., 2007). World Wide Web is nowadays become a very effective media of Advertising. For preparing and implementing Internet Advertising, advertising company, online publishers and advertisers are involved (Subodha Kumar et al., 2006). The purpose of online advertising is to inform consumers about new products, encourage consumers to use the product, create a brand image and finally stimulate them to buy the product (Marhaba, 2008).

The various forms of internet advertising include Banners, Pop-Ups, Pop-downs, Advertising in Search engine, e-mail advertising and sub-site advertising (Dolabi, 2007). The users’ reactions to banners were found to be very low with an average click rate of 2.1% right from the start of Internet advertising (Williamson, 1996). On the other hand, it was found that banners have a substantial “burnout rate” (Double-click, 1996). It was also revealed that the respondents clicked the banners if it were well designed (Leest, 1996; Belz 1997). Schlosser et al. (1999) found that the users’ had more dislike towards Online advertising than advertising in general. However, it was also found that, customers’ had more trust in Online advertising than the other advertising in general. Similarly, Wong (2001) found that users’ have favourable perception towards banner advertisements on the web. Banner form of online advertisements does influence the purchase intentions of the customers and it has a positive influence on the products advertised (Briggs and Hollis, 1997).

According to Bulik (2000), internet advertising is non-sensual, uninformative forgettable and ineffective. Similarly, Jupiter (1999) found that pop-ups are annoying and users are unable to visit the website because of advertisements. Also, Ad intrusiveness is the leading cause of annoyance (Bauer and Greyser, 1968). But, Rust and Varki (1999) predicted advertisements in new media is not that much intrusive. In contrast, Li et al. (2002) report that online consumers are goal-oriented and perceive online ads as even more intrusive than those in other media, leading to negative attitudes, and impairing intentions to return to the site.

There is varied opinion about online advertising among the users of internet. But, the teenagers who are the active users of internet are not taken as a sample to know the attitude towards online advertising. Hence, the present paper, discusses the teenagers’ attitude towards online advertising.

**METHODOLOGY**

The present study is an empirical study using primary data to investigate the objectives and testing the hypotheses. A well-structured questionnaire was used to collect the primary data. The data used for the purpose of this study were collected for a period of 6 months from 1st July 2014 to 31st December 2014.

**STATEMENT OF THE PROBLEM**

The users of internet are growing at an exponential rate. More than 80% of the internet users fall under the age group of thirteen to nineteen i.e Teenagers. Since, they have access to internet they are the target audience for the online advertisements. There are many forms of online advertisements, ranging from Pop-Ups to e-mail advertisements. When these types of advertisements are accessed by the internet users when they access online, can they influence them had always been a topic under discussion. Especially, when the target audience is teenagers, knowing whether it is influential or misleading is always important to know. Also, their attitude on online advertisements based on gender, educational qualifications and age may vary. Hence, the present research problem was stated to answer the following research questions:
• What is the attitude of teenagers towards online advertisements?
• Does the teenagers’ attitude towards online advertisements are subject to change based on their age, gender and educational qualifications?

OBJECTIVES OF THE STUDY
• To analyze teenagers’ attitude towards online advertisements
• To capture the difference in the teenagers’ attitude towards online advertisements due to age
• To discern the teenagers’ attitude towards online advertisements based on gender
• To study the influence of educational qualifications on teenagers’ attitude towards online advertisements

SAMPLING TECHNIQUES
The geographical area of Tamil Nadu state was used as the sample area. The main reason for choosing Tamil Nadu is the researcher is stationed here and there is more teenagers who access internet. The Questionnaire was administered in person to students in identified schools and colleges all over Tamil Nadu. Also, Snowball Sampling Technique was used to collect data from respondents who are stationed far away from the researcher. On this basis the questionnaire was administered to 2500 respondents with a yielding rate of 80.04 % (2001 usable Questionnaires).

STATISTICAL TOOLS APPLIED FOR ANALYSIS
The techniques used for analysis are Frequency analysis, Chi-Square test, and Mann Whitney U test.

Analysis and Interpretation
To measure the teenagers’ attitude towards internet advertising, the respondents’ responses under five categories on attitude such as their general perception, the advertising utility, indignity, price perceptions and regulation were captured. Their responses under each category were subjected to frequency analysis and test of significance was performed using Chi-Square test. The results are tabulated below:

GENERAL ATTITUDE ABOUT ONLINE ADVERTISING
To know about the teenagers’ general attitude towards online advertising, five statements were queried and their responses were captured on a three-point scale. Their responses were coded as 1 for ‘Like’, 2 for ‘Neutral’ and 3 for ‘Dislike’ which were all summed up to get the total perception (TP). Later the total perception values were classified as ‘Favourable’ if the TP value is between 5 and 7, ‘Neutral’ if the TP value is between 8 and 12 and ‘Unfavourable’ if TP value is above 13. Finally, frequency analysis was performed along with test of significance using Ch-Square test and the results are tabulated below:

Table 1: Frequency Analysis On General Perception About Online Advertising

<table>
<thead>
<tr>
<th>S.No</th>
<th>Opinion</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Cumulative Percent</th>
<th>Chi-Square (Sig. at 5%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Favourable</td>
<td>215</td>
<td>10.7</td>
<td>10.7</td>
<td>2436.498</td>
</tr>
<tr>
<td>2</td>
<td>Neutral</td>
<td>1705</td>
<td>85.2</td>
<td>96.0</td>
<td>df=2</td>
</tr>
<tr>
<td>3</td>
<td>Unfavourable</td>
<td>81</td>
<td>4.0</td>
<td>100.0</td>
<td>p=0.000</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2001</td>
<td>100.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
It is clear from Table 1 that majority of the respondents (85.2%) are neutral on their general perception towards online advertising. Only 10.7% and 4% of the respondents have favourable perception and unfavorable perception respectively towards online advertising. Since, the Chi-Square value (2436.498) is significant at 5% level for 2 degrees of freedom, it can be concluded that, general perception of the Teenagers about online advertising is Neutral.

**Utility of Online advertising**

The next category to measure the attitude is the advertising utility. Under this category, 4 statements were queried and their responses were captured on both 3 point scale and 5 point scales. Their responses were coded as 1 for ‘Agree’ or ‘Completely’ and 2 for ‘neutral’ and 3 for ‘Disagree’ or ‘Not at all’ for all the three point scales. For the 5 point scales, 1 to 5 was coded respectively for ‘Always’, ‘Often’, ‘Sometimes’, ‘Seldom’ and ‘Never’. The total advertising utility (TAU) was measured by summing up all the responses for each statement. The TAU values were classified as ‘Favourable’ if its value is between 4 and 8, ‘Neutral’ if its value is between 9 and 12 and ‘Unfavourable’ if its value is above 13. Such classifications were subjected to frequency analysis and test of significance was performed using Chi-Square test. The results are tabulated below:

**Table 2: Frequency Analysis On Advertising Utility**

<table>
<thead>
<tr>
<th>S. No</th>
<th>Opinion</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
<th>Chi-Square (Sig. at 5%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Favourable</td>
<td>600</td>
<td>30.0</td>
<td>30.0</td>
<td>1164.579</td>
</tr>
<tr>
<td>2</td>
<td>Neutral</td>
<td>1321</td>
<td>66.0</td>
<td>96.0</td>
<td>df=2</td>
</tr>
<tr>
<td>3</td>
<td>Unfavourable</td>
<td>80</td>
<td>4.0</td>
<td>100.0</td>
<td>p=0.000</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>2001</td>
<td>100.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It is evident from Table 2 that, majority of the respondents (66%) have neutral opinion on the advertising utility of online advertisements. Further, 30% and 4% respectively have favourable and unfavourable opinion respectively about the advertising utility of online advertisements. The significant Chi-Square value (1164.579) at 5% level for 2 degrees of freedom, confirm that the teenagers are having neutral opinion about the advertising utility of online advertisements.

**Indignity due to Online Advertisements**

Another important measure to capture attitude about online advertisements is the indignity or embarrassment that happens to the teenagers. To know the indignity caused due to online advertisements, six statements were queried to the respondents and their responses were captured on both three point and five point scales. The three point scales were coded as 1 for ‘like’ or ‘completely’, 2 for ‘neutral’ and 3 for ‘dislike’ or ‘not at all’. The five point scales were coded as 1 to 5 for ‘Always’, ‘Sometimes’, ‘Neutral’, ‘Seldom’ and ‘Never’ respectively. Its total measure called Total indignity (TI) was calculated by summing up all the responses. This TI was further used to classify the respondents’ opinion as ‘Favourable’ for a TI score between 5 and 10 followed by ‘Neutral’ for a TI score between 11 and 16 and ‘Unfavourable’ for a TI score above 16. This classification was further subjected to frequency analysis and test of significance using Chi-Square test. The results are tabulated below:

**Table 3: Frequency Analysis on Indignity Due To Online Advertisements**

<table>
<thead>
<tr>
<th>S.No</th>
<th>Opinion</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
<th>Chi-Square (Sig. at 5%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Favourable</td>
<td>40</td>
<td>2.0</td>
<td>2.0</td>
<td>1632.225</td>
</tr>
<tr>
<td>2</td>
<td>Neutral</td>
<td>1480</td>
<td>74.0</td>
<td>76.0</td>
<td>df=2</td>
</tr>
<tr>
<td>3</td>
<td>Unfavourable</td>
<td>481</td>
<td>24.0</td>
<td>100.0</td>
<td>p=0.000</td>
</tr>
</tbody>
</table>
It can be inferred from Table 3 that, majority of the respondents (74%) are neutral about the indignity/embarrassment caused due to online advertisements. Further, only 2% of the respondents respectively have opined that indignity is caused while watching online advertisements whereas, 24% of them have opined that online advertisements do not cause indignity. The significant Chi-Square value (1632.225) at 5% level of significance for 2 degrees of freedom has confirmed that the teenagers are neutral about indignity caused due to online advertisements.

**Price Perceptions**

The important measure of attitude about online advertisements is the perception of the audience about the price of products advertised. To gauge the teenagers perception about the price of the products advertised in online advertisements, three statements were inquired and their responses were captured on three point scales. These were coded as 1 for ‘Agree’ or ‘Increases’, 2 for ‘Neutral’ and 3 for ‘Disagree’ or ‘Decreases’. The sum of all the responses were collectively named the Total Price Perception (TPP). The TPP was further categorized into ‘Favourable’ for a score between 3 and 4, ‘Neutral’ for a score between 5 and 7 and ‘Unfavourable’ for a score between 8 and 9. These categories were treated with frequency analysis and test of significance using Chi-square test. The results are tabulated in Table 4.

<table>
<thead>
<tr>
<th>S.No</th>
<th>Opinion</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
<th>Chi-Square (Sig. at 5%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Favourable</td>
<td>556</td>
<td>27.8</td>
<td>27.8</td>
<td>62.360 df=2 p=0.000</td>
</tr>
<tr>
<td>2</td>
<td>Neutral</td>
<td>615</td>
<td>30.7</td>
<td>58.5</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Unfavourable</td>
<td>830</td>
<td>41.5</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2001</strong></td>
<td><strong>100.0</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It is evident from Table 4 that, majority of the respondents (41.5%) have unfavourable perceptions about the prices of the advertised products. Also, 30.7% and 27.8% of them are having neutral and favourable perceptions respectively. But the significant Chi-square value (62.360) depicts that the teenagers have unfavorable opinion on the prices of products advertised online.

**Regulation**

The final measure of attitude is the regulation available for online advertisements. To judge the respondents’ attitude towards regulation followed for online advertisements, three statements were questioned and the respondents’ responses were captured on three point scales. These responses were coded as 1 for ‘Agree’ or ‘Too much’, 2 for ‘Neutral’ or ‘Right’ and 3 for ‘Disagree’ or ‘Very Little’. These scores were summed up to get the total regulation (TR) score. The TR scores were further grouped into ‘Favourable’ for a score between 3 and 4, ‘Neutral’ for a score between 5 and 7 and ‘Unfavourable’ for a score between 8 and 9. These groups were analyzed using frequency analysis and test of significance using Chi-Square test. The results are tabulated in Table 5.

<table>
<thead>
<tr>
<th>S.No</th>
<th>Opinion</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
<th>Chi-Square (Sig. at 5%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Favourable</td>
<td>385</td>
<td>19.2</td>
<td>19.2</td>
<td>1426.291 df=2</td>
</tr>
<tr>
<td>2</td>
<td>Neutral</td>
<td>1453</td>
<td>72.6</td>
<td>91.9</td>
<td></td>
</tr>
</tbody>
</table>
It is obvious from Table 5 that majority of the respondents (72.6%) are neutral about the regulation imposed on online advertisements. Further, 19.2% and 8.1% of the respondents have favourable and unfavourable opinion respectively on the regulation imposed on online advertisements. The significant Chi-Square value (1426.291) at 5% level for 2 degrees of freedom confirms that the Teenagers are unaware about the regulations imposed on online advertisements.

**Attitude towards Online Advertisements based on Gender**

The various categories used to measure attitude towards online advertisements such as general perception, Advertising utility, Indignity, Price perceptions and Regulation were analyzed based on gender using Mann Whitney ‘U’ test and the results are tabulated in Table 6.

**TABLE 6: ATTITUDE TOWARDS ONLINE ADVERTISEMENTS BASED ON GENDER**

<table>
<thead>
<tr>
<th>Attitude Factors</th>
<th>Gender</th>
<th>N</th>
<th>Mean Rank</th>
<th>Sum of Ranks</th>
<th>Mann-Whitney U</th>
<th>Wilcoxon W</th>
<th>Z</th>
<th>Asym p. Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Perception</strong></td>
<td>Male</td>
<td>1096</td>
<td>1008.74</td>
<td>1105579.50</td>
<td>487456.50</td>
<td>897421.50</td>
<td>-</td>
<td>0.671</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>905</td>
<td>991.63</td>
<td>897421.50</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2001</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Advertising Utility</strong></td>
<td>Male</td>
<td>1096</td>
<td>999.40</td>
<td>1095339.50</td>
<td>494183.50</td>
<td>1095339.50</td>
<td>-</td>
<td>0.139</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>905</td>
<td>1002.94</td>
<td>907661.50</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2001</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Indignity</strong></td>
<td>Male</td>
<td>1096</td>
<td>997.73</td>
<td>1093507.00</td>
<td>492351.00</td>
<td>1093507.00</td>
<td>-</td>
<td>0.282</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>905</td>
<td>1004.97</td>
<td>909494.00</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2001</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Price Perceptions</strong></td>
<td>Male</td>
<td>1096</td>
<td>1001.61</td>
<td>1097769.50</td>
<td>495266.50</td>
<td>905231.50</td>
<td>-</td>
<td>0.053</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>905</td>
<td>1000.26</td>
<td>905231.50</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2001</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Regulation</strong></td>
<td>Male</td>
<td>1096</td>
<td>1007.83</td>
<td>1104576.50</td>
<td>488459.50</td>
<td>898424.50</td>
<td>-</td>
<td>0.598</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>905</td>
<td>992.73</td>
<td>898424.50</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2001</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

It is evident from Table 6 that the male respondents have scored higher mean rank (1008.74) against female respondents (991.63) in their general perception. But, the U statistic (487456.50) is insignificant since significance value (0.502) is more than 0.05. Thus there is no significant difference in the respondents on their general perception based on gender.
Similarly, male respondents have scored higher mean rank (1001.61) against female respondents (1000.26) in their perception about prices of the product advertised in online advertisements. But, the U statistic (495266.50) is insignificant since significance value (0.957) is more than 0.05. Thus there is no significant difference in the respondents based on gender about their perception about prices of the product advertised online.

In the same way, male respondents have scored higher mean rank (1007.83) against female respondents (992.73) in their perception about regulations imposed on online advertisements. But, the U statistic (488459.50) is insignificant since significance value (0.550) is more than 0.05. Thus there is no significant difference in the respondents based on gender about regulations imposed on online advertisements.

On the other hand, female respondents (1002.94) have scored higher mean rank for Advertising utility than their male counterparts (999.40). But, the insignificant U Statistic (494183.50;p=0.890)depicts that the difference in opinion about Advertising utility due to gender is not significant.

Similarly, female respondents (1004.97) have scored higher mean rank for Indignity than their male counterparts (997.73). But, the insignificant U Statistic (492351.00;p=0.778)depicts that the difference in opinion based on gender about indignity due to online advertisements is not significant.

ATTITUDE TOWARDS ONLINE ADVERTISEMENTS BASED ON EDUCATIONAL QUALIFICATIONS

Next, the attitude of the teenagers about Online advertisements based on their educational qualifications were analyzed using Mann Whittney U test. To perform this analysis, the educational qualifications for school students were coded as 1 and college students as 2. The results are tabulated in Table 7.

Table 7: Attitude Towards Online Advertisements Based On Educational Qualifications

<table>
<thead>
<tr>
<th>Attitude Factors</th>
<th>Education Qualifications</th>
<th>Mean Rank</th>
<th>Sum of Ranks</th>
<th>Mann-Whitney U</th>
<th>Wilcoxon W</th>
<th>Z</th>
<th>Asymp. Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Perception</td>
<td>School (N=824)</td>
<td>883.68</td>
<td>728151.50</td>
<td>388251.500</td>
<td>728151.500</td>
<td>-7.728</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>College (N=1177)</td>
<td>1083.13</td>
<td>1274849.50</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Advertising Utility</td>
<td>School (N=824)</td>
<td>1027.19</td>
<td>846402.00</td>
<td>463346.000</td>
<td>1156599.000</td>
<td>-1.725</td>
<td>0.085</td>
</tr>
<tr>
<td></td>
<td>College (N=1177)</td>
<td>982.67</td>
<td>1156599.00</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Indignity</td>
<td>School (N=824)</td>
<td>1066.13</td>
<td>878490.00</td>
<td>431258.000</td>
<td>1124511.000</td>
<td>-4.271</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>College (N=1177)</td>
<td>955.40</td>
<td>1124511.00</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Price Perceptions</td>
<td>School (N=824)</td>
<td>941.52</td>
<td>775810.00</td>
<td>435910.000</td>
<td>775810.000</td>
<td>-3.932</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>College (N=1177)</td>
<td>1042.64</td>
<td>1227191.00</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
It is obvious from Table 7 that, the mean rank for college students (1083.13) is higher than the school students (883.68). The significant ‘U’ Statistic (388251.500) has clearly implied that the teenagers differ in their general perception about online advertisements based on their educational qualifications.

Similarly, college students (1042.64) are higher in their mean ranks than the school students (941.52) on their opinion about prices of the products advertised. The significant ‘U’ Statistic (435910.000) has clearly implied that the teenagers differ in their price perception of online advertisements based on their educational qualifications.

In the same way, college students (1049.90) are higher in their mean ranks than the school students (935.43) on their opinion about regulations imposed on online advertisements. The significant ‘U’ Statistic (430897.500) has clearly implied that the teenagers differ in their opinion on the regulations imposed on online advertisements based on their educational qualifications.

On the other hand, the school students (1027.19) have ranked higher than their college counterparts (982.67) in their opinion about the advertising utility of online advertisements. But the difference between school and college students on their opinion on advertising utility of online advertisements is insignificant as depicted by the insignificant ‘U’ Statistic (463346.000; p=0.085).

In the same way, the school students (1066.13) have ranked higher than their college counterparts (955.40) in their opinion about indignity caused due to online advertisements. Also, the significant ‘U’ Statistic (431258.000;p=0.000) depicts that the teenagers differ significantly in their opinion about the indignity caused due to online advertisements.

ATTITUDE TOWARDS ONLINE ADVERTISEMENTS BASED ON AGE

Finally, the attitude towards online advertisements based on age was analyzed using Mann Whitney U test. For this purpose, the age of respondents were grouped into less than or equal to 15 and more than 15. The results are tabulated in Table 8.

<table>
<thead>
<tr>
<th>Attitude Factors</th>
<th>Age in years</th>
<th>Mean Rank</th>
<th>Sum of Ranks</th>
<th>Mann-Whitney U</th>
<th>Wilcoxon W</th>
<th>Z</th>
<th>Asymp. Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Perception</td>
<td>&lt;=15 (N=624)</td>
<td>872.33</td>
<td>544336.50</td>
<td>349336.50</td>
<td>544336.500</td>
<td>-6.819</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>&gt;15 (N=1377)</td>
<td>1059.31</td>
<td>1458664.63</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Advertising Utility</td>
<td>&lt;=15 (N=624)</td>
<td>1026.13</td>
<td>640306.50</td>
<td>413941.50</td>
<td>1362694.500</td>
<td>-1.332</td>
<td>0.183</td>
</tr>
<tr>
<td></td>
<td>&gt;15 (N=1377)</td>
<td>989.61</td>
<td>1362694.50</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Indignity</td>
<td>&lt;=15 (N=624)</td>
<td>1066.05</td>
<td>665214.00</td>
<td>389034.00</td>
<td>1337787.000</td>
<td>-3.432</td>
<td>0.001</td>
</tr>
</tbody>
</table>
From Table 8, it is obvious that, the respondents above 15 years (1059.31) have ranked higher than their counterparts below 15 years of age (872.33). Further, the significant ‘U’ Statistic (349336.500) shows that the respondents differ significantly based on age about their general perceptions about online advertisements.

Similarly, the respondents above 15 years (1028.65) have ranked higher than their counterparts below 15 years of age (939.99). Further, the significant ‘U’ Statistic (391556.000) shows that the respondents differ significantly based on age about their price perceptions about online advertisements.

In the same way, the respondents above 15 years (1024.61) have ranked higher than their counterparts below 15 years of age (948.91). Further, the significant ‘U’ Statistic (397119.500) shows that the respondents differ significantly based on age about the opinion on the regulations imposed on online advertisements.

On the other hand, the respondents below 15 years of age (1026.13) have ranked higher than the respondents above 15 years of age (989.61) in their opinion about advertising utility of online advertisements. But the insignificant ‘U’ Statistic (413941.500;p=0.183) has implied that the respondents do not differ significantly based on age in their opinion about advertising utility of online advertisements.

Similarly, the respondents below 15 years of age (1066.05) have ranked higher than the respondents above 15 years of age (971.52) in their opinion about indignity caused due to online advertisements. But the significant ‘U’ Statistic (389034.000;p=0.001) has implied that the respondents differ significantly based on age in their opinion about indignity caused due to online advertisements.

**CONCLUSION**

The present paper has aimed to capture the teenagers’ attitude towards online advertising and perceptual changes based on age, gender and educational qualifications. From, the study it is clear that, teenagers’ attitude is neutral for almost all factors of online advertising and there is a significant difference in the teenagers’ opinion based on their age, gender and educational qualifications. Although, it is a preliminary study, the findings may be helpful in reframing the contents and message of online advertisements when they are targeted towards teenagers. Further, the study is limited to Tamil Nadu state of India only and the perception of teenagers may vary with other geographical area since there are vast cultural differences. Hence, the findings of the present study are a foundation for studying the effectiveness of online advertisements.
Acknowledgement

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REFERENCES


PERCEPTION OF EMPLOYER BRANDS IN A STRONG ECONOMIC REGION AS EVALUATED BY FUTURE MANAGERS

BIBIANA GRASSINGER1, ALEXANDER H. KRACKLAUER2 AND SASCHA G. FABIAN3

ABSTRACT
Employer branding has become a popular topic in recent years. Due to various reasons such as the internationalised labour market, ageing society and the values of generation Y, the main challenge of companies in the next years will be to find the “right potentials”. Based on the three-component model of attitudes, future specialists and executives (students) were asked to evaluate the employer brands of companies located in a very strong economic region (external brand perception). The employer brand was operationalised by three components: awareness (cognition), likability (affection) and employer attractiveness (intentional behaviour). Companies with the head office in the selected region and an annual turnover of more than €50 million were evaluated. Two key results could be found: the awareness of a lot of companies is poor, and the emotionalisation of the employer brand can be seen as a crucial success factor in the “war for talents”.

Key words: employer brand, attitudes, employer attractiveness, brand management

INTRODUCTION
Attractive employer brands are often viewed as key to prevent a shortage of specialists. This can be the case especially for small and medium-sized enterprises. Large corporations have usually already established employer branding and are much more attractive in the competition for specialists and executives in comparison to small and regional companies (Kirchgeorg and Günther, 2006; Baum, Gsell and Kabst, 2012; Sommer, 2014; Trendence, 2015).

This article explains if and to what extent employer brands in a strong economic region are recognised by future specialists and executives. Firstly, the significance and scientific basis for this topic will be discussed. The theoretical framework of the employer brand is the basis of this study on the measurement of employer brands. It is conducted in the highly competitive (in terms of winning employees) region of Ulm/Neu-Ulm. The article closes with a conclusion and the prospects of future fields of study.

The concept of employer brand
The basis of the explanation of the employer brand is the term “brand”. Drawing on the definition of the American Marketing Association (Bennet, 1988, p. 18), Dibb et al. (1997, p. 264) state: “A brand is a name, term, design, symbol or any other feature that identifies one seller’s good or service as distinct from those of other sellers.” The authors add “any other feature”, since intangibles, people, places and companies can also be brands (Backhaus und Tikoo, 2004).

Ambler and Barrow (1996, p. 187) define the employer brand as “the package of functional, economic and psychological benefits provided by employment and identified with

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the employing company. The main role of the employer brand is to provide a coherent framework for management to simplify and focus priorities, increase productivity and improve recruitment, retention and commitment.” The employer brand focuses not only on potential employees (external perception) but also on current employees (internal perception) (Esch, Knörl and Strödt, 2014).

The core of the employer brand is a distinctive proposition, the so-called employer value proposition (EVP) (Esch, Knörl and Strödt, 2014; Edward, 2010, Barrow and Mosely, 2005, Sparrow and Cooper, 2003). It derives from marketing, where products should provide a unique selling proposition (Schumacher and Geschwill, 2009, p. 39; Trost, 2009, p. 16; Hummel, 2012, p. 71; Esch, Knörl and Strödt, 2014, p. 26, 43). This is necessary as the labour market in economically strong regions can be compared to a buyer market (Kirchgeog and Günther, 2006). Sparrow and Cooper (2003, p. 160) define the EVP as “the application of a customer value proposition – why should you buy my product or service – to the individual – why should a highly talented person work in my organization? It differs from one organization to another, has to be as distinctive as a fingerprint, and is tailored to the specific type of people the organization is trying to attract and retain.” Hence, the proposition is not exchangeable, but rather specific to the company.

RELEVANCE OF THE TOPIC

In many companies, employer branding is playing an ever-increasing role. The demographic development of German society shows that the population aged between 20 and 65 (relevant for employment) will decrease from 49.7 million (2010, percentage of the total population: 61%) to over 47.6 million (2020, 60%) to 42.1 million (2030, 54%) (Statistisches Bundesamt, 2009). The companies can no longer “fish” from the large pool of specialists over the long term, but rather must win and keep suitable employees in a buyer’s market. Through the internationalisation of the labour market (i.e. free movement of persons within the EU), employee mobility has increased. In the competition for suitable employees, companies compete not only within a region or country, but now over the entire globe (Schumacher and Geschwill, 2009; Stotz and Wedel, 2009).

Germany’s economy is strongly characterised by medium-sized enterprises. These cannot fall back on the advantages of corporate structure when attracting potential employees (i.e. overseas stay, career possibilities, prestige, health care programmes). A study of determinants of employer branding in German companies showed that the probability of employer branding being part of a company increases with the size of the business (Baum, Gsell and Kabst, 2012).

The study presented in this paper was undertaken in the economic region of Ulm/Neu-Ulm. The region is characterised by large industries on the one hand and on the other hand is marked by a wide range of medium-sized enterprises as well as prosperous family-run enterprises. The examined region indicates a low unemployment rate: 2.7% for Neu-Ulm, 2.7% for the Alb-Danube District and 4.4% for Ulm (as of September 2015; Agentur für Arbeit, 2015(a),(b),(c)). The region has a long tradition of being an industrial site. In recent decades, further economic pillars have arisen, especially through the establishment of a university (1967) and the so-called Science Park (1986). In a current labour market study, Ulm takes 5th place in Germany with 1.81 unemployed per vacant position (Honecamp, 2015). The good chances on the labour market especially affect specialised engineers and scientists, but also academics from different sectors.

The values of the so-called generation Y (those born between 1980 and 2000) also explain the increasing importance of employer branding. Future specialists and executives come from this generation; that is why they were included in this study. Some of its members are “digital natives” (raised with digital media) and regard work as a part of life, in which many other areas
play a role as well (Espinoza, Ukleja, and Rusch, 2010). They are willing to do things for work during free time, and expect to be able to do private tasks in the workplace in return. Work and private lives blur together. Lifelong learning is a matter of course, so that among other things, the offer of continuous education in a company and flexible work models (securing work-life balance) are substantial factors in the decision regarding an employer (Ruthus 2014, p. 19ff).

THEORETICAL FRAMEWORK
The study is based on the three-component model of attitudes (Rosenberg and Hovland, 1960, p. 3; Trommsdorf and Teichert, 2011, p. 130):

Figure 1: Three-component model of attitudes (Trommsdorff and Teichert, 2011, p. 130)

Trommsdorff and Teichert (2011) explain the attitude of consumers to a specific product with the three-component theory. Every attitude has an emotional (affective), a knowledge-based (cognitive), and a practical (intentional behaviour) component. The behaviour is derived from these three factors, which in turn affects future attitudes (cf. figure 1).

As a popular instrument for market measurement, the brand triad is derived from these three components (Gruner+Jahr, 2007). The brand triad shows strengths and weaknesses of a particular brand position among target groups (Kilian, 2015). Attitudes towards an employer are transmitted through three components:

- Cognitive component: awareness
- Affective component: likability
- Intentional behaviour component: employer attractiveness/willingness to apply

Considering the employer brand proposition (cf. figure 2), it becomes evident that the study presented in this paper analyses the external reputation of the company as an employer (Barrow/Mosley, 2011, p. 150).
METHODOLOGY

Students from regional universities were defined as potential and future specialists and executives. They were asked to judge the employer brands of companies with an annual turnover of more than €50 million and headquartered in the economically strong region of Ulm/Neu-Ulm. The selection of the companies was made with the help of the database Bisnode (Bisnode Deutschland GmbH, 2015). The study in the current design started in 2013 and is conducted continuously every year. The employer brands from a total of 69 companies were queried (2015). In 2014, 66 companies were analysed, and in 2013 61 companies. The samples are isomorphic, meaning they were rated by gender and faculty.

The survey period stretched from May to June 2013, from May to July 2014, and from May to July 2015. Written, standardised questionnaires were used in all three years, and in 2014 and 2015 additional online questionnaires were used.

From a theoretical perspective, brands can only build high attractiveness with appropriate awareness and positive association. The following questions were asked:

- Cognitive component: How well do you know the company from your own experiences, from third parties or from the media?
- Affective component: How do you feel about the company?
- Intentional behaviour component: Would you apply for a suitable job in the company?

The respondents could give scaled responses as to how well they know a company (cognitive component: awareness), how likable the company is (affective component: likability) and if they would apply for a suitable position (intentional behaviour component: employer attractiveness).

The scale ranges from 5 (very positive statement) to 1 (very negative statement). Figure 3 shows how these three dimensions for each company were asked. In order to reduce the time to fill in the questionnaire, in 2015 two separate questionnaires were developed. The students rated 34 and 35 companies respectively.
FINDINGS

In Figures 4 and 5, it will become evident how the companies performed using the determining factors awareness (cognitive component), likability (affective component) and employer attractiveness (intentional behaviour component). The results are anonymised.

In awareness, the highest value measured was 4.62 and the lowest was 1.05. The wide range of the values is notable. The values of awareness decrease rapidly (cf. Figure 4).

An average value for each enterprise was formed based on the statements made:

\[
\text{Employer brand} = \frac{\emptyset \text{ awareness} + \emptyset \text{ likability} + \emptyset \text{ attractiveness}}{3}
\]

Figure 5 displays the overall ranking, in which only one enterprise achieved a value above 4. In total, 19 companies were evaluated with a score of 3 or better. The employer brands of 50 out of the 69 examined enterprises of the region Ulm/Neu-Ulm were judged under 3 which means that the students don’t perceive them as strong (Figure 5).
The values of awareness of the enterprises turned out to be more heterogeneous than those for likability and employer attractiveness. The latter components tend to have better results than the values for the awareness of the companies (cf. Table 1).

Table 1: Minimum, maximum and mean values of the three evaluated components

<table>
<thead>
<tr>
<th></th>
<th>Awareness</th>
<th>Likability</th>
<th>Employer attractiveness</th>
<th>Total value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>1.05</td>
<td>2.17</td>
<td>2.07</td>
<td>1.98</td>
</tr>
<tr>
<td>Maximum</td>
<td>4.62</td>
<td>4.02</td>
<td>3.94</td>
<td>4.13</td>
</tr>
<tr>
<td>Mean</td>
<td>2.12</td>
<td>3.06</td>
<td>2.91</td>
<td>2.70</td>
</tr>
</tbody>
</table>

The top 10 can be characterised as follows: Among them are five enterprises with more than €1 billion in annual revenue, two subsidiaries of large corporations, two owner-operated companies, and one municipal undertaking. With one exception, all of the top 10 enterprises represented an annual turnover of more than €200 billion. The sectors of the top 10 are widely scattered and cover a range of industries from construction to production (pharmaceutical, food, motor oil, gardening products, lorries) to trade and services (IT, energy).

An analysis of the correlations shows that there is a significantly positive correlation between likability and employer attractiveness (r = 0.662) (cf. Table 2).

Table 2: Correlations between the components of the employer brand 2015

<table>
<thead>
<tr>
<th>Pearson correlation</th>
<th>Awareness (cognitive component)</th>
<th>Likability (affective component)</th>
<th>Employer attractiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awareness</td>
<td>1 (n=738)</td>
<td>0.141** (n=719)</td>
<td>0.177** (n=719)</td>
</tr>
<tr>
<td>Likability</td>
<td>0.141** (n=719)</td>
<td>1 (n=719)</td>
<td>0.662** (n=716)</td>
</tr>
</tbody>
</table>

** p<0.01
Table 2 displays that there is no significant linear correlation between awareness and likability or between awareness and employer attractiveness. The better students feel about a company (likability), the higher the probability to apply for a suitable position there (employer attractiveness). The correlation can be depicted as follows (cf. Figure 6):

**Figure 6: Correlations in the three-component-model of attitudes**

![Diagram showing correlations in the three-component-model of attitudes]

Comparisons to previous years

The survey in the current design was also conducted in the years 2013 and 2014, so that developmental trends can be seen. 57 companies have been evaluated by the students in all three consecutive years. Figure 7 displays the means of the employer brand components of these 57 companies.

**Figure 7: Development of the employer brand’s components 2013–2015**
All changes from year to year are significant. The awareness increased every year. Values for likability and employer attractiveness increased first and then declined. Thus, the components are not stable. Awareness is indispensable for an employer brand. The emotional side of the construct has to be cultivated.

This also becomes clear when checking the ranges and standard deviations (cf. Table 3):

Table 3: Descriptive statistics of the employer brand’s components from 2013 to 2015

<table>
<thead>
<tr>
<th>Component</th>
<th>n</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Range</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awareness 2013</td>
<td>57</td>
<td>1.10</td>
<td>4.00</td>
<td>2.90</td>
<td>1.9035</td>
<td>.82807</td>
</tr>
<tr>
<td>Likability 2013</td>
<td>57</td>
<td>2.40</td>
<td>3.80</td>
<td>1.40</td>
<td>3.1860</td>
<td>.27021</td>
</tr>
<tr>
<td>Employer attractiveness 2013</td>
<td>57</td>
<td>2.00</td>
<td>3.80</td>
<td>1.80</td>
<td>2.8211</td>
<td>.39854</td>
</tr>
<tr>
<td>Total value 2013</td>
<td>57</td>
<td>1.90</td>
<td>3.70</td>
<td>1.80</td>
<td>2.6333</td>
<td>.41805</td>
</tr>
<tr>
<td>Awareness 2014</td>
<td>57</td>
<td>1.10</td>
<td>4.60</td>
<td>3.50</td>
<td>2.1947</td>
<td>.95850</td>
</tr>
<tr>
<td>Likability 2014</td>
<td>57</td>
<td>2.70</td>
<td>4.20</td>
<td>1.50</td>
<td>3.3193</td>
<td>.34509</td>
</tr>
<tr>
<td>Employer attractiveness 2014</td>
<td>57</td>
<td>2.30</td>
<td>4.10</td>
<td>1.80</td>
<td>3.1789</td>
<td>.38067</td>
</tr>
<tr>
<td>Total value 2014</td>
<td>57</td>
<td>2.20</td>
<td>4.10</td>
<td>1.90</td>
<td>2.8965</td>
<td>.49856</td>
</tr>
<tr>
<td>Awareness 2015</td>
<td>57</td>
<td>1.10</td>
<td>4.60</td>
<td>3.50</td>
<td>2.2474</td>
<td>.99554</td>
</tr>
<tr>
<td>Likability 2015</td>
<td>57</td>
<td>2.20</td>
<td>4.00</td>
<td>1.80</td>
<td>3.1263</td>
<td>.39755</td>
</tr>
<tr>
<td>Employer attractiveness 2015</td>
<td>57</td>
<td>2.10</td>
<td>3.90</td>
<td>1.80</td>
<td>2.9772</td>
<td>.39098</td>
</tr>
<tr>
<td>Total value 2015</td>
<td>57</td>
<td>2.00</td>
<td>4.10</td>
<td>2.10</td>
<td>2.7807</td>
<td>.52148</td>
</tr>
</tbody>
</table>

The range of awareness, in particular (3.50 on a scale from 1 to 5 in 2014 and 2015), shows how strongly the values deviate both ways. The range increased from 2013 to 2014, and stagnated in 2015. The ranges for likability and employer attractiveness are, in contrast to the awareness, low. In comparison to last year, they have increased.

**DISCUSSION AND CONCLUSION**

The study presented in this paper showed the evaluations of employer brands by future specialists and executives. The construct is composed of the awareness, the likability and the employer attractiveness of a company. As the study started in 2013, changes in these evaluations can be seen.

The study revealed that in 2015, the respondents (students) did not know almost 60% of the evaluated companies (awareness values under 2). Only one company reached a total value of over 4. This is a warning signal since only big companies in terms of annual turnover (> €50 million) were analysed in this study. Moreover, in the competition for junior specialists and executives, the larger companies (higher annual turnover) tend to be judged better. Many studies of the last few years confirm this (Baum, Gsell and Kabst, 2012; Sommer, 2014; Trendence, 2015). It can be assumed that the location attractiveness of Ulm/Neu-Ulm – though itself a strong economic region – suffers from being situated between the metropolitan areas of Stuttgart and Munich. Those offer jobs at even larger companies, e.g. in the automotive industry (Porsche, Daimler, BMW).

The moderate to high correlation (0.662) between likability and employer attractiveness shows that searching for work is an emotional matter. Hence, the likability of an enterprise is regarded as a crucial determining factor. The positive emotionalisation of the employer brand is the fulcrum within an employer-branding process that companies should establish to find and maintain well-suited staff. Another critical factor is addressing potential employees through the contact channels they use to communicate with the companies (touchpoint management) (Accelerom, 2014; Esch, Knörle and Strödter, 2014).
Until now, companies have perceived the lack of specialists only in a qualitative way. In the future, searching for specialists will be more difficult for companies both in quantity and in quality. Hence, the awareness of a company is a necessary, however not a sufficient requirement, to be even perceived as a potential employer.

From a scientific point of view, the three-component theory of the brand triad can be considered as an appropriate instrument for evaluating the employer brand of a company. In this study, it was operationalised with one question for each component. To obtain a differentiated image for every enterprise, asking several questions per component may be considered in the future. In this way details of the employer brand can be identified.

The study is limited to the image of the enterprise as an employer (external perception). Therefore, it does not provide insight about the internally lived corporate culture or about any corporate efforts regarding the positioning of its employer brand (e.g. own company homepage for careers, job fairs, and cooperation with colleges and universities, among other things). To obtain a holistic view of employer brands, further in-depth research in the presented region is recommended.

To sum up, awareness is mandatory for companies in the “war for talents”. Additionally, a positive and emotionalised employer brand (likability) is attractive to students. As shown in comparison to previous years, the values for the three components are not stable. Hence, companies have to work continuously on their employer brand.

REFERENCES


IMPACT OF GROSS DOMESTIC PRODUCT (GDP) AND TOTAL OF POPULATION TOWARDS FOREIGN DIRECT INVESTMENT (FDI): CASE OF BANKING SECTOR IN MALAYSIA: AN EMPIRICAL STUDY ON THE TIME SERIES DATA BY USING E-VIEWS, 1987-2012

INTANMAIZURA ABDUL RASHID1, NOR'AZNIN ABU BAKAR2 AND NOR AZAM ABDUL RAZAK3

ABSTRACT

This research attempt to look at the impact of Gross Domestic Product (GDP) and total of population towards Foreign Direct Investment (FDI) for Banking Sector of Malaysia through an empirical analysis during 1980 to 2011. First, the variable was tested using Augmented Dickey-Fuller (ADF) whereby only the population is significant with FDI and the result show that the alternative hypothesis is accept and null hypothesis is reject. Next, OLS framework was conducted for the computation model to censor the impact of Gross Domestic Product (GDP) and total of population towards foreign direct investment (FDI) for banking sector of Malaysia. In addition, the outcome demonstrates that the value of t-statistic is significant at 5% which means that the null hypothesis is rejected and the alternative hypothesis is accepted. Thus from the result obtained, it can conclude that FDI it has significant relationship with all the two variables. The diagnostic test suggests that the model cannot sustain from any autocorrelation and heteroscedasticity. Moreover, the evidence is sufficiently strong to claim that the FDI can improve the GDP. All the data used where collect from the statistic of World Bank and Central Bank of Malaysia. Lastly, this study indicates that Gross Domestic Product (GDP) and Total of Population have a significant impact towards FDI for Banking Sector in Malaysia.

Keywords- Malaysia, FDI, Banking Sector, GDP, Population.

INTRODUCTION

According to Ang (2007) foreign direct investment (FDI) has been seen as a key driver underlying the strong growth performance experienced by the Malaysia economy. Policy reforms, including the introduction of the Investment Incentives Act 1968, establishment of free trade zones in the early 1970s, and the provision incentives along the acceleration of open policy in the 1980s, led to a surge of FDI in the late 1980s. Apart from these policy factors, many think that sound macroeconomic management, sustained economic growth, and well-functioning financial system have made Malaysia as an attractive prospect for FDI especially in banking sector. However, there has been a persistent decline in the ratio of FDI inflows to GDP since the early 1990s. While this disappointing pattern of development has become a major concern of researchers and policy makers, there has been little attention paid to the understanding of determines FDI for banking industry in Malaysia. Hence, this warrants an investigation into what are the key forces that stimulate FDI in Malaysia. According to Tang

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3 School of Economics, Finance and Banking, College of Business, Universiti Utara Malaysia, Kedah, Malaysia. Email: azam@uum.edu.my
(2014), even though the role of foreign direct investment (FDI) shows in an economic literature, investigation of the determinants of inward FDI remains a hotly debated topic. This topic is crucially important for developing countries which often face shortage of domestic resources to accelerate economic growth. Therefore, investigating the relationship of GDP and Total of Population towards FDI is vital in modelling an effective macroeconomic policy to attract inward FDI. Given that the policy is relevant, estimating the GDP and Total of Population on inward FDI for Malaysia has also received a great deal of attention.

**RESEARCH OBJECTIVES**

The main focus of conducting this research is to find out the mainfactors especially on GDP and populations towards foreign direct investment (FDI) for banking sector in Malaysia. Based on the theoretical framework and research questions in this study, the research objectives as follow:

1. To determine the gross domestic products towards FDI on banking sector in Malaysia.
2. To identify the effect of population towards foreign direct investment on banking sector in Malaysia.

**HYPOTHESES**

**Hypothesis 1**

H0: There is no relationship between gross domestic products towards FDI on banking sector in Malaysia.
H1: There is a relationship between gross domestic products towards FDI on banking sector in Malaysia.

**Hypothesis 2**

H0: There is no relationship of population towards FDI on banking sector in Malaysia.
H1: There is a relationship of population towards FDI on banking sector in Malaysia.

**RESEARCH METHODOLOGY**

All the data collected from Economic Report, Department of Statistics and Ministry of Finance, Malaysia and the World Bank. In completing this study, the samples that have been used based on 25 years data in yearly basis from 1987-2012. The sanity behind choose this periods was based on the availability of data. The variables used for dependent variable are GDP and population. In additions, the data collected for Gross Domestic Product (GDP) measured by Ringgit.

**THEORETICAL FRAMEWORK**

The schematic diagram below shows the relationship between independent variable and dependent variables:
METHODS AND RESULTS

Method of Analysis

Basically, the Augmented Dickey-Fuller (ADF) unit root test was applied. After conducted the unit root test, the Johansen-Juselius Co-integration Test was used to determine the long run relationship among variables. Lastly, the Granger causality test was utilized to examine the causality relationship among the GDP and population.

Augmented Dickey-Fuller (ADF) unit root test

The beginning step in developing a time series data is to decide the no stationary characteristic of every variable. We must tentative each of the series in the stages (log of real GDP and log of population) and in the first differences (growth and FDI rate). All variable were inspecting in stage using the Augmented Dickey-Fuller (ADF) Test. Consider the equation below:

\[ a_t = \alpha + \beta t + \sum_{i=1}^{m} \Delta X_{t-i} + \epsilon_t \]  

(1)

Where \( a_t \) is our variable of savour, \( \Delta \) is the time trend and the discrepancy operator is the time current and the \( \epsilon_t \) is the white rumble residual of zero average, constant variance; \( (\epsilon_t, \epsilon_{t-1}, \epsilon_{t-2}, \ldots, \epsilon_{t-m}) \) is a set of parameters to be estimated. If the stationary test is significant, it implies that the part variable series is stationary and does not have a unit root test. The null hypothesis will thus be rejected, but the alternative hypothesis will be accepted. If the stationary test is not significant, then the variable series is not stationary and has a unit root test; thus, the null hypothesis will be accepted. The hypotheses for this study as follows:

- \( H_0: \delta = 0 \) (have a unit root test / not stationary)
- \( H_1: \delta \neq 0 \) (no unit root test / stationary)

The first involved in this study is to check the stationary of variables application the Augmented Dickey-Fuller (ADF). Unit Root test with the result presented in table 4.1 the test includes Intercept with no trend and Intercept with trend at level and first difference.

Augmented Dickey-Fuller Unit root test results

<table>
<thead>
<tr>
<th>Variables</th>
<th>Intercept</th>
<th>Intercept + trend</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Level</td>
<td>First difference</td>
</tr>
<tr>
<td>FDI</td>
<td>-0.814532 (0.7931)</td>
<td>-4.473836** (0.0026)</td>
</tr>
<tr>
<td>GDP</td>
<td>-3.004294 (0.1552)</td>
<td>-5.094163** (0.0007)</td>
</tr>
<tr>
<td>Population</td>
<td>-1.679254 (0.4259)</td>
<td>-3.978025** (0.0074)</td>
</tr>
</tbody>
</table>

Note: *, ** and *** indicates the rejection of the null hypothesis of non-stationary Fat 1%, 5% and 10%, respectively

For the first variable of banking sector (FDI), it is significant at level suggesting that it has unit root and not stationary where the t statistic for the variable is -0.814532 with probability is
(0.7931) under intercept. However still under intercept, at the first different, the variable indicates the significance at 1% where its t-statistic is -4.473836 and probability is (0.0026). Thus the result shows that it has no unit root and stationary. Under Intercept and Trend, it is not significant at level suggesting that it has unit root and not stationary where the t statistic for the variable is -2.385642 with probability is (0.3748) under intercept and trend. However still under intercept and trend, at the first different, the variable indicates the significance at 1% where its t-statistic is -4.307484 and probability is (0.0154) Thus the result shows that it has no unit root and stationary.

The second variable under intercept of Gross Domestic Product (GDP) it is not significant at level suggesting that it has unit root and not stationary where the t statistic for the variable is -3.004294 with probability is (0.1552) under intercept. However still under intercept, at the first different, the variable indicates the significance at 1% where its t-statistic is -5.094163 and probability is (0.0007). Thus the result shows that it has no unit root and stationary. Under Intercept and Trend, it is not significant at level suggesting that it has unit root and not stationary where the t statistic for the variable is -1.192503 with probability is (0.6564) under intercept and trend. However still under intercept and trend, at the first different, the variable indicates the significance at 1% where its t-statistic is -5.126422 and probability is (0.0032) Thus the result shows that it has no unit root and stationary.

The third variable of population shows that the result at a level is not significant. The t-statistic for the valuable is -1.679254 with probability (0.4259) which are it has unit root and not stationary for the variable. For the first different under intercept, the variable indicate that at 1% where the t- statistic shows that the value of -3.978025 with probability (0.0074). Under Intercept and Trend, it is not significant at level suggesting that it has unit root and not stationary where the t statistic for the variable is -1.547446 with probability is (0.7772) under intercept and trend. However still under intercept and trend, at the first different, the variable indicates the significance at 1% where its t-statistic is -4.079510 and probability is (0.0236). Thus the result shows that it has no unit root and stationary.

**Ordinary Least Square Framework**

Yearly data on foreign direct investment, total FDI and real gross domestic product are analysed by using Simple ordinary least square (OLS) regressions.

OLS framework:

\[
\text{FDI} = \beta_0 + \beta_1 \text{GDP} + \beta_2 P + \varepsilon_i
\]

(2)

Based on the equation above, the positive sign of GDP and P coefficients represent positive effects of gross domestic product and population on foreign direct investment in banking sector in Malaysia. A rise in GDP and P will cause the FDI to decrease in banking sector in Malaysia, and vice versa. The hypothesis is stated below as:

**Hypothesis 1**

\[H_0: \beta = 0\]

\[H_1: \beta \neq 0\]

The null hypothesis is \(\beta=0\), where FDI has no effect on the real GDP compared with its alternative \(\beta \neq 0\), which if less than the lower bound critical value (0.05), then the null hypothesis is accepted. In turn, if the t-statistic value is bigger than the lower bound critical value (0.05), then the null hypothesis is accepted. While, if the t-statistic value is more than 5% critical value, then the null hypothesis is rejected, indicate that the independent variable has significant impact on the dependent variable. This Ordinary Least Square (OLS) regression shows the estimation model to censor the GDP and populations towards FDI for banking sector in Malaysia. The outcomes indicate that the value of t-statistic is significant at 5% that represent that the null hypothesis is rejected and the alternative hypothesis is accepted. From the table 4.2 we can derive the equation below as:
LNFDI= C(1) + C(2)*LNGDP + C(3)*LNP
LNFDI=25.06778+6.552279LNGDP- 2.877872LNP

Based on the equation above, we can infer that a 1% increase in FDI can cause GDP to increase by 6.5%. Thus, we can say that a higher FDI can dedicate to a decrease in gross domestic product GDP in Malaysia.

**Table 1 Model Estimation (Dependent Variable)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Standard Error</th>
<th>t-Statistic</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDI</td>
<td>25.06778</td>
<td>51.27172</td>
<td>0.488920</td>
<td>0.6315</td>
</tr>
<tr>
<td>GDP</td>
<td>6.552279</td>
<td>2.531389</td>
<td>2.588413</td>
<td>0.0198</td>
</tr>
<tr>
<td>Population</td>
<td>-2.877872</td>
<td>7.288869</td>
<td>-0.394831</td>
<td>0.6982</td>
</tr>
<tr>
<td>R-squared</td>
<td></td>
<td>0.857441</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td></td>
<td>0.821801</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F-statistic</td>
<td></td>
<td>24.05858</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Durbin-Watson stat</td>
<td></td>
<td>1.481092</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Probability (F-static)</td>
<td></td>
<td>0.000001</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This model estimation result show that the probability of FDI is 0.6315, and population is 0.6982 is a significant statement but the probability of GDP is 0.0198 means that it is not significant because the probability is less than 0.10.

**Diagnostic Test**

Diagnostic testing is significant to confer whether the series is free from autocorrelation, heteroscedasticity and normality problem. If the cipher p-value is more than 0.05 significant levels, then the null hypothesis is accepted, certify that autocorrelation and heteroscedasticity occur. Moreover, if the cipher p-value is less than 0.05 significant levels, the null hypothesis is rejected, inferring those autocorrelation and heteroscedasticity problems occur. According to the diagnostic test in Table 2, the result recommends that the model does not worry from any autocorrelation and heteroscedasticity. In addition, the series is not ordinarily distributed. The outcome from the model is deduced as trusty. The testimony is sufficiently strong to require that the FDI can ameliorate the GDP.

<table>
<thead>
<tr>
<th>Normality test</th>
<th>Jarque-Bera:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.362534 (0.505976)</td>
</tr>
<tr>
<td>Breusch-Godfrey Serial Correlation LM test</td>
<td>F-statistic: 0.279677 (0.7602) Obs*R-squared: 0.806796 (0.6680)</td>
</tr>
<tr>
<td>Heteroskedasticity Test</td>
<td>F-statistic: 0.648021 (0.6364) Obs*R-squared: 2.927794 (0.5700)</td>
</tr>
</tbody>
</table>

**Table 2: Diagnostic test**

From Graph 1, the result of the normality test has found given as following, which are the value of Jarque-Bera is 1.362534, and the probability value is 0.505976, which is not significant at 5%. In addition, the series is still considered to be normally distributed. The result from the diagnostic test model is inferred as reliable. This evidence is sufficiently strong enough to prove that the null hypothesis is accepted, proving that autocorrelation and heteroscedasticity exist.
Graph 1: Normality Test

**CONCLUSION**

**Hypothesis Results**

<table>
<thead>
<tr>
<th>No of Hypothesis</th>
<th>Statement of Hypothesis</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>There is a relationship of GDP towards foreign direct investment in Banking Sector of Malaysia.</td>
<td>Accepted</td>
</tr>
<tr>
<td>H2</td>
<td>There is a relationship of population towards foreign direct investment in Banking Sector of Malaysia.</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

**Table 3: The Hypothesis Statement**

As a conclusion, this study indicates that Gross Domestic Product (GDP) and Total of Population have a significant impact towards FDI for Banking Sector in Malaysia. The empirical results show that highly important in policy implementation that were related to the explanatory variables have significant effect on FDI in banking sector. Based on the empirical results, the government should be focused and paid attention to GDP and total of populations, particularly for increasing the market size of banking sector. These two determinants were the most significant with the foreign direct investment in banking sector in Malaysia. There is no doubt that GDP and populations played a huge role in FDI for banking sector as GDP has been considered as the most important factor whenever investors are coming to bring in investment into Malaysia. Nevertheless, the minimum savings policy should be implement by the Malaysia government whereby reduce in savings cause a slump in the amount of FDI inflows in banking sector. The implementation of minimum personal saving policy by the government in nevertheless being that crucial.

**REFERENCES**


THE STRESS FACTORS INFLUENCING ACADEMIC PERFORMANCE TOWARD STUDENTS IN HIGHER EDUCATION

INTAN MAIZURA ABD RASHID,1 AIDA NAZIMA ABASHAH, WAN NORSYAFAWATI W. MUHAMAD RADZI, IRZA HANIE ABU SAMAH, RAZLEENA RAZALI, HASLINA HASSAN BASRI, NURSAKINAH ABDUL KARIM, MUHAMMAD FAZLEE SHAM, MOHD KHAIRULNIZAM ZAHARI

ABSTRACT
This study was conducted to investigate the relationship between stress factors and academic performance among students in higher education. This study involved 361 respondents between 18-25 years old indifferent ethnicity. The quantitative method was used and questionnaire question was distributed. T-test, One Way ANOVA, Pearson Correlation Test and Multiple Regressions were used to analyze data. The findings showed that there are significant relationship between environment, financial problem, and interpersonal with academic performance among students in higher education. Furthermore, these studies were contributed to the body of knowledge in existing literatures, which are still rendered few and limited. Result revealed that there were moderate positively significant between financial problem and academic performance. While the result showed that there is low positively significant relation between environment, interpersonal and academic performance.

Keywords Stress, Environment, Financial Problem, Interpersonal, Academic Performance, Higher Education

INTRODUCTION
According to Kohn and Frazer (1986) and Ferlis, Rathakrishan, and Rosnah (2009), the students in higher education faced with stress workload given by the lecturer, environment, adjustment problems, conflict and competition among them in academic achievement.

Disorders will become worst causes of stress factors. The teens need to be taught about soft skill to act or respond, and get a social support from parents, siblings, friends, and relatives when faced with problems, therefore they can avoid negative effects. (Jas Laile Suzana Jaafar, 1996; Plucker, 1997; Hall & Torres, 2002)

The study was conducted to identify which stress factors more prevalent to give effect on student academic performance in higher education. Based on previous research, it has shown that there are many factors that are capable of influencing the academic performance of students includes; socio-economic status, parental background, learning environment, students’ intelligence and personality (Bossaert, et al., 2011; Magnuson, 2007). Higher education students who have experienced stressful life events also reported worse health outcomes and reduced quality of life most of the time.(Kashif, Shazia and Farzan, 2013).

Hypertension or stress is a verysubjective for individual, but its can contribute to implication or effects also dangerous in our life. According to Campbell and Svenson (1992), if the individual who is stress or hypertension viewed it from negative aspect it will give a negative effect on academic performance and health itself. According to Jaafar (2007), stress can lead to illness

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psychosomatic. In addition, behaviour and personality of a person will determine the ability of them to deal with stress. However, the way to deal with or handle stress cannot be applied effectively without identifying the factors that causes stress.

Thus, this study aimed to identify the factors causes of stress to the students in higher education and its impact on their academic performance. This is because stress among student is a worried phenomenon from various parties if not adequately addressed.

PROBLEM STATEMENT

One of the most significant current discussions in stress has appeared as a large issue influence academic performance among the higher education students has been studied at length over the years in the literature. It was determined by many past researchers that there was a significant relationship that existed between stress and academic performance, measured by Grade Point Average (GPA). Nowadays, the stress it’s not only experienced by adults but also higher education students will encounter to the stress, (Lessard, 1998; Mahfar, Zaini and Nordin, 2007).

Another important thing to consider when studying is about to explore whether the stress factors are motivating or beneficial, and which factors of stress are detrimental. According to the Moore, Burrows and Dalziel (1992), it has been established that moderate amounts of stress help motivate us and increase performance also. This finding has some similarity with Rafidah, Azizah and Norzaidi (2009) where they found that students of moderate degree stress performed to have satisfactory GPAs. They reported that the moderate stress experienced by the students was desirable for attaining good academic performance.

Today, we can see among university students be found were not focused in the classes, get a poor result (CGPA) decreases, absent lecture, sleep and certain students want to quit from studying caused by stress. International research by Ross et al. (1999) was conducted a research about the sources of stress among college students in Midwestern University. Besides Misra and Castillo (2004) was made a research of academic stress comparison between American students and international students.

There are common stressors in university life that include get higher academic performance, adapt to a new environment, financial responsibilities, awareness of one’s sexual identity and orientation, exposure to new people and making decisions on a higher level. (National Health Ministries, 2006). A study by Harlina (2014), there was no negative relationship between stress level and academic performances of the students. If the students are able to manage their stress well, the higher academic performance can be achieved. Norhidayah et al. (2009) state that, students’ performance (academic achievement) plays an important role in producing the best quality graduates who will become great leader and manpower for the country thus responsible for the country’s economic and social development.

SIGNIFICANCE OF STUDY

From a theoretical perspective, this study was contributed to the body of knowledge in understanding deeply on stress factors experienced by students influencing on their academic performance. Hence, it also expected to help students to identify which factors causes them stress. Therefore, they can move on taking appropriate steps to deal with stress and find the best way to improve their academic performance. Besides that, from a practical implication standpoint, policy maker in higher education able to improve the current policy higher education organization.

Besides, lecturers hopefully they can help to give a motivation and enthusiasm for students who are facing in stressful situation. So that, with a great hope, the lecturers can develop and adapt
learning styles that are experiencing in stress conflict, then the learning process can run smoothly without any problems arising from students.

RESEARCH OBJECTIVES
The main objective of this research was to study the influence of student in stress factors on academic performance. The specific objectives of this research are:

1. To identify the relationship between environment and academic performance experienced by students in higher education
2. To examine the relationship between financial problem and academic performance by students in higher education
3. To study whether the relationship between interpersonal problems can affect academic performance experienced by students in higher education

Theoretical Framework

![Theoretical Framework](image)

Figure 1: Theoretical Framework

RESEARCH METHODOLOGY

Sample Size
This study were conducted in higher education located in Malaysia among undergraduate and postgraduates students from different education background including engineering, and social science programmes.

Simple random sampling was used in this research. This is a sampling procedure that assures each element in the population has an equal chance of being included in the sample used in order to avoid bias and to ensure that each student had an equal chance of being selected (Martha, 2009). According to Krejcie and Morgan (1970), the sample size representative of respondents is 361 to represent 6000 population.

Instruments
A questionnaire was used as an instrument for data collection in this study. Closed-ended questions also being used in the questionnaire because they are easy to fill save time and keep the respondents focused on the subject.

There were 18 questions adapted from "What Are Your Sources of Stress" by Barreca & Hepler (2000) includes environment (6 items), financial problems (6 items), and interpersonal (6 items) and lastly academic performances (6 items). The questionnaires comprised of five answer scales which is strongly disagree (1), disagree (2), neutral (3), agree (4), and strongly agree (5).
Findings and Conclusion

Descriptive Statistic of the Independent and Dependent Variables

Table 1: Descriptive Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>mean_environment</td>
<td>361</td>
<td>1.33</td>
<td>5.00</td>
<td>3.1653</td>
<td>.70607</td>
</tr>
<tr>
<td>mean_financial</td>
<td>361</td>
<td>1.17</td>
<td>5.00</td>
<td>3.1888</td>
<td>.68626</td>
</tr>
<tr>
<td>mean_interpersonal</td>
<td>361</td>
<td>1.00</td>
<td>5.00</td>
<td>2.4792</td>
<td>.96981</td>
</tr>
<tr>
<td>mean_academic</td>
<td>361</td>
<td>1.00</td>
<td>5.00</td>
<td>3.4257</td>
<td>.62837</td>
</tr>
</tbody>
</table>

A descriptive analysis was done for 24 items for three independent variables and one dependent variable: environment (6 items), financial (6 items), interpersonal (6 items) and academic performance (6 items). Based on Table 4, the mean for environment is 3.17, the mean for financial 3.19, the mean for interpersonal is 2.48 and the mean for academic performance is 3.43 that show that the independent variable are significant with dependent variable.

Reliability Analysis

Table 2: Reliability Statistic

<table>
<thead>
<tr>
<th>No of Item</th>
<th>Variable</th>
<th>Cronbach’s Alpha</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Environment</td>
<td>0.757</td>
<td>Accepted</td>
</tr>
<tr>
<td>6</td>
<td>Financial</td>
<td>0.747</td>
<td>Accepted</td>
</tr>
<tr>
<td>6</td>
<td>Interpersonal</td>
<td>0.931</td>
<td>Excellent</td>
</tr>
<tr>
<td>6</td>
<td>Academic Performance</td>
<td>0.848</td>
<td>Good</td>
</tr>
</tbody>
</table>

Table 2 shows the result. The value Cronbach’s Alpha for environment 0.757, financial 0.747, interpersonal 0.931 and academic performance 0.848. All research variables exceeded the acceptable standard of reliability analysis of 0.70. These statistical analysis confirmed that the measurement scales met the acceptable standards of reliability analysis.

Correlation Analysis

Table 3: Correlation of Environment

<table>
<thead>
<tr>
<th>Academic Performance</th>
<th>0.293**</th>
<th>0.0001</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>361</td>
<td>361</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).
Hypothesis 1: There is significant relationship between environment and academic performance
The result illustrates in Table 3 shows that Pearson Correlation coefficient for two variables which are environment with academic performance is low and significant where is 0.293. It is show that there is a linear relationship between those two variable and the relationship is positive low. Therefore, stress factor of environment was significant predictor on academic performance. So, hypothesis 1 is accepted.

Table 4: Correlation of Financial problem

<table>
<thead>
<tr>
<th></th>
<th>Academic Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Performance</td>
<td>Pearson Correlation</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>361</td>
</tr>
<tr>
<td>Financial</td>
<td>Pearson Correlation</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.0001</td>
</tr>
<tr>
<td>N</td>
<td>361</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

Hypothesis 2: There is significant relationship between financial problem and academic performance
Table 4 shows two variables which are financial problem and academic performance is moderate relationship and significant where is 0.300. Pearson Correlation shows that there is linear relationship between those two variables and the relationship is positive moderate. Therefore, stress factors of financial problem variable is a significant predictor for academic performance. So, hypothesis 2 is accepted.

Table 5: Correlation of Interpersonal

<table>
<thead>
<tr>
<th></th>
<th>Academic Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Performance</td>
<td>Pearson Correlation</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>361</td>
</tr>
<tr>
<td>Interpersonal</td>
<td>Pearson Correlation</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.0001</td>
</tr>
<tr>
<td>N</td>
<td>361</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

Hypothesis 3: There is significant relationship between interpersonal and academic performance
Table 5 indicates that the correlation between interpersonal and academic performance is 0.251. It is indicating that the correlation is significant and low relationship. Therefore, stress factors of interpersonal is significant predictor of academic performance. So, hypothesis 3 is accepted.

Regression Analysis
Table 6: Regression Analysis

<table>
<thead>
<tr>
<th>Variables</th>
<th>Beta</th>
<th>t-Ratio</th>
<th>Sig-t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environment</td>
<td>0.141</td>
<td>2.216</td>
<td>0.027</td>
</tr>
<tr>
<td>Financial</td>
<td>0.168</td>
<td>2.696</td>
<td>0.007</td>
</tr>
</tbody>
</table>
Table 6 show the stress factors that affect academic performance toward student in higher education. The result show for the environment is (sig = 0.027) with beta value 0.141. This indicates it is less significant effect on the student’s academic performance. However, hypothesis 1 (H1) is still supported this figure which is stated that environment has relationship with student’s academic performance. So, (H1) was accepted.

Next, the result also show that there is relationship between financial problem and academic performance. The result indicates for financial problem is (sig = 0.007) with beta value 0.168. The result also show that financial problem was found less significant effect on the student’s academic performance. Therefore, H2 still supported this statement which state that “There is significant relationship between financial problem and academic performance”. So, H2 is substantiated.

Last but not least, the result show for interpersonal and academic performance also was found to have less significant effect on the student’s academic performance. The result indicates for interpersonal is (sig = 0.039) with beta value 0.118. This result implies that there is still relationship between independent and dependent variable. Therefore, H2 is still supported this statement and was accepted.

The R-squared of 0.121 implies that the three predictor variables explain about 12.1% percent of the variation in the academic performance. This is not a quite good and respectable result. The ANOVA table revealed that the F-statistic (F = 16.438) is quite small which is indicates there is linear relationship. However, all of the three hypotheses are significant and the summary of hypothesis tested presented in table

Table 7: Hypothesis Result

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Statement</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>There is significant relationship between environment and academic performance</td>
<td>Accepted</td>
</tr>
<tr>
<td>H2</td>
<td>There is significant relationship between financial problem and academic performance</td>
<td>Accepted</td>
</tr>
<tr>
<td>H3</td>
<td>There is significant relationship between interpersonal and academic performance</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

CONCLUSION

The result has shown that majority of students in higher education has low level of academic performance. It also shows that there is significant relationship between stress factor (environment, financial problem, interpersonal) and academic performance. The results does support the literature reviewed. Moreover, it proves that student’s stresses are crucial for them in performing their academic result. Future research should be more emphasizing on others stress factors for better understanding on their stress level.

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Ross, S.E., Neibling, B.C. and Heckert, T.M. (1999) Sources of Stress Among College Students. College Student Journal, 33(2), 5-15
EXAMING THE EFFECTIVENESS OF HRM PRACTICES ON EMPLOYEE RETENTION ON THE CONTEXT OF RAPIDLY GROWING ECONOMIES: A CASE STUDY OF QATAR
A. QAYED AL-EMADI, AND C. SCHWABENLAND

ABSTRACT

In 2009, the new HRM policy was implemented in Qatar for public sector organisations. The purpose of this research is to examine how Qatar’s 2009 HRM policy was significant in influencing employee retention in public organisations. The conducted study utilised quantitative methodology to analyse the data on employees’ perceptions of such HRM practices associated with the HRM policy in public organisations in comparison to semi-private organisations. Employees of seven public and semi-private organisations filled in the questionnaire based on the 5-point Likert scale to present quantitative results. The data was analysed with the correlation and multiple regression statistical analyses. It was found that Performance Management had the relationship with Employee Retention, and Rewards and Promotion influenced Job Satisfaction in public organisations. Relationship between Job Satisfaction and Employee Retention was also observed. However, no significant differences were observed in the role of HRM practices in public and semi-private organisations.

Key Words: HRM practices, Job Satisfaction, Employee Retention, SHRM, configurational perspective.

INTRODUCTION

Public sector organisations all over the world began to reform in order to overcome economic pressures, to address ideas of innovativeness and flexibility, and to respond to employees’ needs while improving their productivity and performance (Truss, 2008). Qatar is currently discussed as experiencing the rapid economic growth, and its public sector also adapts to the changes in global tendencies (Weber, 2011). The intensive economic growth in the country led to increasing the number of semi-private organisations, and the public sector reported changes in the human resources and their decreased interest in positions within the public sector (Afioni, Ruel, and Schuler, 2014; Forstenlechner and Rutledge, 2010). In order to respond to these changes, Qatar implemented a new human resource management (HRM) policy in 2009, and the policy was designed to regulate the public sector employment and ensure that more employees are retained in the sector by providing a range of benefits for the Qatari nationals (Council of Ministers Secretariat General, 2009).

The implementation of the HRM policy was based on the principles of the strategic human resource management (SHRM) configurational perspective. This SHRM approach is also followed in implementing policies in Qatar’s semi-private sector (Council of Ministers Secretariat General, 2009; General Secretariat for Development and Planning, 2011). The configurational perspective depends on the idea that HRM practices supported with the HRM policy need to be implemented in organisations as bundles in order to expect synergy in practices.

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Employee retention in the public sector is often achieved with the help of various HRM practices that include salary increases, bonuses, employee development and training programs, opportunities for promotion, and the provision of the supervisors’ support (Collins and Clark, 2003; Giauque, Anderfuhren-Biget and Varone, 2013; Yamamoto, 2013). However, to date there is no empirical study in the context of Qatar to evaluate how implementation of HRM practices in bundles in public organisations can affect the employee retention in comparison with the situation in the semi-private sector. Therefore, the current research aims to evaluate how significant Qatar’s 2009 HRM policy was in influencing the factor of employee retention in the governmental sector. The study also refers to the comparison of the situation in public and semi-private sectors to determine possible obstacles associated with implementation of HRM practices in governmental organisations of Qatar.

AIM

This research aims to evaluate how significant the 2009 Qatar HRM policy has been in influencing employee retention in the public sector of the country. The impact of the policy is evaluated with references to the employees’ perception of the implemented HRM practices’ effectiveness in public organisations. The relationships of the study variables and determined hypotheses are provided in Figure 1.

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**Figure 1 The Conceptual Framework**

**LITERATURE REVIEW**

Previous studies have indicated that such HRM practices as Performance Management, Rewards and Promotion, and Training and Development have an effect on Job Satisfaction and Employee Retention in public and semi-private organisations (Kehoe and Wright, 2013; Majumder, 2012; Paille, Bourdeau and Galois, 2010). It has been found that employees perceive HRM more positively when they are implemented in bundles, according to the configurational perspective of the strategic human resource management (SHRM) (Payne, 2006; Wiklund and Sheperd, 2005).

**The SHRM Configurational Perspective**

While discussing the SHRM configurational perspective, theorists focus on “configurations, or unique patterns of factors, that are posited to be maximally effective” to promote the organisation’s performance (Arshad, Azhar and Khawaja, 2014; Delery and Doty, 1996, p. 808). Waiganjo and Awino (2012) indicate that a set of configurations that are properly selected
to be implemented as a unit in the organisation are ‘bundles’, in which certain HRM practices support other practices to lead the organisation to completing the strategic goals. The role of bundling HRM practices is important because these practices supported with the HRM policy are interrelated, and their main function is to reinforce each other (Maryam and Sina, 2013, p. 701; Michie and Sheehan, 2005).

Following the claim by Martin-Alcazar, Romero-Fernandez, and Sanchez-Gardey (2005), the configurational model is a single approach to SHRM that allows focusing on the quantitative method in the research that is supported with references to the cluster analysis and factor analysis. As a result, this model is usually used in empirical SHRM studies that are focused on discussing different sets of HRM practices as effective for different organisations (Alusa and Kariuki; 2015; Innes and Wiesner, 2012; Meyers and Woerkom, 2014).

Employees’ Perception of HRM Practices

Employees’ perception is their personal interpretation of experiences and impressions in the workplace (Yamamoto, 2013). In this study, the term “perception” is used to describe how employees individually interpret HRM practices and view their effectiveness because perception necessarily follows the stage of the HRM practices’ implementation. A number of researchers have focused on a positive impact of HRM practices on the employees’ perceptions in terms of increasing the employees’ productivity and job satisfaction as well as decreasing turnover intentions and absenteeism (Abdullah, Ahsan and Alam, 2009). Giauque et al. (2013) state that it is important to distinguish between implemented and perceived HRM practices because intended HRM practices implemented by managers in bundles can be perceived by employees differently. Therefore, the effectiveness of these practices need to be assessed with references to the changes in the employees’ attitudes and behaviours that influence the aspect of employee retention associated with turnover and absenteeism (Carraher, 2011).

Job Satisfaction

The discussion of the concept of job satisfaction is important to focus on mediating the relationship between the employee perception of the HRM practices integrated in a bundle and the retention (Edgar and Geare, 2005). Thus, employees point at job satisfaction and other positive feelings associated with job when their work situation is regarded as promising for their development in terms of compensation (Tsai, Edwards and Sengupta, 2010, p. 2; Yamamoto, 2011). In addition, Choi and Lee (2013) have found that HRM practices associated with training, appraisal systems, feedback systems, and promotion are oriented to developing the employees’ competencies and increasing their self-efficacy as well as job satisfaction. Hasin and Omar have defined job satisfaction as “the extent to which a person derives pleasure from a job” (Hasin & Omar 2007, p. 23). Bockerman and Ilmakunnas (2012) found that job satisfaction is positively associated with organisational productivity and commitment, while negatively associated with employee quit intentions and absenteeism. Focusing on job satisfaction in the public organisations, Rehman (2012) developed the idea that job satisfaction is not only a principal psychological factor in deciding whether the public sector is attractive to work in, but also influences HRM policies within the sector. Thus, employees can demonstrate a desire to leave the organisation if they view this organisation as offering fewer opportunities for achieving job satisfaction through available HRM practices, such as rewards and promotion, career development, and performance management (Bockerman and Ilmakunnas, 2012; Reiche, 2009; Rehman, 2012).

Employee Retention

Employee retention is associated with the affective commitment when employees choose to stay with the organisation instead of leaving it (Kehoe & Wright 2013). According to Nishii,
Lepak and Schneider (2008), if employees feel the commitment to the organisation because of their satisfaction or obligation, managers can rely on the high retention rate in the company. In this context, researchers note that HRM practices implemented in organisations should promote the employees’ sense of significance, motivation, inspiration, and satisfaction (Onyemah, Rouzies and Panagopoulos, 2010; Rasouli et al., 2013; Rehman, 2012).

Doherty (2010) has found that the employee retention is a result of the effective management programmes and strategies used in organisations to stimulate performance. When the improvement of the existing link between perception and attitudes is a matter for discussion, managers often choose to improve the adopted HRM practices and refer to the configurational approach even if it was not used previously.

Still, HRM practices selected to promote retention can be rather different (Tabiu and Nura, 2013). While Chapman (2009) proposed to develop a comprehensive plan of new employees’ orientation and socialisation to help reduce stress, Ghosh et al. (2013) found that the development of a positive organisational culture is instrumental in retaining the key staff.

Employees’ Perception, Job Satisfaction, and Employee Retention

Choi and Lee (2013) supported the relationship between employee perception and retention concluding that when HRM practices are implemented with the focus on employees’ needs, the personnel forms the positive perception that leads to increasing employee retention. The other researchers also state that if employees evaluate the implemented HRM practices positively, their direct intention is to stay with the organisation that addresses their needs (Bao and Analouli, 2011; Bartel, 2004; Richman et al., 2008). Perceptions of employees depend on the completeness and nature of HRM practices, and effectively implemented practices in performance management, rewards and promotion, and training and development affect the employees’ vision of the organisation as meaningful, make them feel like part of the team and to have the intention to contribute to the organisation’s growth (Al-Kahtani and Khan, 2014; Chen, 2014; Hausknecht et al., 2009; Holtom et al., 2008, p. 232; Saks, 2006). Such conclusions led to formulating the first hypothesis for the study:

**H1:** Employees’ perception of effectiveness of the selected HRM practices in the HRM policy is positively contributing to employee retention in the public sector.

Researchers also have found that employees’ individual perceptions of HRM practices often lead to job satisfaction, and only then, to retention (Hausknecht, Rodda and Howard, 2009; Holtom et al., 2008). According to recent studies, this relationship is based on the fact that employees become satisfied with their job position and organisation and become affectively committed to it if HRM practices are associated with opportunities for training, development, appraisal, and promotion (Bhatti et al., 2013; Gbrevbie, 2010; Hausknecht et al., 2009). From this point, employees’ perception of HRM practices’ effectiveness can be discussed as an important factor to speak about job satisfaction (Choi and Lee, 2013; Rahman and Nas, 2013; Tangthong, 2014). The focus on job satisfaction as the mediating aspect led to formulating the second hypothesis for the study:

**H2:** Employees’ perception of effectiveness of the selected HRM practices in the HRM policy has the positive effect on their job satisfaction, which in turn influences their retention in the public sector. However, according to Gkorezis and Petridou (2012) and Majumder (2012), there can be differences in the HRM practices’ implementation and employees’ perception of them in public and private sectors, while leading to different levels of retention. As a result, the third and fourth hypotheses for the study were formulated:

**H3:** The impact of the selected HRM practices in the HRM policy in the semi-private sector is likely to have the more positive effect on employee retention than in the public sector.
H4: The impact of the selected HRM practices in the HRM policy in the semi-private sector is likely to have the more positive effect on job satisfaction, which in turn influences employee retention, than it is in the public sector.

DATA ANALYSIS AND DISCUSSION

The research is grounded on the positivist philosophy according to which the approaches of the deductive logic are combined with accurate empirical observations (Neumann, 2003). The quantitative correlational research approach was selected for the study to measure relationships between such independent variables as Performance Management, Rewards and Promotion, Training and Development, the intervening variable such as Job Satisfaction, and the dependent variable such as Employee Retention. The followed strategy is cross sectional survey questionnaire.

140 questionnaires were distributed to seven public sector and semi-private sector organisations to be completed by 20 employees in each organisation. 110 completed questionnaires were received as hard copies in envelopes and in the electronic form via email. 30 questionnaires were excluded because they were not provided for the further analysis. The demographic characteristics of participants

The factor analysis was conducted to evaluate the factor structure of the groups of items in the proposed questionnaire and to assess each of the constructs, including Performance Management, Rewards and Promotion, Training and Development, Job Satisfaction, Employee Retention for public and semi-private sectors. The factor analysis was based on the principal component factor analysis and the varimax rotation approach (Ansari, 2011; Dhiman and Mohanty, 2010). The results of the factor analysis allowed starting the correlational analysis of constructs and items in them.

The complete correlational analysis for testing three conditions to determine whether the mediation was characteristic for the relationships between the variables was important to be conducted prior to starting the Multiple Regression Analysis. The three conditions under discussion were the following ones:

1. The Independent Variables (Performance Management, Rewards and Promotion, Training and Development) predict the Dependent Variable (Employee Retention).
2. The Independent Variables (Performance Management, Rewards and Promotion, Training and Development) predict the Mediating Variable (Job Satisfaction).
3. The Mediating Variable (Job Satisfaction) predicts the Dependent Variable (Employee Retention).

The conditions were tested for both the public and semi-private sector organisations. Focusing on the Pearson correlation analysis, it was found that the correlation coefficients for each condition in each sector were highly and moderately statistically significant at p-value 0.01, although there was also observed the negative relationship between items in constructs. The highest correlation of 0.619 was observed for the relationship between the mediating and dependent variables in the public sector, and of 0.588 in the semi-private sector. The lowest correlation of 0.455 was observed for the relationship between the Rewards and Promotion as the independent variable and the dependent variable in the public sector, and of 0.458 in the semi-private sector.

The Multiple Regression Analysis was conducted for each condition in order to determine what types of relationships between variables were most meaningful. It was found that there are significant relationships between HRM practices and Employee Retention in the public sector. According to the highest beta of 0.623, such independent variable as Performance Management most contributes to Employee Retention. Furthermore, there are moderately significant relationships between HRM practices and Job Satisfaction with the highest beta of
.503, indicating the relationship between Rewards and Promotion and Job Satisfaction. Finally, there are significant relationships between Job Satisfaction and Employee Retention because of the beta of .611.

It was also found that there are statistically significant relationships between employees’ perceptions of HRM practices and Employee Retention in the semi-private sector. Although, betas were almost equal for independent variables, the highest beta of .511 was determined for Rewards and Promotion, and it contributed to Employee Retention most of all. Significant relationships were observed between HRM practices and Job Satisfaction, with the focus on Rewards and Promotion having the highest beta of .880 to influence Job Satisfaction. The significant relationship between Job Satisfaction and Employee Retention with beta of .610 was also observed.

Referring to the received data, it is possible to state that in the public sector, employees can see the strong relationships between Performance Management practices and Employee Retention and Rewards and Promotion practices and Job Satisfaction. It was found that the Training and Development practices can be discussed as moderately meaningful for employees. It is also possible to state that Hypothesis 1 is supported with the found results. Such two conditions as the relationships between HRM practices and Job Satisfaction and Job Satisfaction and Employee Retention demonstrate that Hypothesis 2 is also supported because referring to the findings; it is possible to state that Job Satisfaction works as the mediating variable to influence Employee Retention while being influenced by three independent variables.

In order to conclude about whether the stated Hypothesis 3 and Hypothesis 4 are supported, it was necessary to apply the further analysis for the semi-private sector. It was found that Performance Management, Rewards and Promotion, and Training and Development worked almost equally to influence the factor of Employee Retention. However, the role of Rewards and Promotion was comparably higher to influence Job Satisfaction in this sector. The comparison of the results for the public and semi-private sectors indicate that Hypothesis 3 is not supported because HRM practices have no more positive effects on employee retention in the semi-private sector because of comparably moderate results in contrast to the accentuated focus on Performance Management practices in the public sector. Hypothesis 4 is supported only partially because only the role of Rewards and Promotion practices in the semi-private sector can be discussed as significant to influence Job Satisfaction, and then, Employee Retention. However, in both sectors, Job Satisfaction can be considered as leading to Employee Retention.

The findings of the pilot study can be discussed as also important to suggest that the absence of the significant difference between the implementation of the HRM practices in the public and semi-private sectors in Qatar can become a reason to state that specific challenges associated with the level of retention in the public sector are results of the ineffective managerial approach to implementing the HRM practices, in contrast to possible weaknesses of the HRM policy. Therefore, referring to the results of the pilot study, it is rather difficult to conclude about the challenges associated with the implementation of HRM practices in the public sector of Qatar, and the future research is necessary in this field. Much attention should be paid to possible challenges as well as to formulating the appropriate solution to address the identified issues.

CONCLUSION

The aim of the pilot study was to determine how HRM practices in Qatar’s 2009 HRM policy could influence the employee retention in the public sector in comparison to the semi-private sector. The conducted pilot study revealed that such HRM practices as Performance Management, Rewards and Promotion, and Training and Development had significant impact
on job satisfaction and employee retention in both public and semi-private sectors. It was found that Performance Management most contributed to employee retention in the public sector, and Rewards and Promotion practices led to Job Satisfaction in the semi-private sector. However, there were not statistically significant results to state that HRM practices in the semi-private sector had the more positive effect on employee retention than the same practices in the public sector. Furthermore, the relationships between Job Satisfaction and Employee Relation were almost equal in both sectors. As a result, Hypothesis 3 was not supported, and Hypothesis 4 was supported only partially. The Future direction of the research could be is to conduct similar study in the same environment, with intention of measuring managers perception of HRM practices; in order to evaluate the efficiency of the implemented HRM practices. The study requires a separate set of questionnaire design for managerial level, beside the questionnaire used for employee level.

REFERENCES


TRANSFORMATIONAL LEADERSHIP, KNOWLEDGE SHARING AND INNOVATION: AN INVESTIGATION INTO THE IMPACT OF TRANSFORMATIONAL LEADERSHIP ON THE ABU DHABI (UAE) POLICE

MR. KHALED ALDARMAKI

ABSTRACT
Transformational Leadership (TL), Knowledge sharing (KS) and Innovation are important to 21st century organisations. In an extensive number of previous studies, researchers have argued that leadership is an enabler of KS (Al-adaileh and Al-atawi, 2011; Song et al., 2012; Shih et al., 2012; Allameh et al., 2012; Seba et al., 2012a; Humayun and Gang, 2013) and stimulates or enhances innovation (Si and Wei, 2012; Al-omari and Hung, 2012; Eisenbeib and Boerner, 2013; Andreeva and Kianto, 2011; Porzse et al., 2012; Ferraresi et al., 2012). Although, it can be argued that public sector institutions face immense pressures to innovate, organisational and cultural environments may enable transformational leadership styles conducive to KS. The Ministry of Interior (MoI) of the United Arab Emirates (UAE), which is the entity responsible for the Abu Dhabi Police (ADP), is trying to develop its employees’ skills and knowledge and seeks to implement training schemes best fit for purpose regarding the organisational culture and strategies of the ministry. Transformational leadership (TL) seems to be the way forward to help the MoI to innovate and improve their management, decision making and leadership skills, in order to fully achieve MoI targets and key performance indicators. An investigation into the impact of transformational leadership on innovation and knowledge sharing in the ADP and the significance of knowledge sharing seems therefore most pertinent and particularly well suited as the case study to form the basis for this research. Using a mixed method approach, the researcher will examine the effect of Transformational Leadership (TL) in terms of idealised influence, inspirational motivation, intellectual stimulation, and individualised consideration on innovation, through the mediating role of Knowledge Sharing (KS) in the ADP, and the differences in the TL practice and the effectiveness of relationships across the departments. From a practical perspective, this study could help the leaders and policy-makers of the ADP facing pressure to be innovative, by enabling them to overcome the barriers that prevent the development of product and process innovation within the organisation, and by providing ideas for strategies that will foster KS activities among them.

Keywords: Transformational leadership, Innovation, Knowledge sharing, Change management, Organizational culture, UAE ADP

INTRODUCTION
The Ministry of Interior (MOI) is trying to develop its employees’ skills and knowledge, however it has been noticed that the leaders of the ministry in the different hierarchical levels are not aware of clear training schemes regarding the organisational culture and strategies of the ministry. Through better understanding of the effect of leadership on

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innovation, management would be able to develop a better vision and mission of the ministry which, in turn, will improve their management and leadership skills, decision making and ability to achieve MOI targets and key performance indicators. Therefore, lack of effective leadership skills has resulted in managers being dependent on their interpersonal skills and organisational experience to develop employee relationships. It is in line with this that H.H Sheikh Saif bin Zayed Al Nahyan is personally leading a movement of change in the MoI creating a kind of connection between change and creativity so as to achieve excellence and free enterprise as one of the Ministry’s most important goals (MOI website, 2014).

As innovation becomes critical to the survival of organisations and a key factor in achieving competitive advantage, leadership style has been identified as the most important factor affecting innovation, because leaders can influence the introduction of ideas, set specific goals and create a culture for innovation (Sarrors et al., 2008). This has only been identified in recent years by the MoI, and as a result, H.H Sheikh Saif bin Zayed Al Nahyan concluded that creativity and innovation were to be adopted as organisational values for the Ministry and were stated in its strategic objectives “Invest in our human resources” and “Promote innovation” H.H decree in 2008 to create the MOI organisational design, and decree in 2012 to establish a regulatory unit for creative leadership “Creativity and Leadership Development Centre” which came to underpin H.H concern for leaders and creativity. The centre has been assigned to develop policies for promoting and driving creative and innovative thinking of MOI staff and prepare second-line leaderships to take over responsibility in the future (MOI website, 2014). Hence, the focus of this study will be on transformational leadership, innovation and knowledge sharing in ADP as one of the important areas of the MOI, and the largest directorate under the supervision of UAE MOI with a population estimated 36000 employees.

LITERATURE REVIEW

Although many styles have been studied in the field of management (Saenz, 2011), the most important is acknowledged to be transformational leadership (TL). This style leads to increased goal-directed behaviour exhibited by followers (DuBrin, 2012) and thus to enhanced performance and innovation for the organisation (Yukl, 2013). Under TL, the followers feel respect and trust towards the leader and are willing to do more than is expected of them. TL generates commitment from subordinates and produces a greater quantity of work and more creative problem solving (Hawkins, 2011; Lynch, 2012; Yukl, 2013).

Few studies have been published about knowledge sharing in UAE, concentrating on business and management, construction, and police force service (Ahmad and Daghfous, 2010; Seba et al., 2012b; Seba et al., 2012a). The authors studied the practice of knowledge sharing and its activities, in addition to the influence of certain organisational, individual, and technological factors on it. Therefore, the need to create a knowledge sharing culture in organisations is quite imperative (Tan et al., 2010), which calls for motivating factors to be employed in order to motivate individuals to share their knowledge. In terms of KS, Xiong and Deng (2008) showed that the effectiveness of KS among employees is dependent on the leadership style, as the latter is crucial for planning the processes used to donate and collect knowledge. Humayun and Gang (2013) found that leaders have the power to affect the intentions of employees regarding the collection of knowledge, by
developing a knowledge culture within an organisation. The literature identifies a number of motivators that influence the success of knowledge sharing and among the major ones are trust and reputation. However, a causal link amongst the three factors has not been developed to date within ADP. Therefore, this study seeks to examine the mediating role of KS in the relationship between TL and INN. A few empirical studies to date have produced evidence in favour of these claims.

**Epistemology of Leadership Theory**

Early organisational leadership was defined by an outcome-based standard which utilised performance benchmarking and predictability to orchestrate organisational operations and outcomes (Aitken and Higgs, 2010). Yet subsequent iterations of leadership theory (e.g. Bass and Avolio, 1994; Gumuslugu and Ilsev, 2009) would recognise the need for business process evolution as operational complexity and competition catalysed a demand for persistent change (Paton and McCalman, 2008; Aitken and Higgs, 2010). The outcome of such a paradigm shift would be an evolution of the leadership function towards employee motivation, support, and development through inspirational, charismatic, and transformative leadership practises (Jung et al., 2009). In spite of such evolution of practise, three common archetypes remain in modern leadership, each of which is manifested to varying degrees throughout modern organisations:

- **Laissez-Faire Leadership**: Representing a form of arm’s-length leadership, this strategy ‘abdicates responsibilities and avoids making decisions’, avoids giving any significant feedback, and mitigates leader interference in the decision making process (Chaudhry and Javed, 2012, p. 259).

- **Transactional Leadership**: This form of leadership involves the leverage of social exchanges in the form of transactions which stimulate employee actions and behaviours. There are two primary styles of transactional leadership including contingent reward (reward based upon performance) and management by exception (actioned intervention following deviation from rules, standards, and objectives) (Chaudhry and Javed, 2012).

- **Transformational Leadership**: Purposed as the ‘elicitation of extraordinary performance on the part of followers (Wolfram and Mohr, 2009, p. 260), this leadership approach is characterised by four I’s define by Bass and Avolio (1994, p. 3-5) including idealised influence, inspirational motivation, intellectual stimulation, and individual consideration.

Following the division of leadership theory into these distinct categories, a robust spectrum of study has emerged, focusing on differentiation, justification, and validation of leadership approaches. Skogstad et al. (2007) and Chadhry and Javed (2012) have focused on the destructive and detrimental effects of laissez-faire leadership behaviour in organisational settings, mutually concluding that factors such as role conflict, ambiguity, and workplace stressors are magnified under such arm’s-length conditions. Other researchers, Aiken and Higgs (2010) and Pieterse et al. (2010) highlight the stabilising and performance-based influence of transactional approaches to leadership; however, both studies suggest that these techniques reduce the likelihood of employee creativity and innovation and enhance resistance to change. As a result, studies focusing on transformational leadership (e.g. Bass and Avolio, 1994; Brown and Keeping, 2005; Wolfram and Mohr, 2009; Wang et al., 2014)
have achieved precedence as they describe linking effects between empowering and employee-motivating leadership and creativity and innovation outcomes.

**Transformational Leadership in Employee Innovation**

The effect of transformational leadership in organisational settings has been widely evaluated as academics seek to develop a framework of effectiveness for a range of organisational applications. Jung et al. (2009), for example conducted a critical comparison of cross-cultural transformational leadership, focusing on subordinate responses, attitudes, and motivations. The results reveal that transformational leadership had a positive effect on employee perceptions of leader effectiveness across all samples (regardless of cultural background), whereby work outcomes were substantially improved by transformational practises (Jung et al., 2009). Such findings are confirmed by Al-Araimi (2012) who revealed that core dimensions of transformational leadership including idealised influence and individual consideration directly contribute to employee creativity and innovative outputs. Leaders, in such organisations, serve as a reduction mechanism for barriers to change, catalysing employee empowerment through strategic and focused interventions that are designed to stimulate creative thought and motivation (Jung et al., 2009; Al-Araimi, 2012).

One of the most significant barriers to change and innovation identified by Al-Araimi (2012) is employee behaviour, an inertia-based force which ultimately limits the effectiveness of managerial agenda setting. Yet evidence presented by Zagorsek et al. (2009) suggests that through transformative interventions and leader-catalysed organisational change, employee behaviours and motivations are directly affected and altered over time. An early definition of employee motivation offered by Bartol and Martin (1994, p. 377) described ‘forces that energize behaviour, give direction to behaviour, and underlie the tendency to persist’, an interpretation which was further extended by Robbins et al. (2007, p. 215) to represent the ‘process which accounts for an individual’s intensity, direction, and persistence of effort towards attaining a goal’. The findings revealed by Zagorsek et al. (2009) suggest that transformational leaders affect employee motivation by creating intrinsic value in creativity and innovation, stimulating change through compelling and purposeful vision.

Empirical research focusing on employee creativity and the effects of transformational leadership reveal important strategies and techniques that can be amended to fit in a variety of organisational settings. Wang et al. (2014) conducted a thorough empirical survey of manager-employee relations in the hospitality industry, describing a transformative process by which employees develop their cognitive role identity, their creative self-efficacy, and ultimately, a foundation of workplace creativity. Transformational leaders critically evaluate employee motivations and workplace conditions, affecting those psychological processes which inspire creativity by creating environments and conditions under which employees are motivated to innovate (Wang et al., 2014). Sun et al. (2012) offer similar findings from the retail industry which describe the effects of employee empowerment on creative outputs, suggesting that transformational leadership is capable of ‘fostering group-level empowerment which further shapes individual’s psychological empowerment’. The findings presented by both Sun et al. (2012) and Wang et al. (2014) identify leaders as catalysts for creativity, focusing on the
conditions which leaders create to support creative behaviours and organisational outcomes.

The affective value of a robust, employee-centred organisational culture is described by Hassan et al. (2012) as a direct catalyst for innovative and creative workplace behaviour. In fact, Mumford et al. (2002, p. 734) challenge that innovative and creative behaviour is ‘unlikely to succeed’ without adequate management support and a commitment to advancing knowledge and capabilities through investment and autonomy. Through a multi-dimensional discussion of the role of leadership in organisational creativity, the researchers confirm the arguments of Hassan et al. (2012), suggesting that leadership development of a compelling and complementary organisational culture of creativity is an essential precondition for employee initiative (Mumford et al., 2002). Furthering such arguments, Yan et al. (2013) describe a knowledge-based organisational architecture which not only encourages employee-driven learning, but enables workplace creativity through the re-integration of learned capabilities and skill sets. It is this validation of employee accomplishments through leader-inspired participation that ultimately allows firms to utilise inimitable intellectual capital to enhance and re-define its practices and priorities (Yan et al., 2013).

STUDY PROBLEM

It has been revealed that TL, KS and innovation are important to organisations. In an extensive number of previous studies, researchers have argued that leadership is an enabler of KS (Al-adaileh and Al-atawi, 2011; Song et al., 2012; Shih et al., 2012; Allameh et al., 2012; Seba et al., 2012a; Humayun and Gang, 2013) and enhances innovation (Si and Wei, 2012; Al-omari and Hung, 2012; Eisenbeib and Boerner, 2013), and that KS is an antecedent to innovation (Andreeva and Kianto, 2011; Porzse et al., 2012; Ferraresi et al., 2012). Although, it can be argued that public sector institutions face immense pressures to innovate, conversely leadership style may be different within them in particular in the ADP due to the organisational and cultural environments.

Culture

The issues with organisational culture and studies with organisations within developing countries is that there has been little or no systematic application for the conceptual studies of organisations in developing or middle eastern countries (Elbanna, 2008 and 2010).

In the UAE environment according to Jones and Seraphim (2008) the organisation undertaking change is likely to encounter a cultural and contextual environment which is described as an "unfavourable environment". Some of the key characteristics of the culture in the unfavourable environment are high masculinity and a gap in the hierarchical level, and these factors can be observed in the ADP. The implementation of any transformation in this unfavourable environment will require greater management of change which aims to address the environmental context.

Jones and Seraphim (2008) advise that the current cultural status of the organisation should be measured so that any planning and control of the culture will support the development of sound performance metrics suitable for the working environment of the organisation.

To achieve this goal, the leaders of the ADP will need to consider how they are going to change the internal culture of the organisation to support the implementation of
innovation through KS in order to develop the continuous improvement of the culture within the ADP.

Organisational Structure

His Highness Deputy Prime Minister and Minister of Interior (ADP website 2015) stated that developing the skills of the ministry’s staff members, boosting their awareness and enhancing their abilities is a vital task and a key priority for the ministry’s leaders, due to its significant effect on promoting the overall performance, and its paramount role in implementing modern policies that are proportionate with the changes of the times.

The General Headquarters of ADP has been established as a distinct element of the police department through developing a Headquarters organisational structure and job description to cope with the present time requirements. H.H has issued directives for forming a new organisational structure emanating from the general strategy that must be applied by the ADP (2008), and also by creating new departments (Elbanna, 2010). This strategy should meet the present and future requirements through the new organisational structure which encourages the initiative and creative spirit in order to assimilate and handle the tools that govern police work (Elbanna, 2010). In order to achieve this techno structural interventions are used to focus on aspects of organisational technology such as task methods, job design and organisational structure, thus helping the ADP to move from traditional structural forms to more flexible structures in order to adapt to changes in the external environment. As Hughes (2006) emphasised, the importance of understanding how changes in organisational structure are directly linked to other factors of change such as strategy, culture, technology and power relations within the organisation.

Hence, this study has examined previous research and has identified a lack of empirical studies on the relationships between TL, KS, and innovation. No such studies have examined these relationships within the field of the UAE public sector in particular in ADP. In order to fill this gap in the literature, this study aims to answer the following main question:

“What are the impact of transformational leadership style through the use of knowledge sharing on innovation in ADP, and to what extent the differences in the impact of TL on innovation, if any, between different departments at ADP”.

IMPORTANCE AND PURPOSE OF THE STUDY

The importance of this study lies in its contribution to theory and practice. The study examines the impact of TL on innovation through KS, and the effectiveness of relationships across the public sector in this regard, in particular in ADP. From a theoretical perspective, the study aims to advance and provide insight into the links between TL, KS and innovation. Furthermore, the findings of this study will enable the development of an organisational framework which takes into account the particularities of TL, KS and innovation.

Two aspects are important for sustaining competitive advantage and continuous innovation: the first is the relationships between TL, KS and innovation. TL is known to initiate and stimulate strong effects via a variety of initiatives that raise followers’ awareness of other group members’ contributions (Bass and Riggio, 2012). Such leaders are able to create a suitable climate, set values and norms, and create a culture of change. They can foster a shared vision and therefore enhance innovation (DuBrin, 2012). Thus, it
will be useful to provide a better understanding of the links between TL, KS and innovation, and determine methods that can be used by leaders to promote KS activities within ADP.

The second important aspect is the mediating role of KS in the relationship between TL and innovation. KS is known to be a key issue in enhancing innovation (Hislop, 2013). Therefore, transformational leaders that encourage a KS culture among members can foster innovation. This would help to enhance and support the UAE ADP in its vision to have one of the most secure and safest countries in the world, along with its mission to work effectively and efficiently towards quality of life in the UAE. Also according to Skaik, & Othman, (2014, p. 66) few studies have been published about knowledge sharing in UAE. Hence, this study contributes to the Transformational Leadership, Knowledge Sharing and Innovation literature by enriching the library of theoretical research.

Although past literature has mentioned TL (Al-mailam, 2004) and KS (McAdam and Reid, 2000) within organisations, so far it is not clear how TL affects KS and innovation, and KS innovation, in public sectors. Thus, by examining these issues, the current study aims to fill the gap in the literature. Furthermore, the study examines sector-based differences in TL practice and attempts to determine which behaviours, out of idealised influence, inspirational motivation, intellectual stimulation, and individualised consideration, have the biggest impact on KS and innovation in public sectors. Thereby, it will hope to give more information about the systems and policies that could be used in the public sector more specifically ADP.

From a practical perspective, this study could help the leaders and policy-makers of the UAE ADP facing pressure to be innovative, by enabling them to overcome the barriers that prevent the development of product and process innovation within the organisation, and by providing ideas for strategies that will foster KS activities among them. As a result, the lack of a model of TL, KS and innovation in the context of ADP, led to the development of the importance and purpose of this study, its aims and objectives, and the research questions within.

**Gap in the Research**

Throughout the academic theory and empirical evidence, there is a clear link between transformational leadership and opportunities for employees to embrace creativity and innovation (e.g. Mumford et al., 2002; Walumbwa et al., 2008; Hassan et al., 2012). Yet such findings are inherently tied to an overwhelming cultural force which defines the scale and direction of creative output. For this reason, the transformational leader is subordinated in practise to the organisation itself, raising questions as to the true dominion of leadership in affecting organisational change. Whilst researchers such as Bass and Avolio (1994) and in later research, Gumselouglu and Ilsev (2009) have defined the spectrum of influence relative to transformational leadership in theory, the variable nature of employee outputs in practise fails to resolve the gap between cultural influence and employee behaviour. For this reason, the current study reveals a significant gap in the research which must be resolved through more practical, case-based evidence of the scale-based influence of transformational leadership in stimulating and sustaining employee innovation in the workplace.
RESEARCH DESIGN

Philosophy
Positivism - scholars claim that Positivist researchers remain detached from the participants of the research by creating a distance, which is important in remaining emotionally neutral to make clear distinctions between reason and feeling (Carson et al., 2001). They also maintain a clear distinction between science and personal experience and fact and value judgement. It is also important in positivist research to seek objectivity and use consistently rational and logical approaches to research (Carson et al., 2001).

Approach: Deductive
The use of the deductive approach allows the researcher to test existing theory as Fieser and Dowden (2006) pointed out that deductive approach is one where an existing theory is developed which is subjected to precise testing by investigation of observations made and the generalisation or theory is applied to specific settings or particular contexts such as Abu Dhabi police which has specific and unique work duties and activities that make it inherently different to this topic to examine leadership, Innovation, and Knowledge sharing.

Data Collection
A mixed method approach has been utilized for this research as follow:

- **Phase One**: During this phase, (Questionnaire Scaling), specific steps were followed by the researcher for the construction and development of a reliable and valid questionnaire. Taking a quantitative approach, survey questionnaires were employed for identifying how the level of KS and employees innovation are affected by the leadership, The MLQ-5X includes 11 items of which measure Transformational leadership style five leadership behavior dimensions: idealized influence (behavior), inspirational motivation, intellectual stimulation, and individualized consideration adapted from (Bass & Avolio, 2000). The Knowledge Sharing Questions adapted by (Hooff et al., 2003; Hooff and Weenen 2004; Hooff and Ridder, 2004; De Vries et al., 2006) After conducting a factor analysis and experimental testing, finally, the best items were selected for the pilot test and the researchers decided to retain only (5) only items and. Finally, the Innovation (8) items questions adapted from (Perri 6, 1993; Skerlavaja et al., 2010; Liao et al., 2007).

- **Phase Two**: During the second phase, qualitative methods were employed, including the use of semi-structured interviews for exploring and examining the views of participants in relation to Transformational Leadership amongst ADP leaders.

RESULTS

Composition of the research sample
Saunders et al. (2012) indicates that the selection of appropriate composition of the research sample, which reflects the entire research population, is critical for reliability and validity of the research findings. From the SPSS analysis of the reliability of the findings, it can be analysed that the selected sample composition and their responses to the questionnaire are highly reliable and valid.
In this study, the composition of the research sample was analysed in terms of age, gender, nationality, educational qualifications, work experience, department, job position and length of the service. For instance, analysis of the research sample in terms of age groups indicates that nearly 85.5 percent of the respondents are between the age of 25-40 years followed by 13.2 percent of over 40 years and 1.3 percent of under 25 years. The figure 1 below presents the composition of the research sample based on the age group. This results closely reflect the overall composition of the employees working at ADP, where majority of the people are between the age group of 25-40 years.

![Age Composition](image)

**Figure 1: Composition of the research sample based on age groups.**

The analysis of the research sample on these parameters in vital for this research study as differences in the demographics effect the transformation leadership and knowledge sharing abilities of the individuals, which in turn impact the innovation process across the organisation (Tan et al., 2010). From the composition of research sample, in terms of job position, it can be analysed that 11.8 percent belong to senior management level, 50 percent to middle management and 38.2 percent of the operational level employees.

<table>
<thead>
<tr>
<th>Position</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Manager</td>
<td>27</td>
<td>11.8</td>
<td>11.8</td>
<td>11.8</td>
</tr>
<tr>
<td>Middle Management</td>
<td>114</td>
<td>50.0</td>
<td>50.0</td>
<td>61.8</td>
</tr>
<tr>
<td>Employee</td>
<td>87</td>
<td>38.2</td>
<td>38.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>228</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 1: Composition of the research sample based on the job position.

At the same time, in terms of educational qualifications, nearly 48.7 percent hold Bachelor’s or equivalent degree, 26.7 percent hold Master’s or equivalent degree, 10.5
percent hold PhD and 9.2 percent studies until high school. Lynch (2012) indicates that the analysis of the research sample on the basis of educational qualifications is highly significant in the research context as they possess impact on the attributes of transformation leadership, knowledge sharing and innovation.

1. Educational Qualifications

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School Certificate</td>
<td>21</td>
<td>9.2</td>
<td>9.2</td>
<td>9.2</td>
</tr>
<tr>
<td>Bachelor's Degree or equivalent</td>
<td>111</td>
<td>48.7</td>
<td>48.7</td>
<td>57.9</td>
</tr>
<tr>
<td>Masters Degree or equivalent</td>
<td>60</td>
<td>26.3</td>
<td>26.3</td>
<td>84.2</td>
</tr>
<tr>
<td>PhD. or equivalent</td>
<td>24</td>
<td>10.5</td>
<td>10.5</td>
<td>94.7</td>
</tr>
<tr>
<td>Other</td>
<td>12</td>
<td>5.3</td>
<td>5.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>228</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Table 2: Composition of the research sample based on the educational qualifications

Seba et al. (2012) explains that work experience is vital element to understand how processes and practices are perceived by employees in an organisation. It is pointed out that employees who are part of the organisation for more number of years are more likely to integrate them into organisational practices and processes effectively. Under this context, this study analyses the composition of the research sample based on the work experience of the participants and it is observed that nearly 68.4 percent of the participants have work experience of more than 10 years followed by 23.7 percent between 6-10 years and 7.9 percent between 3-5 years respectively (Please see the figure 2 below).
2. Transformational Leadership

According to DuBrin (2012) transformation leadership leads to increased goal-directed behaviour and enhance performance and innovation. One of the important aspects of transformational leadership is building trust and respect (Hawkins, 2011). When asked about whether leadership at ADP acts in a ways that build their trust and respect, nearly 31.6 percent strongly agreed followed by 38.2 percent of the participants agreeing to it. Cumulatively, only 9.2 percent of the participants were either disagree or strongly disagree.

<table>
<thead>
<tr>
<th>Acts in ways that build my respect</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>72</td>
<td>31.6</td>
<td>31.6</td>
<td>31.6</td>
</tr>
<tr>
<td>Agree</td>
<td>87</td>
<td>38.2</td>
<td>38.2</td>
<td>69.7</td>
</tr>
<tr>
<td>Neutral</td>
<td>48</td>
<td>21.1</td>
<td>21.1</td>
<td>90.8</td>
</tr>
<tr>
<td>Disagree</td>
<td>9</td>
<td>3.9</td>
<td>3.9</td>
<td>94.7</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>12</td>
<td>5.3</td>
<td>5.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>228</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

On the similar lines, when asked about majority of the participants, nearly 13.2 percent and 46.1 percent respectively, indicated that leadership at ADP talks about the importance of values and beliefs and encourage employees to actively participate in the organisational processes (Please see figure 3 below). This is important because it generates commitment within subordinates and motivate them to be more productivity, creative and problem solving (Yukl, 2013; Lynch, 2012).
Aitken and Higgs (2010) indicates that one of the important features of TL is articulating a vision for future, presenting an optimistic view of it and emphasising the importance of having collective sense of the future goals and mission of the organisation. This is highly significant to make employees understand the opportunities and challenges in their job roles and participate in the innovation process (Armstrong and Taylor, 2014). From the results presented in the tables 7, 8 it can be analysed that majority of the survey participants agree to this statements. This view is very important as it drive employees to work beyond their own self-interest and for the sake of the organisation.

**Emphasises the importance of having a collective sense of mission.**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>51</td>
<td>22.4</td>
<td>22.4</td>
<td>22.4</td>
</tr>
<tr>
<td>Agree</td>
<td>108</td>
<td>47.4</td>
<td>47.4</td>
<td>69.7</td>
</tr>
<tr>
<td>Neutral</td>
<td>51</td>
<td>22.4</td>
<td>22.4</td>
<td>92.1</td>
</tr>
<tr>
<td>Disagree</td>
<td>9</td>
<td>3.9</td>
<td>3.9</td>
<td>96.1</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>9</td>
<td>3.9</td>
<td>3.9</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>228</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

**Articulates a compelling vision of the future.**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>39</td>
<td>17.1</td>
<td>17.1</td>
<td>17.1</td>
</tr>
<tr>
<td>Agree</td>
<td>105</td>
<td>46.1</td>
<td>46.1</td>
<td>63.2</td>
</tr>
</tbody>
</table>
Similarly, the results of the survey questionnaire indicate that leadership at ADP develops a team attitude spirit among employees (cumulatively 58 percent either strongly agree or agree) whilst seeking different perspectives to solve problems (Please tables for the findings 10, 11, 12 below). Wang et al. (2014) indicates that this aspect of TL play a vital role in encouraging employees to solve problems in new ways, which in turn enhances innovation and creativity.

**Develops a team attitude and spirit among members of staff**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>45</td>
<td>19.7</td>
<td>19.7</td>
<td>19.7</td>
</tr>
<tr>
<td>Agree</td>
<td>87</td>
<td>38.2</td>
<td>38.2</td>
<td>57.9</td>
</tr>
<tr>
<td>Neutral</td>
<td>57</td>
<td>25.0</td>
<td>25.0</td>
<td>82.9</td>
</tr>
<tr>
<td>Disagree</td>
<td>27</td>
<td>11.8</td>
<td>11.8</td>
<td>94.7</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>12</td>
<td>5.3</td>
<td>5.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>228</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
Furthermore, it is analysed from the results that leadership at ADP requires to spend more time teaching, training and coaching to enhance innovation. It can be analysed from the survey results that only 47 percent either strongly agree or agree while more than 53 percent of the participants seek further improvement (Please see the table 13 below). Wang et al. (2014) findings supports this notion and indicates that learning processes help employees develop their cognitive role identity, creative self-efficacy, and ultimately, a foundation of workplace creativity.

### Seeks different perspectives when solving problems

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>51</td>
<td>22.4</td>
<td>22.4</td>
<td>22.4</td>
</tr>
<tr>
<td>Agree</td>
<td>75</td>
<td>32.9</td>
<td>32.9</td>
<td>55.3</td>
</tr>
<tr>
<td>Nuteral</td>
<td>75</td>
<td>32.9</td>
<td>32.9</td>
<td></td>
</tr>
<tr>
<td>Disagree</td>
<td>15</td>
<td>6.6</td>
<td>6.6</td>
<td>94.7</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>12</td>
<td>5.3</td>
<td>5.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Disagree</td>
<td>30</td>
<td>13.2</td>
<td>13.2</td>
<td>90.8</td>
</tr>
<tr>
<td>Total</td>
<td>228</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Furthermore, leadership at ADP requires to spend more time teaching, training and coaching to enhance innovation.

### Spends time teaching and coaching

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>42</td>
<td>18.4</td>
<td>18.4</td>
<td>18.4</td>
</tr>
<tr>
<td>Agree</td>
<td>66</td>
<td>28.9</td>
<td>28.9</td>
<td>47.4</td>
</tr>
<tr>
<td>Nuteral</td>
<td>69</td>
<td>30.3</td>
<td>30.3</td>
<td>77.6</td>
</tr>
<tr>
<td>Disagree</td>
<td>30</td>
<td>13.2</td>
<td>13.2</td>
<td>90.8</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>21</td>
<td>9.2</td>
<td>9.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Disagree</td>
<td>21</td>
<td>9.2</td>
<td>9.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>228</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

### 3. Knowledge Sharing

Aitken and Higgs (2010) indicates that knowledge sharing play a significant role in enhancing innovation in the organisations. It is a continuous learning process and it is essential for organisations to develop a culture that promotes knowledge sharing. When asked about knowledge sharing to the participants, cumulatively 62 percent agreed that there is much they could learn from colleagues in their work groups (Please see figure 4 below).
However, on the contrary, it is pointed out that only 33 percent (cumulatively) their immediate supervisors organises regular meetings to share information whilst 67 percent of the participants seeks further development or initiatives to promote knowledge sharing in the organisation. The table 14 below presents the survey results

My immediate supervisor organises regular meetings to share information

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>30</td>
<td>13.2</td>
<td>13.2</td>
<td>13.2</td>
</tr>
<tr>
<td>Agree</td>
<td>45</td>
<td>19.7</td>
<td>19.7</td>
<td>32.9</td>
</tr>
<tr>
<td>Neutral</td>
<td>102</td>
<td>44.7</td>
<td>44.7</td>
<td>77.6</td>
</tr>
<tr>
<td>Total</td>
<td>228</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

At the same time, there is a negative correlation between the views of the individuals in knowledge sharing. For instance, the results of the survey indicate that majority of the participants (cumulatively 69.7 percent) indicated that they are more likely to share knowledge with their colleagues when they learn something new. But on the contrary, it is pointed out that only cumulatively 39.4 percent of the participants believe that they colleagues share information when they learn something new (Please see tables 15 and 16 for results). This indicates the need for initiatives for knowledge sharing and building trust between the employees in order to promote innovation in the organisation’s processes.
When I have learned something new, I tell colleagues in my department about it

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>60</td>
<td>26.3</td>
<td>26.3</td>
<td>26.3</td>
</tr>
<tr>
<td>Agree</td>
<td>99</td>
<td>43.4</td>
<td>43.4</td>
<td>69.7</td>
</tr>
<tr>
<td>Nuteral</td>
<td>51</td>
<td>22.4</td>
<td>22.4</td>
<td>92.1</td>
</tr>
<tr>
<td>Disagree</td>
<td>15</td>
<td>6.6</td>
<td>6.6</td>
<td>98.7</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>3</td>
<td>1.3</td>
<td>1.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>228</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

When my colleagues in the department learn something new, they tell me about it

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>24</td>
<td>10.5</td>
<td>10.5</td>
<td>10.5</td>
</tr>
<tr>
<td>Agree</td>
<td>66</td>
<td>28.9</td>
<td>28.9</td>
<td>39.5</td>
</tr>
<tr>
<td>Nuteral</td>
<td>96</td>
<td>42.1</td>
<td>42.1</td>
<td>81.6</td>
</tr>
<tr>
<td>Disagree</td>
<td>33</td>
<td>14.5</td>
<td>14.5</td>
<td>96.1</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>9</td>
<td>3.9</td>
<td>3.9</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>228</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

4. Innovation

The key aspect of this research study is the mediating role of KS in the relationship between TL and innovation (Hislop, 2013). Therefore, transformational leaders that encourage a KS culture among members can foster innovation (DuBrin, 2012). When asked about whether leadership at ADP supports collaborative culture that encourages employees to identify and develop new innovations, majority of the respondents (cumulatively 59.2 percent) stated their agreement whilst only 9.2 percent indicated their either ‘disagree’ or ‘strongly disagree’ (Please table below 17). This suggests that leadership at ADP plays an important role in promoting KS culture and encourage every employee to create new solutions and innovations.
Our leadership supports a collaborative culture to encourage staff to identify and develop new innovations and solutions

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>54</td>
<td>23.7</td>
<td>23.7</td>
<td>23.7</td>
</tr>
<tr>
<td>Agree</td>
<td>81</td>
<td>35.5</td>
<td>35.5</td>
<td>59.2</td>
</tr>
<tr>
<td>Neutral</td>
<td>72</td>
<td>31.6</td>
<td>31.6</td>
<td>90.8</td>
</tr>
<tr>
<td>Disagree</td>
<td>15</td>
<td>6.6</td>
<td>6.6</td>
<td>97.4</td>
</tr>
<tr>
<td>Strongly Disagree</td>
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<td>2.6</td>
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<tr>
<td>Total</td>
<td>228</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Wang et al (2014) also indicates that it is a responsibility of leadership to ensure adequate staffing, funding, and cross-functional management support to identify and implement new ideas. When asked about the role of leadership at ADP in promoting this unique culture, cumulatively 52.6 percent stated their leadership engage actively in creating new strategies to promote innovation. However, it can be analysed from the responses that there is further scope for improvement in the areas of funding and cross-functional support in implementing innovative ideas (Please see tables below).

My department’s strategy development processes engage key staff members as a way of identifying new opportunities and creating unique strategies

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>21</td>
<td>9.2</td>
<td>9.2</td>
<td>9.2</td>
</tr>
<tr>
<td>Agree</td>
<td>99</td>
<td>43.4</td>
<td>43.4</td>
<td>52.6</td>
</tr>
<tr>
<td>Neutral</td>
<td>75</td>
<td>32.9</td>
<td>32.9</td>
<td>85.5</td>
</tr>
<tr>
<td>Disagree</td>
<td>27</td>
<td>11.8</td>
<td>11.8</td>
<td>97.4</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>6</td>
<td>2.6</td>
<td>2.6</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>228</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

My department has adequate staffing, funding, leadership, and cross-functional management support to successfully identify and implement new ideas

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>27</td>
<td>11.8</td>
<td>11.8</td>
<td>11.8</td>
</tr>
<tr>
<td>Agree</td>
<td>66</td>
<td>28.9</td>
<td>28.9</td>
<td>40.8</td>
</tr>
<tr>
<td>neutral</td>
<td>81</td>
<td>35.5</td>
<td>35.5</td>
<td>76.3</td>
</tr>
<tr>
<td>Disagree</td>
<td>36</td>
<td>15.8</td>
<td>15.8</td>
<td>92.1</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>18</td>
<td>7.9</td>
<td>7.9</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>228</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
At the same time, it can be analysed from the results that it requires further improvement in the development of new training programs for staff members whilst promoting an effective rewards system (such as bonuses or perks) to encourage employees to come up with innovative ideas. For instance, only 51.3 percent of the respondents stated their departmental leadership development new training programs whilst 48.7 percent indicating a scope for further improvement (Please see table 22 below).

### My department develops new training programs for staff members

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>24</td>
<td>10.5</td>
<td>10.5</td>
<td>10.5</td>
</tr>
<tr>
<td>Agree</td>
<td>93</td>
<td>40.8</td>
<td>40.8</td>
<td>51.3</td>
</tr>
<tr>
<td>Neutral</td>
<td>69</td>
<td>30.3</td>
<td>30.3</td>
<td>81.6</td>
</tr>
<tr>
<td>Disagree</td>
<td>27</td>
<td>11.8</td>
<td>11.8</td>
<td>93.4</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>15</td>
<td>6.6</td>
<td>6.6</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>228</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

In addition to this, nearly 38.2 percent (cumulatively) of the respondents either ‘disagree’ or ‘strongly disagree’ to the incentive system at ADP whilst 34.2 indicating their neutrality (Please see figure 6 below). It is important to improve rewards system and integrate them to knowledge sharing and achievements in order to encourage employees to come-up with new innovations in the processes at ADP. Hassan et al. (2012) research findings point out that integrated incentive systems will act as a direct catalyst for innovative and creative workplace behaviour.

### My department implements an incentive system (i.e. higher salaries, bonuses,--) to staff to encourage them to come up with innovative ideas

![Bar chart showing responses to the statement about incentive systems](image-url)
CONCLUSION

To conclude, the relationship between transformational leadership and knowledge sharing is vital for enhancing innovation. It has been analysed from the research findings that mediating role of KS in the relationship between TL and innovation helps to develop a culture that fosters constant innovation. At ADP, leadership across various departments emphasise on systematic process for engaging employees and to promote innovation. However, there is further scope for improvement in the areas of staffing, funding and cross-functional support in implementing innovative ideas. At the same time, leadership at ADP develop new training programs for developing KS culture and improving trust between employees. Furthermore, it is important to improve rewards system and integrate them to knowledge sharing and achievements in order to encourage employees to come-up with new innovations in the processes at ADP.

REFERENCES


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TOWARD THE DEVELOPMENT OF A SUSTAINABLE PROJECT PORTFOLIO SELECTION FRAMEWORK FOR IT PROJECTS

ABDULLA AL MAHRI* AND DR. TARIQ KHAN

ABSTRACT

This research aims to develop a sustainable project portfolio selection (PPS) framework for the selection of IT projects. In this regard, after introducing the research aims, objectives and research questions, this paper presents the need of such a framework and summarises state of the art literature review on existing PPS frameworks. This has been done to carefully evaluate the current research state in this area. Based on these findings, this paper further discusses the methodological plan for the achievements of all defined research objectives. Moreover, it presents our recent progress towards formulating a project portfolio selection frameworks evaluation methodology to evaluate existing PPS frameworks and to aid in achieving the overall objectives of this research. This PPS evaluation methodology also includes the suggested ranking of the PPS frameworks evolution criteria defined by the project portfolio experts in Abu Dhabi Police, which is selected case study organisation in this research. Finally the paper is concluded with the intended future research direction.

KEYWORDS: Project portfolio selection, sustainability, project management.

RESEARCH AIMS, OBJECTIVES AND QUESTIONS

This research aims to develop a sustainable PPS framework for the selection of IT projects, which is determined by corporate strategy plan and by considering sustainability as the main PPS optimisation factor along with balancing it with other PPS factors. The main research question of this research aim is: how can the PPS framework be improved for the selection of value added projects based on a balance approach to sustainability that is determined by both corporate and sustainability strategies?

In an effort towards achieving the above defined research aim, the main research question of this research has been decomposed into further research questions and their associated objectives based on the identified research gaps. As a result we have came up with the following 5 x refined objectives and research questions:

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Related Research Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To what extent the existing PPS frameworks are suitable for integrating sustainability?</td>
<td>To review and analyse the exiting PPS frameworks in order to establish the possibility for incorporating sustainability for the evaluation of IT projects.</td>
</tr>
</tbody>
</table>

* PhD Researcher, Brunel Business School, Brunel University, London, UB8 3PH, United Kingdom. Email: Abdulla.almahri@brunel.ac.uk, Tariq.khan@brunel.ac.uk
2. How can sustainability be considered as an evaluation stage in a PPS framework?
   Determine how sustainability can be integrated into a PPS framework as a stage for the evaluation of IT projects.

3. How can sustainability be balanced with other factors and cost when all of these are collectively considered as PPS factors?
   Determine the relationship between sustainability and other IT project portfolio selection factors.

4. How can sustainability be included in a PPS framework as the central optimisation factor for the selection of IT projects?
   Determine the relationship between sustainability with other PPS factors by taking sustainability as the main optimisation factor.

5. How to determine sustainable portfolio policy for IT projects selection, which integrates both organisational strategic objectives and sustainability strategy?
   Formulate a sustainability project selection policy, which incorporates both corporate level strategy and sustainability strategy.

LITERATURE REVIEW

In order to know the current state of the art in relation to this research, a comprehensive literature review has been conducted. The major findings of this literature review are summarised in this section.

In (Birgisson, 2012), a study has been conducted and as per the results, it is only since 2007 when the PPM research became active. Moreover, there are some generic PPS frameworks; methodologies/approaches and systems exist that have been extensively reviewed to assess the extent of existing evidences on this topic. The review of existing PPS models had a main objective to identify the extent of current research that includes sustainability aspect in PPS to achieve Green IT (discussed later in this section). This literature review made it possible to explore, organize, and summarise contributions related to the research topic.

In a recent survey by Info-Tech Green IT Report (2013), sponsored by IBM a detailed investigation on the ways to achieve Green and Sustainable IT adopted by worldwide organisations has been presented. The outcomes of this survey report show that Green and Sustainable IT is being carried out in a number of areas that include (but not limited to) virtualisation, storage consolidation, IT energy measurement, equipment power management, printer consolidation, remote conferencing, IT equipment recycling, etc. Moreover, while looking at various Green IT adoption trends, such as in Info-Tech (2013) the four main areas where Green IT and/or Sustainable IT is being adopted by the organisations include: (1) virtualisation support and consolidation of storage space; (2) energy efficiency of IT equipment; (3) reduce travel by using remote conferencing and adopting telecommuting strategies; and (4) asset disposal – IT equipment recycling. Therefore, the portfolio managers of any organisation (and in our case ADP) will have to consider most of all of the above ways to achieve a sustainable PPS mechanisms for IT projects selection. Moreover, the companies who have successfully implemented such initiatives suggest that success depends on following major factors: (1) having right and complete support of business stakeholders including top management as its require changes in processes, education of employees and a change in their attitude (Nidumolu, 2013); (2) it is usually the case that companies adopting Green IT initiatives face various obstructions in the approval and implementation due to organisation culture,
communication problems, lack of resources etc.; and (3) the current economic situation of concerning organisation i.e. revenues, Green IT budget or funding, prioritisation of projects etc.

Moreover, the review carried out of existing Project Portfolio Selection (PPS) models had main objectives to identify the extent of current research on PPS models and incorporation of sustainability aspect in PPS to achieve Green IT. In this literature review it has been concluded that most of the existing PPS approaches; for example by (Khalili-Damghani et al., 2013) introduces a high-level PPS framework with abstract information on each component of the framework. Similarly, the PPS framework presented by Nasrin and Duecker (2013) is mainly providing guidelines for organizations pursuing waste minimization, process optimization, or improvements in energy use. But, it is not considering how these (or other) sustainability factors can be incorporated into PPS framework. In another approach presented by Heising (2012), the proposed Conceptual Framework is based on existing literature and interview questions and not by applying to a specific domain. In (Bernard and Sami, 2011) the benefits and shortcomings of the project portfolio selection methods are recognise in order to assist them in with various choices, but not a complete design of PPS framework is proposed. Recently various other PPS abstract frameworks or theories have been presented; for example by (Strang, 2011). However, in there is no PPS or PPM framework is proposed which caters for sustainability aspects; therefore, no relevant examples or practical case studies are provided too. Very recently in (Nowak, 2013), an idea has been formulated within which a new universal method for project portfolio selection could be designed. However, this is an in-progress work and in future authors plan to propose a dynamic interactive decision support technique combining a decision tree and interactive approach. The closest literature found during this literature review was in (Abbassi et. al., 2013) where a Multi-stage decision framework of R&D project portfolio selection is provided which has four major modules i.e. research projects categorization; identifying research projects evaluation criteria; constructing mathematical model; and research projects evaluation and constructing R&D project portfolio. However, it is not clear that to what extent and how sustainability aspects can be catered-for in the framework, if any. Thus, based on the outcomes of this state of the art review this can be concluded that, to best of our knowledge there is still no PPM and PPS framework along with practical case study exists that also caters for sustainability aspects while selecting an IT project.

In the following section our data collection methods are presented in the form of activity diagrams, which outlines various activities that are being (or will be) carried out to achieve the defined research objectives.

**METHODOLOGY TO ACHIEVE RESEARCH OBJECTIVES**

The above-defined objectives of this research have been further divided into various data collection, analysis and related activities. The outcome of the activities associated with all objectives 1-5 will contribute toward the aim of achieving a sustainable PPS framework based on a balanced corporate and sustainability strategy. The following activity diagram (Figure 1) shows the steps to achieve the objective 1 i.e. to review and analyse the exiting PPS frameworks in order to establish the possibility for incorporating sustainability for the evaluation of IT projects.
Figure 1: Activity Diagram of Research Objective 1

Figure 2 shows the steps involved to achieve objective 2 i.e. to determine how sustainability can be integrated into a PPS framework as a stage for the evaluation of IT projects. Further, Figure 3 shows the steps involved to achieve objective 3 and 4. Here, objective 3 is to “determine the relationship between sustainability and other IT project portfolio selection factors” and objective 4 to “determine the relationship between sustainability with other PPS factors by taking sustainability as the main optimisation factor”. Both of these objectives 3 and 4 require primary data collection from the same 5 x project/portfolio managers from ADP via semi-structured interviews. Therefore, some of activities of both objectives 3 and 4 have been merged together (as shown in Figure 3).

Finally, Figure 4 shows the steps involved to achieve objective 5 i.e. to formulate a sustainability project selection policy, which incorporates both corporate level strategy and sustainability strategy. Once this and all of the above activities are performed they will lead us towards the development of a sustainable PPS framework for the selection of IT projects in ADP.

Figure 2: Activity Diagram of Research Objective 2
In the next section our adopted evaluation methodology to evaluate existing PPS frameworks is presented. This development of evaluation methodology to evaluate existing PPS frameworks is a major step forwards towards achieving the objective 1 of this research.

EVALUATION METHODOLOGY TO EVALUATE EXISTING PPS FRAMEWORKS

For this purpose of this research, it was required to evaluate existing PPS models in order to establish the possibility for incorporating sustainability for the evaluation of IT projects. In order to evaluate PPS models, first literature review investigation to identify PPS contribution factors and features have been carried out. As an outcome of this investigation, a PPS evaluation criteria have been constructed for the selection of suitable PPS framework for the selection of IT project selection and for the inclusion of sustainably as another evaluation factor. This PPS evaluation criteria determines the applicability of a particular PPS framework with respect to its (1) realism with respect of organizational objectives (Jeffrey K. Pinto, 2010), (Douglas J., 2013) (2) capability in terms of changing/adding new criteria (Jeffrey K. Pinto, 2010), (Abbassi
et al., 2013) (3) flexibility towards the use of client applications (Jeffrey K. Pinto, 2010), (Strang, 2011), (4) ease of its use by the people in an organization (Jeffrey K. Pinto, 2010), (5) cost effective in terms of effort required to implement it (Strang, 2011), (6) comparability or support to include different types of projects (Strang, 2011), (7) method flexibility in terms of including both qualitative and quantitative criteria (Strang, 2011), (8) relevance or application into PPS domains, (9) practical reliability and accuracy of the model, and finally (10) relevance to PPS standards (Nowak, 2013).

After the above literature review investigation, five days focused group workshop sessions were conducted with project portfolio experts who have carefully reviewed and revised the PPS evaluation criteria based on their expert knowledge. The following section presents the resultant PPS evaluation criteria for the selection of a suitable project portfolio selection (PPS) framework for the selection of IT projects.

**PPS frameworks evaluation criteria**

The PPS evaluation criteria are divided into various criteria. The defined PPS evaluation criteria are as follows i.e. domain/field, Realism, Practical Reliability/Accuracy, Capability to integrate with relevant tools or systems, Monitoring, Measuring Ease of Use, Cost Effectiveness, Capability to integrate with relevant tools or systems, Flexibility of change and Qualitative and Quantitative method flexibility. Complete definitions and details of the proposed PPS Frameworks Evaluation Criteria are presented as Table 1.

**Table 1: Detailed description of project portfolio selection frameworks evaluation criteria**

<table>
<thead>
<tr>
<th>No.</th>
<th>Criteria</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PPS domain/field</td>
<td>If the PPS framework is related to particular domain/field or industry e.g.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“High = IT projects evaluation”,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Medium = General applicability on different domains”,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Low = Specific domain other than IT”, and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“NIL = Only top leave concept of a framework is provided with no</td>
</tr>
<tr>
<td></td>
<td></td>
<td>consideration or applicability to any domain”.</td>
</tr>
<tr>
<td>2</td>
<td>Realism</td>
<td>An effective model must be able to reflect organizational objectives and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>must be reasonable in light of such constraints on resources as “money” and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“personnel”. Moreover, the model must take into account both commercial</td>
</tr>
<tr>
<td></td>
<td></td>
<td>risks and technical risks.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“High = If the model is completely matching to the above description”,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Medium = If the model is fairly matching to above description e.g. only</td>
</tr>
<tr>
<td></td>
<td></td>
<td>effective for few organizational objectives instead of all”,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Low = If the model is limited in matching to above description”, and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“NIL = If the model is not matching to anything in the above description”.</td>
</tr>
<tr>
<td>3</td>
<td>Practical Reliability</td>
<td>If the framework has been applied in one or more practical environments and</td>
</tr>
<tr>
<td></td>
<td>/Accuracy</td>
<td>the practical reliability and accuracy of the framework has been tested.</td>
</tr>
<tr>
<td>No.</td>
<td>Criteria</td>
<td>Description</td>
</tr>
<tr>
<td>-----</td>
<td>---------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“High = If the model can be applied on various types of projects with accurate results and reliability”, “Medium = If the model can be applied on few/selected types of projects with medium reliability of results”, “Low = If the possibility of model’s practical test is limited (e.g. no details guidelines are available) or it can be applied on just one type of projects with no reliability of results”, and “NIL = If the model is very high level without any implementation or testing details”</td>
</tr>
<tr>
<td>4</td>
<td>Capability to integrate with relevant tools or systems</td>
<td>The model should be easily modified if trial applications (could be visual tools) require changes. “High = If the model is completely adjustable with the change of client application”, e.g. changing the GUI tool to a spreadsheet tool for evaluation. “Medium = If the model is fairly adjustable with the change of client application” e.g. changing some of the calculations/formulas from GUI tool to spread sheet for evaluation. “Low = If is difficult to change/adjust the model with respect to the application ”, and “NIL = If the model cannot accept a change”</td>
</tr>
<tr>
<td>5</td>
<td>Monitoring</td>
<td>Decision maker’s involvement or provision of some interactive mechanism for a decision maker for controlling and overriding portfolio selections generated by any algorithms or models based on past project experience, and they may also receive feedback on the consequences of such changes. “High = If the model fully supports decision maker involvement to override portfolio selection decisions.” “Medium = If the model fairly supports decision maker involvement in most stages of the process to override or amend selection decisions “, “Low = If the model supports limited decision maker involvement in certain (only few of the) stages of the process. “NIL = If the model does not support decision maker involvement at all”</td>
</tr>
<tr>
<td>6</td>
<td>Ease of Use</td>
<td>A model must be simple enough to be used by people in all areas of the organization, and it should be timely: It should generate information rapidly, and people should be able to assimilate that information without any special training or skills. This can include if any tool (or Visual) support has been provided. “High = If anyone in the organization (e.g. ADP) with minimum project management knowledge can use the model. “Medium = If only expert (or experienced) project managers can use the model. “Low = If specialized training is required to use the model”, and</td>
</tr>
<tr>
<td>No.</td>
<td>Criteria</td>
<td>Description</td>
</tr>
<tr>
<td>-----</td>
<td>-----------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>NIL = If the model cannot be applied due to extremely complex expertise and/or tool requirements</strong></td>
</tr>
</tbody>
</table>
| 7   | Cost Effective / Econometric Viability        | The cost of gathering, storing, and arranging information in the form of useful reports or proposals should be relatively low in relation to the costs associated with implementing a project (in other words, low enough to encourage use of the models rather than diminish their applicability).  
   “High = If the model’s implementation cost (overall time/effort required for implementation) is extremely low”.  
   “Medium = If the model’s implementation cost (overall time/effort required for implementation) is normal and/or near to average for other models”.  
   “Low = If the model’s implementation cost (overall time/effort required for implementation) is high”, and  
   “NIL = If the model’s implementation cost (overall time/effort required for implementation) is extremely high”. |
| 8   | Comparability                                 | The model must be broad enough that it can be applied to multiple projects, and it must support general comparisons of project alternatives.  
   “High = If the model can be applied to multiple projects, and support comparisons”.  
   “Medium = If the model can be applied to few types of projects with limited ability of comparisons”.  
   “Low = If the model can be applied to somewhat similar projects without the support of comparing project alternatives”, and  
   “NIL = If the model cannot be applied on multiple projects”. |
| 9   | Flexibility of change                         | A model should be flexible enough to respond to changes in the conditions under which projects are carried out and robust enough to accommodate new criteria and constraints.  
   “High = If the model is completely matching to the above description i.e. highly flexible”,  
   “Medium = If the model is fairly matching to above description e.g. model is responding to changes but cannot accommodate new criteria, or vice versa”,  
   “Low = If the model is limited in matching to above description e.g. having limited flexibility to change some of the criteria”, and  
   “NIL = If the model is not flexible nor robust” |
| 10  | Qualitative & Quantitative method flexibility | Results shows that taking only a Qualitative or the Quantitative portfolio selection approach can lead to oversight, safety problems, budget overruns, and/or outright failure. The model must be able to accommodate both qualitative or exclusively quantitative project selection parameters on safety and risks of complete failure of project.  
   “High = If the model support both qualitative and the quantitative portfolio selection parameters without any limitation and also support parameters on safety and risks of complete failure of project” |
Rankings of PPS frameworks evaluation criteria

In order to properly measuring level of importance for each of the criterion (presented in above section) we have collected experts opinions from the project portfolio specialists at Abu Dhabi Police (ADP) with the help of a questionnaire, so that we can select the most suitable PPS framework that satisfies ADP’s organizational requirements. In the questionnaire the above list of criterion for selecting a suitable PPS framework for the selection of IT project in Abu Dhabi Police was presented and the respondents were asked to give their ranking. Overall, 10 respondents having various senior roles at ADP have filled the survey that include: two team leads, one project contributor, three project managers, two portfolio managers and two senior managers. Moreover, 60% of these respondents had over 10 years of experience in the same role, 30% had between 5-9 years of experience in the same role and only 10% had between 2 to 4 years of experience. None of the respondents have less than a year experience. The scale for rating importance is as follows which is used to calculate the ranking for each criterion:

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Scale</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Not at all important</td>
<td>1</td>
</tr>
<tr>
<td>2.</td>
<td>Slightly Important</td>
<td>2</td>
</tr>
<tr>
<td>3.</td>
<td>Important</td>
<td>3</td>
</tr>
<tr>
<td>4.</td>
<td>Fairly Important</td>
<td>4</td>
</tr>
<tr>
<td>5.</td>
<td>Very Important</td>
<td>5</td>
</tr>
<tr>
<td>6.</td>
<td>No Opinion</td>
<td>Not applicable (NA)</td>
</tr>
</tbody>
</table>

The following formula has been used for ranking calculations:

$$\text{Calculation of Ranking} = (\text{Number of respondents} \times \text{Scale1}) + (\text{Number of respondents} \times \text{Scale2}) + \ldots + (\text{Number of respondents} \times \text{Scale n})$$

**Example – Realism**

$$= (0 \times \text{Not at all important}) + (0 \times \text{Slightly Important}) + (1 \times \text{important}) + (3 \times \text{Fairly Important}) + (6 \times \text{Very Important})$$

$$= (0 \times 1) + (0 \times 2) + (1 \times 3) + (3 \times 4) + (6 \times 5) = 3 + 12 + 30 = 45$$

**Now Taking Average**

$$45/10 = 4.5$$ (So the resultant ranking for realism is 4.5)

Using the above calculation method, the resultant rankings (as an outcome of the questionnaire) are presented as Table 2:

<table>
<thead>
<tr>
<th>No.</th>
<th>Criteria</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Medium</td>
<td>“Medium = If the model support both qualitative and the quantitative portfolio selection parameters with some limitation”.</td>
</tr>
<tr>
<td>2</td>
<td>Low</td>
<td>“Low = If the model support either of qualitative or quantitative portfolio selection parameters, but not both. And/ Or the model is quite restricted on the selection of parameters”.</td>
</tr>
<tr>
<td>3</td>
<td>NIL</td>
<td>“NIL = If the model has limited and pre-defined either of quantitative or qualitative parameters, but not both”.</td>
</tr>
</tbody>
</table>
Table 2: Rankings of Project Portfolio Selection Frameworks Evaluation Criteria

<table>
<thead>
<tr>
<th>Score</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Total / 10</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Criterion and Scales</strong></td>
<td><strong>Score</strong></td>
<td><strong>Not at all important</strong></td>
<td><strong>Slightly Important</strong></td>
<td><strong>Important</strong></td>
<td><strong>Fairly Important</strong></td>
<td><strong>Very Important</strong></td>
</tr>
<tr>
<td>Realism</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>6</td>
<td>4.5</td>
</tr>
<tr>
<td>Capability</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>5</td>
<td>2</td>
<td>3.9</td>
</tr>
<tr>
<td>Flexibility (of change)</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>3</td>
<td>1</td>
<td>3.5</td>
</tr>
<tr>
<td>Ease of Use</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>5</td>
<td>4.1</td>
</tr>
<tr>
<td>Cost Effective / Econometric Viability</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>3.7</td>
</tr>
<tr>
<td>Capability to integrate with relevant tools or systems</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>2</td>
<td>2</td>
<td>3.6</td>
</tr>
<tr>
<td>Qualitative &amp; Quantitative method flexibility</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>3.7</td>
</tr>
<tr>
<td>PPS domain/field</td>
<td>0</td>
<td>2</td>
<td>5</td>
<td>3</td>
<td>0</td>
<td>3.1</td>
</tr>
<tr>
<td>Practical Reliability/Accuracy</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**CONCLUSIONS AND FUTURE WORK**

In this paper after introducing the research aims, objectives and research questions, we summarised our findings of the state of the art literature review of existing PPS frameworks. This has led us to formulate a detailed methodological plan for the achievements of all defined research objectives. The further major focus of this paper is the dissemination of our recent progress towards achieving the objective 1; that is about formulating a PPS frameworks evaluation methodology in order to evaluate existing PPS frameworks, which will also aid in achieving the overall objectives of this research. This PPS evaluation methodology includes the overall PPS frameworks evaluation criteria and suggested ranking both reviewed and approved by the project portfolio experts through focused group workshops and a questionnaire. The follow-on outcomes of this research will include the practical application of resultant PPS evaluation criteria along with rankings on various selected PPS frameworks, which have been shortlisted during the state of the art literature review. Moreover, the next stages of this research will also be focused towards achieving the other defined research targets including conducting a through investigation of ADP’s portfolio selection framework and sustainability policies.

**REFERENCES**


DOES SURVEYTAINMENT BELONG TO B2B MARKET RESEARCH?
IRMA MACHACOVA

ABSTRACT
This article summarises results of quantitative online experimental B2B research that tested effects of gamification and surveytainment on respondents’ survey experience and data quality. Gamification and surveytainment are presumed to counter the declining engagement of survey participants and thus help in improving data quality. However, they have been tested mainly in B2C research and there is a debate on whether they can distort data and are appropriate even for B2B projects.

The results of our experiment showed that surveytainment and gamification had no effect on data quality, but it also did not influence perceived enjoyability and had a negative effect on perceived length of the questionnaire. But despite this, those who have experienced a new type of questionnaire would strongly prefer it in future.

As surveytainment and gamification have experienced a boom in popularity, B2B researchers have to face this trend. Our experiment is one of the first published in this area.

Key Words: surveytainment, gamification, B2B research, survey design, questionnaire

INTRODUCTION
In recent years, researchers around the world have been observing declining response rates (e.g. Wenemark, 2011; Cape, 2007), increasing dropout (exit) rates in online surveys (Uzunova, 2015) and growing demands in overall respondents’ survey experience (e.g. Torres van Grinsven, 2014). People are under greater time pressure, facing an increasing number of survey participation requests, and possibly bored by repetitive tasks and questions in surveys (Guin, 2012). Researchers are therefore afraid of declining motivation and engagement of survey participants; they are afraid of losing respondents and, with them, the possibility to gain quality and reliable data. To face this, new approaches in market research have appeared: “gamification” and “surveytainment” (Uzunova, 2015). Authors who promote these approaches state that they can help in solving problems of declining response and completion rates and help in obtaining richer and better quality data (Sleep and Puleston, 2011). Others are more critical, saying that gamification has no contribution to increasing completion rates and they have only minor positive effects on engagement. And moreover, they state that gamification can lead to data distortion (Koenig-Lewis, 2013).

Effects of surveytainment and gamification have been tested mainly when surveying individuals (B2C research). Based on the search for published empirical studies available, we found that there is a lack of knowledge about gamification and surveytainment in B2B research, where the conditions are different.

This study makes a contribution by testing several techniques of surveytainment and gamification in quantitative online B2B research and examining their effects on respondents’ survey experience and data quality.

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Theory

Elitsa Uzunova in her article “A new business model of marketing research” (Uzunova, 2015) summarises the definitions of surveytainment and gamification as follows:

- “Surveytainment” is focused on user-friendly survey designs and appealing questionnaire types which offer a fairly attractive form of survey questions, designed to elicit maximum response and engagement on the part of respondents. To this aim, attractive visual elements are being employed which serve to visualize or animate questions and expected answers alongside interactive elements which can change in real time depending on the previous responses of participants.

- “Gamification” ensures higher engagement of surveyed participants through the use of game design techniques and elements such as points, levels, badges, tokens, challenges etc. Despite the critical comments, it has been proven that ‘surveytainment’ results in higher completion rates and elicits more and longer answers to the open questions, while gamification is more effective in engaging younger participants who are usually harder to get by to respond to marketing surveys which are conducted by applying the classical approach to electronic polling.

Using game techniques in a survey is presumed to have the power to motivate people to complete the questionnaire and keep their attention at the necessary level. Puleston et al. claim that gamified questionnaires bring richer data. In the experiments they conducted, they observed a consistently strong correlation between respondent engagement and the quality and quantity of response. Thanks to game play techniques, more creative questioning techniques, usage of icons, and better design and ergonomics of online surveys, they achieved higher completion rates, a lower number of missing values, richer data in terms of amount and variability, and an increase in engagement and enjoyment (Sleep and Puleston, 2011; Suzuki and Puleston, 2015). Using game techniques in marketing surveys can also get people into a state called “flow”. In this state of mind, the time flows faster and the player is intrinsically motivated by the “game” itself (Groh, 2012). Researchers expect that thanks to the “flow” state of mind, respondents are willing to spend more time completing the questionnaire (Sleep and Puleston, 2011). Additionally, gamified questionnaires can generate a greater degree of respondent willingness to engage in further research (Adamou, 2015).

On the other hand, experimental research conducted by Koenig-Lewis et al. showed that gamification can lead to data distortion in terms of different variable mean scores between surveys adopting a conventional approach versus a gamified approach (Koenig-Lewis, 2013). And we also have to consider an important note, that while some respondents may appreciate gamified questions, icons or challenges, others may feel that a survey is being trivialised and their effort to provide quality answers can decline (B2B International Publications, 2014).

In B2B marketing research, researchers have to solve additional problems compared to surveying individuals in B2C. Respondents in B2B are usually busy, hard-to-reach professionals. They are not asked for their personal opinions but should answer as representatives of companies they are working at. Respondents are asked for their expert opinion in a given topic area. The topics are usually more specific and technical, and respondents have to find answers to more complex and difficult questions (B2B International Publications, 2014). And moreover, 90% of B2B respondents complete online questionnaires during their working hours (data resulting from the analysis of 1,890 completed questionnaires in B2B online surveys conducted by the market research agency B-inside Ltd.). Therefore we may be afraid that colourful and gamified questionnaires will be considered playing games instead of working and thus respondents would feel less comfortable spending much time

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completing the questionnaire. These specifics could be possible barriers when implementing surveytainment and gamification approaches in B2B surveys.

Inspired by the presented benefits of surveytainment and gamification and aware of their possible limitations, especially in B2B research, we examined whether surveytainment and gamification can improve respondents’ survey experience and whether experiencing more enjoyment can help when surveying business professionals, or whether it can have a negative impact on the research outcome.

METHODOLOGY
In the summer 2015 a team of B2B researchers from the marketing research company B-inside Ltd conducted quantitative online experimental research. The project involved online B2B customer satisfaction research for a real client – a company operating in security technology in the Czech Republic. As the client company belongs to market innovators, their representatives were willing to test a new type of questionnaire in their annual customer satisfaction research in order to reflect the recent boom in surveytainment and gamification in online research projects.

The respondents were recruited from the supplier’s database of clients and covered all types of clients in terms of the size of the client company, total amount of purchases of security technologies, years of business relationship, etc. The aims of the project covered assessing the supplier company by its clients, evaluation of the overall cooperation and evaluation of specific aspects of cooperation. Above these, several questions involved media behaviour of the respondents in order to obtain data for decisions about future media activities of the supplier company. Data were collected using an online survey programme. Respondents were randomly assigned to two groups:

1. The first, experimental group, completed questionnaire using more colours, icons, encouraging wording and some game elements.
2. The second, control group, completed a conventional text-only questionnaire that is typically used for this type of research project by B-inside Ltd. So even if it was not colourful and gamified, still it was designed to be user-friendly, using “humanized” language (Pettit, 2014) and asking clear and relevant questions.

Types of experimental elements
Inspired by articles dedicated to gamification and surveytainment (e.g. Sleep and Puleston, 2011; Puleston, 2011; Veris, 2011; Cechanowicz, 2013), we designed and used three types of elements for a colourful/gamified version of the questionnaire. Here are some examples. Please note that these are examples, not the exact wording of questions.

More colours and iconography
Colourful/gamified version:  
Text-only version:

<table>
<thead>
<tr>
<th>How would you evaluate product range of XY:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Great</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How would you evaluate product range of XY:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Great</td>
</tr>
</tbody>
</table>
2. Challenging wording

Colourful/gamified version:

If you could design a newsletter that you’d like to receive from suppliers, what information would you like to find in it?

Now, you have a chance to design your own ideal newsletter:

- Discounts, special offers
- Technical details
- New products announcements
- Trends, news in our business
- Tutorials, advices, how-to
- Other information

Use drag-and-drop to sort the options from those that you would like most to those that you would like at least.

Text-only version:

What information would you like to receive in our newsletter?

- Discounts, special offers
- Technical details
- New products announcements
- Trends, news in our business
- Tutorials, advices, how-to
- Other information

Please select all that apply.

Iconography

Colourful/gamified version:

Where else you want to track information and news about XY company?

- Facebook
- Newsletter
- Twitter
- Youtube
- Linkedin

Text-only version:

Where else you want to track information and news about XY company?

- Facebook
- Newsletter (e-mail)
- Twitter
- Youtube
- Linkedin

Please select all that apply.

We received **237 complete questionnaires**, 118 of the colourful/gamified version and 119 of the conventional text-only version.

Hypotheses

Our **first hypotheses** relate to respondents’ overall survey experience. We expected that surveytainment and gamification would have a positive effect on respondents’ overall survey experience in terms of 1) perceived enjoyability, 2) perceived length, 3) future preference for the type of questionnaire (colourful/gamified versus conventional text-only), 4) exit (dropout) rate and 5) number of idle periods (time when the respondent does not take any action as a result of some external distraction).

**H1**: An online B2B survey that uses surveytainment and gamification results in better perceptions of the questionnaire enjoyability than the corresponding conventional text-only questionnaire.

For examining the effects of surveytainment and gamification on perceived enjoyability, we compared self-reported enjoyment based on the answers to the question: “How enjoyable was the questionnaire?” We used a 5-point scale: Very enjoyable; Rather enjoyable; Standard; Rather annoying; Very annoying.

**H2**: An online B2B survey that uses surveytainment and gamification results in better perceptions of the questionnaire length than a corresponding conventional text-only questionnaire.
For examining the effects of surveytainment and gamification on perceived length of the questionnaire, we compared the answers to the question: “How do you perceive the length of the questionnaire?” We used a 5-point scale: Quite short, it went quickly; Rather short; Standard, one could handle it; Rather long; Too long, it was annoying.

**H3:** Completing a colourful/gamified online B2B questionnaire results in a stronger preference for the same type of questionnaire in the future more than completing a conventional text-only questionnaire.

For examining the effects of surveytainment and gamification on future preferences for the questionnaire type, we compared the answers to the question: “If in future you were asked to answer a questionnaire, you would prefer:”, with options: I would prefer this type of questionnaire (colourful gamified); I would not care if it is a classic or colourful questionnaire; I would prefer the classic text-only questionnaire.

**H4:** An online B2B survey that uses surveytainment and gamification results in a lower exit rate than a corresponding conventional online survey.

For examining the effects of surveytainment and gamification on exit rates, we used the definition: “Exit (dropout) rate refers to the number of respondents who have attrited from the survey. Exit rate = Number of attrited surveys / Number of respondents who entered the survey” (Mirzae, 2014). We compared exit rates between the experimental and control groups.

**H5:** An online B2B survey that uses surveytainment and gamification results in a lower number of idle periods than a corresponding conventional online survey.

For examining the effects of surveytainment and gamification on number of idle periods, we defined “Idle period” as extremely long period when respondent does not take any action. As extremely long we considered period with higher than double interquartile range (Obikee, 2014) of the time spent with completing a logical group of questions.” In the questionnaire, there were 5 logical groups of questions and we compared the average number of idle periods within these groups of questions between the experimental and control questionnaires.

The **second group of hypotheses** relate to market research outcome and data quality. We expected surveytainment and gamification to have an effect on data quality in terms of 6) average mean scores, 7) variability of data, 8) amount of data and 9) missing values.

**H6:** An online B2B survey that uses surveytainment and gamification results in better evaluation of the supplier than a corresponding conventional online survey.

We expected that it is more enjoyable to click on smiling emoticons than on frowning ones and thus we gain better evaluation scores of the supplier from a colourful/gamified questionnaire than from a text-only questionnaire. For evaluation of this effect, we compared average mean scores of evaluation of 10 specific aspects of cooperation on a 5-point scale between the two groups of respondents.

**H7:** There is a significant difference in variability of answers when evaluating the supplier between an online B2B survey adopting surveytainment and gamification versus a conventional text-only survey.

As using icons is presumed to reduce straight-lining, we expected higher variability of data from a colourful/gamified questionnaire. For evaluation of this effect, we compared average standard deviations of mean evaluation scores of 10 specific aspects on a 5-point scale between the two groups of respondents.

**H8:** Using icons and pictures in multiple-choice questions results in choosing more options than using corresponding text-only multiple-choice questions.

As pictures and icons are presumed to encourage respondents to choose more options in multiple-choice questions, we expected to gain more answers from the colourful/gamified questionnaire than from the text-only questionnaire. For evaluation of this effect, we compared the average number of chosen options in multiple-choice questions.
**H9:** An online B2B survey that uses surveytainment and gamification results in a lower number of missing values than a corresponding conventional text-only survey.

We expected that using surveytainment and gamification would encourage respondents to avoid choosing “do not know” and “do now want to answer” options. For evaluation of this effect, we compared the average number of missing values when evaluating the supplier.

**FINDINGS**

**Actual length of the questionnaire**

The actual average length of the questionnaire was similar for both groups – respondents who completed the colourful/gamified questionnaire spent 11.7 minutes on average, while the experimental group spent 11.8 minutes on average (see Table 1). The difference is not statistically significant (p>0.05).

**Table 1: Length of the questionnaire in minutes**

<table>
<thead>
<tr>
<th></th>
<th>Text-only questionnaire N=119</th>
<th>Colourful/gamified questionnaire N=118</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>11.7</td>
<td>11.8</td>
</tr>
<tr>
<td>Median</td>
<td>9.8</td>
<td>9.8</td>
</tr>
<tr>
<td>Minimum</td>
<td>4.7</td>
<td>5.2</td>
</tr>
<tr>
<td>Maximum</td>
<td>37.0</td>
<td>37.2</td>
</tr>
<tr>
<td>Std. deviation</td>
<td>6.4</td>
<td>6.6</td>
</tr>
</tbody>
</table>

**Respondents’ overall survey experience**

Based on the results presented in Table 2, we can conclude that surveytainment and gamification had no effect on perceived enjoyability. Nor did they help in increasing the completion rate or in reducing the number of idle periods.

On the contrary, surveytainment and gamification led to worse perceptions of the questionnaire length. This result confirms previous findings of similar experiments in this field that showed that gamified questionnaires are perceived to be longer (Koenig-Lewis, 2013, Downes-Le Guin, 2012).

**Table 2: Findings summary – perceived enjoyment, perceived length, exit rates and idle periods**

<table>
<thead>
<tr>
<th></th>
<th>Text-only questionnaire N=119</th>
<th>Colourful/gamified questionnaire N=118</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average rating of “enjoyability” of the questionnaire (5-point scale)</td>
<td>3.38</td>
<td>3.33</td>
</tr>
<tr>
<td>Average rating of subjective “questionnaire length” (5-point scale)</td>
<td>3.53</td>
<td>3.21*</td>
</tr>
<tr>
<td>Exit rate</td>
<td>24%</td>
<td>25%</td>
</tr>
<tr>
<td>Average number of idle periods (out of 5 possible) within logical groups of questions</td>
<td>0.47</td>
<td>0.58</td>
</tr>
</tbody>
</table>

* p< 0.05

Even though respondents who answered a colourful/gamified questionnaire perceived the length of the questionnaire as worse and the measured enjoyability was the same as in case of text-only questionnaire, in the future they would prefer this type of
questionnaire in 56% of cases. In comparison, those who answered a text-only questionnaire would prefer the same type of the questionnaire only in 42% of cases (p<0.05). This is shown in Figure 1.

**Figure 1: Future questionnaire preference**

![Graph showing preference for future questionnaire types](image)

The findings in respect of our hypotheses are summarised in Table 3.

<table>
<thead>
<tr>
<th>H</th>
<th>Independent variable</th>
<th>Dependent variable</th>
<th>Hypothesis result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>Surveytainment/Gamification</td>
<td>Perceived enjoyment</td>
<td>Rejected</td>
</tr>
<tr>
<td>H2</td>
<td>Surveytainment/Gamification</td>
<td>Perceived length</td>
<td>Rejected</td>
</tr>
<tr>
<td>H3</td>
<td>Surveytainment/Gamification</td>
<td>Future preference</td>
<td>Supported</td>
</tr>
<tr>
<td>H4</td>
<td>Surveytainment/Gamification</td>
<td>Exit rates</td>
<td>Rejected</td>
</tr>
<tr>
<td>H5</td>
<td>Surveytainment/Gamification</td>
<td>Idle periods</td>
<td>Rejected</td>
</tr>
</tbody>
</table>

**Data quality**

Based on the results presented in Table 4, we can conclude that surveytainment and gamification had no effect on data richness and data quality in our experimental B2B research. On the one hand we can be disappointed that the richness of data is the same; on the other hand, this finding gives us hope that usage of colours, emoticons and game elements does not distort data in B2B. We can assume that the respondents are responding as professionals and they really think of their answers.

**Table 4 Findings summary – data quality**

<table>
<thead>
<tr>
<th></th>
<th>Text-only questionnaire N=119</th>
<th>Colourful/gamified questionnaire N=118</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average mean scores of evaluation of 10 specific aspects of cooperation on 5-point scale</td>
<td>3.24</td>
<td>3.15</td>
</tr>
<tr>
<td>Average standard deviation of mean scores of evaluation of 10 specific aspects on 5-point scale</td>
<td>0.461</td>
<td>0.473</td>
</tr>
<tr>
<td>Average number of chosen options for multiple-choice question (out of 8 possible)</td>
<td>1.61</td>
<td>1.48</td>
</tr>
<tr>
<td>Average number of missing values when evaluating supplier (evaluation of 8 aspects)</td>
<td>0.27</td>
<td>0.32</td>
</tr>
</tbody>
</table>

The findings in respect of our hypotheses are summarised in Table 5.
Table 5: Hypotheses testing summary – part 2

<table>
<thead>
<tr>
<th>H</th>
<th>Independent variable</th>
<th>Dependent variable</th>
<th>Hypothesis result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H6</td>
<td>Surveytainment/Gamification</td>
<td>Evaluation of supplier</td>
<td>Rejected</td>
</tr>
<tr>
<td>H7</td>
<td>Surveytainment/Gamification</td>
<td>Variability of answers</td>
<td>Rejected</td>
</tr>
<tr>
<td>H8</td>
<td>Surveytainment/Gamification</td>
<td>Number of options selected for multiple-choice question</td>
<td>Rejected</td>
</tr>
<tr>
<td>H9</td>
<td>Surveytainment/Gamification</td>
<td>Number of missing values</td>
<td>Rejected</td>
</tr>
</tbody>
</table>

DISCUSSION

In this paper we summarised our effort to answer the question of whether surveytainment and gamification belong to B2B market research. The results of the experiment we have conducted are questionable. The good news is that it is possible to design a survey with elements of surveytainment and gamification that does not negatively influence data quality. We can expect that business people are professionals and when answering the questions, they think of their answers and do not just merrily click on smiling emoticons. On the other hand, we can be slightly disappointed by the fact that we were not able to evoke the feeling of better enjoyment; nor could we increase the completion rate and reduce the number of idle periods using surveytainment and gamification.

We can debate the implications of the findings that, despite respondents perceiving the length of a colourful/gamified questionnaire as worse than the control group and not enjoying the questionnaire more, they would strongly prefer a colourful/gamified questionnaire in future. What does this mean for B2B market researchers? As surveytainment and gamification have experienced a boom in popularity, are potential respondents going to expect more fun and enjoyment in surveys? Would they be bored when completing text-only, non-gamified questionnaires? Will B2B researchers lose their respondents if they do not supply them with “modern” versions of questionnaires? Or, will respondents appreciate well-designed conventional questionnaires for their seriousness more than gamified questionnaires?

We can also debate other impacts of gamification and surveytainment. According to the integrated marketing communications concept (Ellis, 2011), we can consider marketing research to be a part of communication with customers. Therefore, it is obvious that gamified questionnaires are not suitable for each organisation. If a company uses a formal approach and its overall communication with customers is old-fashioned, then a gamified questionnaire could be considered inappropriate, and vice versa.

As these (and many other) questions are still unanswered, further research in the field of surveytainment and gamification in B2B research is necessary.

CONCLUSIONS AND IMPLICATIONS

In recent years researchers have found that it is increasingly difficult to maintain motivation and engagement of survey participants, especially in online research. Researchers have observed declining response and completion rates and the tendency of respondents to provide low-quality answers. Many studies attempt to find new ways to face these challenges, and the new approaches “gamification” and “surveytainment” have appeared. However, the research conducted in this area has focused mainly on individuals and their behaviour in B2C online surveys. There is a lack of knowledge about gamification, surveytainment and their effects in B2B research, where the conditions are different. Respondents are usually professionals, often experts in a given topic area, and should answer questions that are not related so much to themselves as individuals but to the business they are working in or to their professional specialisation.
This article summarised results of a real-condition experiment in B2B online research that tested effects of gamification and surveytainment on business respondents’ survey experience and data quality. Two versions of the questionnaire were tested: one that used more colours, icons, encouraging wording and some game elements; and its conventional, text-only, non-gamified counterpart. The research had to answer important questions: do gamification and surveytainment have a positive effect in B2B research in terms of improving respondents’ survey experience and data quality? Should B2B researchers join their B2C colleagues and start providing respondents with gamified, colourful, entertaining questionnaires?

The findings that we have presented suggest that surveytainment and gamification had no effect on data quality, but also did not influence perceived enjoyability and had a negative effect on perceived length of the questionnaire. But despite this, those who have experienced the new type of questionnaire would strongly prefer it in future.

The main limitation of our experiment is that we conducted the research for a real client and thus even the conventional text-only questionnaire was designed to be comprehensible, easy to complete and user-friendly. We therefore compared two well-designed questionnaires. But we have to point out that this should be the direction of further research in this area: how to improve questionnaires to be even better and more “competitive”.

The other limitation is that when evaluating the “enjoyability” of the questionnaire on 5-point scale, respondents were not given sufficient space to express their possible excitement about the colourful/gamified questionnaire. But we can interpret their strong future preference for the same type of questionnaire as an expression of “enjoyability” and expectations about future survey experience.

To conclude, we can say that we expect that as the attempts of market researchers to design more enjoyable questionnaires will be rising in B2C online research, B2B market researchers will be forced to face this trend and think more of new ways to motivate and engage B2B respondents. This experiment was one of the first attempts to find answers about the effects of surveytainment and gamification in B2B research. Still, a lot of questions remain unanswered and we can see that further research in the field of surveytainment and gamification in B2B research is necessary.

REFERENCES


FOREIGN DIRECT INVESTMENT IN RETAIL SECTOR WITH REFERENCE TO INDIA

DR. DILIP B. SHINDE

Abstract
Foreign direct investment is no longer an activity exclusively undertaken by firms from developed countries. The growth of multinational enterprises from emerging markets has begun to focus attention around the world on the role of these new players. The rise of outward investment from emerging markets has contributed to the growth in FDI globally. In 1980, global FDI outflows totaled US$52 billion; emerging markets accounted for only 6% of this figure. In 2003, India ranked sixth on the list. The Goldman Sachs Global Economics Paper of October 2003 'Dreaming with ERICS: The Path to 2050' had predicted that over the next 50 years, Brazil, Russia, India and China could become a much larger force in the world economy. India has declared that, "now it is destination India unlike China in the past." Several steps have been initiated recently to facilitate increased FDI inflows.

The inflows of Foreign Direct Investment (FDI) would depend on domestic economic conditions, world economic trends, and strategies of global investors. Government, on its part, is fully committed to creating strong economic fundamentals and an increasingly proactive Foreign Direct Investment (FDI) policy regime. Moreover, various governmental and non-governmental organization report revealed India's potentiality as a Foreign Direct Investment (FDI) destination in developing countries next to China, but performance is still very poor. The prospects of India as a Foreign Direct Investment (FDI) destination would be realized if some of its constraints could be overcome.

Keywords: Foreign Direct Investment (FDI), Retail Sector, Industrial Policy, Promotion, Trade, Commerce, Industry and small Scale Industries.

INTRODUCTION
In the era of Liberalization, Privatization and Globalization (LPG) the whole economy is opening up gradually. The Indian retail sector has also not remained untouched. India has already allowed 51 percent FDI in single-brand retail and 100 percent FDI in cash-and-carry or wholesale trading and now, there is a proposal by the Department of Industrial Policy and Promotion (DIPP) to allow 51 percent FDI in multi-brand retailing. India has 15 million-plus, retailers, who account for $350 plus billion of annual sales. The retail space is dominated by the unorganized sector that contributes to 94 percent of the sales. The retail sector is the largest sector in India after agriculture, accounting for over 10 percent of the country's GDP and around 8 percent of the employment. India has the most unorganized retail market in the world. Most retailers of the unorganized retail market have their shops in the front or at the back of their houses.

Foreign direct investment is no longer an activity exclusively undertaken by firms from developed countries. The growth of multinational enterprises from emerging markets has begun to focus attention around the world on the role of these new players. The rise of outward investment from emerging markets has contributed to the growth in FDI globally. In 1980, global FDI outflows totaled US$52 billion: emerging markets accounted for only 6% of this figure. In 2003, India ranked sixth on the list. The Goldman Sachs Global Economic Paper of

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October 2003 'Dreaming with ERICS: The Path to 2050' had predicted that over the next 50 years, Brazil, Russia, India and China could become a much longer force in the world economy. India has declared that, "now it is destination India, unlike China in the past." Several steps have been initiated recently to facilitate increased FDI inflows.

REVIEW OF LITERATURE

Findlay (1978) has postulated that FDI, through a "contagion" effect, increased the rate of technical progress in host country from the more advanced technology, management practices, etc., used by foreign firms. In addition, FDI may contribute to economic growth where the transfer of technology raised the stock of knowledge in host country through labor training and skill acquisition, new management practices and organizational arrangements. Before coming out with a statement of the problem, it is required to survey the existing recent literature on Foreign Direct Investment (FDI) to find the research gap. Jacques Morissets's (2000) survey on 29 African countries reveals that, comparative locational advantages, political stability and economic environment are the prime factors for attracting more FDI. Choudary (2001) examined the politico-economic and legal framework of FDI in China. Reasons for the increase in inflow of FDI to China have also been highlighted in the study. Markusen, James and others (2000) investigated the impact of FDI in services firms of the host country. The study proved that liberalization of policies and its impact on income and welfare of the country is positively correlated. Morisset and Lumenga (2002) examined the cross-country variations in administrative costs faced by investors by studying 32 developing countries.

OBJECTIVE OF THE STUDY

- To study the conceptual background.
- To examine the opportunities before retail sector of India.
- To Study the issues of Foreign Direct Investment.

RESEARCH METHODOLOGY

The said research study in based on secondary data. Such secondary data is collected from various reference books related to Foreign Direct Investment, Retail Sector, entrepreneurship, entrepreneurship development, trade, commerce, industry and small scale industries.

The secondary data is also collected from various websites and other related literature and reviewed it. For the said research study secondary data is also collected and reviewed from the various National and International Research Journals which are related to foreign Direct Investment, Retail Sector.

CONCEPTUAL BACKGROUND

Retail sector is playing very important role in economic development of India. Economic International flow of capital is not a new phenomenon. Foreign Direct Investment (hereafter, FDI) is generally viewed as an engine for global development and transfer of technology. In order to avail the benefits of FDI through MNCs, the developing countries, including India and China have started modifying foreign - related Trade and Investment Laws in favour of the prospective investors. Foreign Direct Investment is defined as, " an investment involving a long - term relationship and reflecting a lasting interest and control by a resident entity in one economy (foreign direct investor or parent enterprise) in an enterprise resident in an economy other than that of the foreign direct investor (foreign direct enterprise resident in an economy other than that of the foreign direct investor (foreign direct enterprise or affiliate enterprise or foreign enterprise. " FDI implies that the investor exerts a degree of influence on the management of the enterprise resident in the other economy. A Foreign direct investor may also have an effective voice in the management of another business entity by means of acquiring
other than an equity stake. For example, through franchising, licensing, turnkey arrangements, sub-contracting. FDI occurs mainly in two forms: namely, Greenfield investment and Mergers & Acquisitions. The former involves the establishment of a new enterprise. On the other hand, the latter is related to the acquisition of existing firms. Since Greenfield form of FDI is backed by many advantages, there is a tough competition among developing countries to turn more FDI to their respective countries through the green field mode.

FOREIGN DIRECT INVESTMENT: ISSUES

According to the International Monitory Fund (IMF), Foreign Direct Investment (FDI) is the category of international investment that reflects the objective of obtaining a lasting interest by a resident entity in one economy, in an enterprise resident in another economy. There is a divergence in the definition of Foreign Direct Investment (FDI) as stated by the International Monitory Fund (IMF) and used by the Reserve Bank of India (RBI) for reporting its Foreign Direct Investment (FDI) statistics. According to the Balance of Payments manual of the International Monitory Fund (IMF), Foreign Direct Investment (FDI) includes equity capital, reinvested earnings of foreign companies, inter-company debt transactions, short-term and long-term loans, financial leasing, trade credits, grants, bonds. The concepts of Foreign Direct Investment (FDI) includes the following organizational bodies:

- **Subsidiaries** (in which the non-resident investor owns more than 50%).
- **Associates** (in which the non-resident investor owns between 10 and 50%).
- **Branches** (unincorporated enterprises, wholly or jointly owned by the non-resident investor).

Statistics on FDI reported earlier by the RBI in the balance of payments included only equity capital and this tended to underestimate the quantum of FDI inflows. According to the International Finance Corporation, India’s adoption of a standard method of FDI computation would raise its net annual FDI inflows from US$ 2-3 billion to US$ 8 billion and would be 1.6 percent of its gross domestic product. The RBI has revised the FDI definition, 2000-01 onwards, to include equity capital, reinvested earnings and other direct capital. The critical role of FDI in the economic development process is widely recognized, not just as source of financial capital, but also as a tool to enhance knowledge and technology transfer and integration into global production chains. A number of studies have showed a strong link between FDI flows and export growth. However, the FDI policy has been revamped continuously to encourage foreign investments. Foreign investment is allowed freely in almost all sectors including services. In some sectors, the existing and notified sector policy permits FDI within a ceiling. Besides, virtually all items/activities can be brought in through the automatic route under powers delegated to the RBI. For the remaining activities, Government approvals are accorded on the recommendations of the Foreign Investment promotion Board (FIPB). The automatic route is available not just to the new ventures, but to existing companies as well. Foreign technology agreements have also been actively promoted by the Government, to attract the desired investment through the automatic route.

**OPPORTUNITIES**

Foreign Direct Investment (FDI) has certainly benefited the country in telecom, automobile and insurance sectors, and with large-scale investments in each of these sectors, customers are getting the best of the services and products, and the resultant competition is spurring the players to improve further. In the retail sector too, it is expected that FDI in multi-brand-retail will help in shaping up the Indian retail sector, in the following way:

1) **Employment Generation:** Large investment in infrastructure would lead to a rise in farm productivity, manufacturing and food processing as well as cold storage facilities. This would cut down wastages and spur growth in employment, exports and GDP. Retail is the
largest sector in India after agriculture, accounting for over 10 percent of the country's GDP, and employs over 4 core people. Within this, unorganized retailing accounts for 97 percent of the total retail trade. FDI in multi-brand-retail is certainly going to create employment opportunities for the youth. Setting up of retail outlets by big retailers from all over the world in different parts of the country will help in removing regional inequalities by providing avenues for the employment.

2) **Control on Inflation**: Foreign Direct Investment (FDI) would help consumers; supply rationalized prices of products to consumers and reduce of wastages across India's farms-to-fork supply chain. The Indian economy has been facing the acute problem of high inflation in recent times. The main reasons for inflation are excess supply of money or shortage of supply of goods in the market. Supply of money can be regulated by the Reserve Bank of India (RBI). It has its own mechanism to control the supply of money. Scarcity of supply of goods can either be due to less manufacturing/production, or it could be created artificially by malpractices like hoarding, etc. FDI can help in removing both types of scarcity by arranging for goods from the global markets or creating competition at the domestic level. The retailers can procure the supply directly from farmers or manufacturers, who will help in strengthening the supply chain as well as help in reducing the prices.

3) **Farmers Will Get Their Due From Their Produce**: In the Indian trading system, there are different types of intermediaries at different stages. Some of the intermediaries procure products from the farmers and sell it to artiyaas middleman, who collect, products from sell the products to different customers at different localities. In this system, at every stage whenever middlemen are involved, they get a fixed commission. Commission at each level adds to the prices of commodities. Generally, when the traders get the products from the farmers or small manufacturers, they pay very little money to them and grab the maximum part of the price, which they charge from the final customer.

4) **More Variety for The Consumers**: FDI in retail will have a far-reaching impact on the various aspects of the economy. Customers will get a wide assortment of quality goods at reasonable prices. They will be able to buy the best brands across various categories. The entry of the global retail giant like Wal-Mart, Tesco, etc. will certainly provide a large variety from one store, which will help customers. Commodities from all over the world can be collected from one store, which will help customers to save time and energy. International brands that were not available due to non accessibility by domestic retailers could easily be made available through these global players.

**SUGGESTIONS**

The following suggestions are made with the expectation of improvement in the atmosphere of Foreign Direct Investment in India.

- Allowing FDI in new sectors, going away the. Multiple approvals of government and regulatory agencies and extending automatic approvals route to some more sectors.
- There is a need of forming an autonomous non-governmental regulatory body with industry representation and facilitating agency at the state and central level to tackle post sanction hassles.
- Activity should be undertaken in investment promotional policies to fill in informational gaps.
- Flexible labor laws, fully fledged single window mechanism, entrepreneurial grievances cell, world class infrastructure, single trade union are really needed for an entrepreneur to play freely, at least in SEZs.
- Business entry and exit norms should be eased.
• Low FDI attractive states conditions should be improved with a good investment climate to make them as good FDI destinations.
• Sector caps should be removed, based on the necessity, viability and national interest.
• A few more sectors need to be opened, considering the national interest into account.
• Foreign-funded enterprises should be made compulsorily to bring Research and Development centers and management expertise and marketing skills along with capital.
• To make the existing single window system more effective and strengthen the concerned departments to leave the powers to a Single Window System.
• To maximize spillover benefits from FDI on a sustained basis and host country features in terms of human capital, technological capacity, etc., must be improved.

CONCLUSION
The inflows of Foreign Direct Investment (FDI) would depend on domestic economic conditions, world economic trends, and strategies of global investors. Government, on its part, is fully committed to creating strong economic fundamentals and an increasingly proactive Foreign Direct Investment (FDI) policy regime. Moreover, various governmental and non-governmental organizations report revealed India's potentiality as a Foreign Direct Investment (FDI) destination in developing countries next to China, but performance is still very poor. The prospects of India as a Foreign Direct Investment (FDI) destination would be realized if some of its constraints could be overcome.

In the Indian trading system, there are different types of intermediaries at different stages. FDI in multi-brand-retail is certainly going to create employment opportunities for the youth. Setting up of retail outlets by big retailers from all over the world in different parts of the country will help in removing regional inequalities by providing avenues for the employment. Commission at each level adds to the prices of commodities. Generally, when the traders get the products from the farmers or small manufacturers, they pay very little money to them and grab the maximum par of the price, which they charge from the final customer.

REFERENCES
SUPPLY CHAIN AGILITY THROUGH CLOUD COMPUTING TECHNOLOGIES
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ABSTRACT
The fast changing business environment and the intensive market competition forces firms to seek flexibility at the level of their supply chain. To accomplish this, companies invest in IT, aiming to improve their business processes and collaboration with trading partners. However, the main aim of firms is to find the best solution for flexibility, without sacrificing quality or increasing costs. This may be enabled with the use of cloud computing, which supports a pay per use model—reducing investments in equipment and software. Although it facilitates supply chain agility, by providing access to all stakeholders and enabling information sharing, it may involve constraints, such as standardization problems, security risks and integration issues with companies’ internal information systems. To examine these issues, this paper primarily aims to analyse the underlying architecture of cloud computing and its impact on supply chain management. Based on previous research, this paper proposes a conceptual framework to explain how cloud computing may affect supply chain agility. It discusses the benefits of this technology and analyses its risks and limitations. It finally suggests the testing, further development and refinement of the proposed research framework through future empirical work.

Key Words: Cloud Computing Technologies, Supply Chain Agility, Operational agility, Structural agility.

INTRODUCTION
Today’s global market competition has increased the firms’ need to find low cost solutions in information technology, in order to enhance competitive advantage via leveraging their supply chains. Hence, firms seek for IT solutions that are stable, but at the same time provide scalability, management effectiveness and ubiquitous connectivity. Fifteen years ago, all these would have been impossible, but contemporary advancements in IT enable firms to discover new market opportunities, gain competitive advantage or even become market leaders, without sacrificing service quality or operational cost and efficiency (Heisterberg and Verma, 2014; Wu et al., 2013). A key enabler of agile supply chains seems to be cloud computing, which describes (Wu et al., 2013) the delivery of on-demand computing resources, everything from applications to data centers, over the Internet on a pay-per-use basis. Using virtualization software, resources can be easily transformed to simple but vital for the firm services, such as procurement, logistics and inventory management (Lindner et al., 2010). These services are available to the service users’ by Internet based services.

There are various definitions for cloud computing throughout the bibliography; Leuker et al. (2011, p. 17) described cloud computing as “a large pool of readily accessible virtualized resources, which can be transformed and adjusted to customer needs in a variable scale, giving the opportunity to an optimum use of the provided resource. Cloud computing is a pay-for-use model which is being guaranteed by Infrastructure Provides by means of Service Level

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Agreements”. Haag et al. (2008) also defined cloud computing as a technology model, with the ability to provide all the web-based application in a pay per use and on demand resource pooling model.

Global demand and efficient supply transactions have become a priority for all firms, seeking cost savings in supply chain management. Ubiquitous Internet connectivity and access to information at any time, in any place and in any way is now a daily routine. The use of cloud computing creates benefits for both financial and operational transactions within the supply chain (Cegielski et al., 2012; Tiwari and Jain, 2013; Jun and Wei, 2011). The major advantage of cloud computing versus traditional technologies is the ability of stakeholders to flexibly transact with global partners. It seems to be a key enabler for smooth supply chain collaboration and information sharing. It also seems to eliminate compatibility issues and provides full simultaneous access to everyone in the supply chain. Hence, through cloud computing the firm achieves the flexibility and the responsiveness needed in order to face global competition (Heisterberg and Verma, 2014; Tiwari and Jain, 2013).

Previous literature examining the impact of IT on supply chain management mostly focused on traditional technologies, such as EDI and web-based inter-organisational systems (Vickery et al., 2010; Lindner et al., 2010; Kopanaki, 2008). In this paper, we aim to examine how cloud-computing technologies may support supply chain transactions and may collaborate with traditional systems used by firms (Wu et al., 2013; Jun and Wei, 2011).

This paper analyses the impact of cloud computing on supply chain management, considering cloud computing benefits, limitations and risks. It also suggests a conceptual framework examining the impact of cloud computing on supply chain agility.

CLOUD COMPUTING ARCHITECTURE

Understanding Cloud Computing Service Models

Rapid globalization of the market has led firms to seek for IT solutions that may offer ubiquitous access, mobility of their business operations and flexibility in their supply chain. All these are considered as critical success factors enabling the sustainability of the competitive advantage (Chen et al., 2013; DeGroote and Marx, 2013). They can be supported by cloud computing, which may provide access to all business network partners, regardless of their location and time zone.

Cloud computing is a service oriented architecture (Gold et al., 2004; El-Gayar and Deokar, 2013; Erol, Sauser and Boardman, 2014) that can be divided in 3 models (Leukel, Kirn and Schlegel, 2011; Heisterberg and Verma, 2014), providing different advantages according to the needs of the user. The three most commonly used service models are:

- **Software as a Service (SaaS)**: provides customer with the capability to use provider’s applications that are in the cloud-computing infrastructure. The user is not authorized to control, to install or to change the software that he is using and he does not necessarily own the hardware (etc. servers, network, storage) on which the application is running. It is, mostly, a pay-per-use model and the user often has limited access to change some application settings. The main advantage of SaaS is that it offers mobility, namely applications and information could be accessed over the Internet in any place and at any time. Examples of SaaS models are Salesforce.com for CRM use and Intacct.com for ERP use.

- **Platform as a Service (PaaS)**: provides the user all the needed, tools (software and hardware) in order to develop applications and hosting environment interfaces. PaaS is frequently being used by developers who control the deployed applications, but do not manage or control the hardware (servers, storage, network). PaaS is, also, a pay-per-use model, which relies on provider’s infrastructure. It combines the benefits of SaaS with the customized...
applications that are needed at the exact time or the exact firm (for example PaaS is extremely useful where there is sales information that needs to be analyzed and combined with order forecasts). Examples of PaaS are Google App Engine and Windows Azure Cloud Services.

- Infrastructure as a Service (IaaS): provides customer virtualized computing resources, which are being used by provider to host Internet applications. IaaS models offer scalable resources that are necessary to unexpected change of demand. IaaS is a pay-per-use model and the customer could control operating systems, storage and network, but could not affect cloud infrastructure. IaaS makes sense where demand is volatile (for example at Christmas, where SC is “expanded” in order to fulfill the increased number of customers, there is need for more HW power which is not being used on a daily basis). Leading IaaS providers include Amazon Web Services (AWS), Rackspace Open Cloud, and IBM SmartCloud Enterprise.

The main advantage of cloud computing is the scalability it offers to firms which look for low investment infrastructure and move from traditional capital expenditure (capex) to optimized operational expenditure (opex) (Heisterberg & Verma, 2014; Leukel, Kirn, & Schlegel, 2011). As demand from internal users (stakeholders) and external (customers) is continually changing the necessary “computer power” can be added or subtracted on even an hourly pay-for-use basis.

**Cloud Computing Deployment Models**

Cloud computing offers various deployment models, which meet the IT needs of the firm. Therefore, it can be divided or combined to one of the below user/deployment models (Heisterberg and Verma, 2014; Goyal, 2010).

- **Private cloud**: It is addressed to the firms that have a well-established IT infrastructure and need autonomy and freedom using the components of cloud computing. It can exist in or out of the firm and can be managed by a third-party provider. Private cloud is used by a single organization and ensures that it is isolated from others, namely all the stakeholders of the firm who could have access to all the information.

- **Public cloud**: is a solution suitable for the firms that have no interest in expanding their IT infrastructure or a start-up business that can use the resources to quickly start the business ideas.

- **Community cloud**: addresses a community of firms that share the same concerns regarding security requirements, policy and mission. It is not being used widely and by 2017 (Gartner 2015) will be “extinguished”.

- **Hybrid cloud**: refers to the coordinated use of private cloud using the boundaries of public. It combines private and public cloud giving the opportunity to a firm that already has an IT infrastructure but it does not want to invest money in order to expand its IT infrastructure. This way, it is more effective to test ideas or new business opportunities. Hybrid cloud can be used by a network of companies that already collaborate to exchange information and products using the benefits of public and private cloud computing.

Based on Gartner (2015) survey, private cloud and public cloud models are most popular today and by 2017 most of the firms that are taking part in the supply chain will choose hybrid cloud for their services. Considering the above, we could conclude that cloud computing offers mobile interactivity, huge scalability and diversification of structure depending on the needs of the firm. Therefore, it is obvious that it offers supply chain information collaboration between stakeholders of the supply chain. Supply chain partners can monitor supply chain operations through cloud computing software and make adjustments if it is needed.
SUPPLY CHAIN AGILITY

Nowadays, companies focus on supply chain management and on supply chain information sharing. Hence, firms seek to achieve agility in their supply chain in order to maintain competitive advantage in a volatile business environment. Supply chain agility is the ability of the firm to sense and timely respond to market changes (Swafford et al., 2008).

Agility in the supply chain seems to be a core competence of supply chain management both at an operational and structural level (Kopanaki, 2013). Operational agility is defined as the ability of the supply chain to quickly respond to changing environment and customer needs. It is, also, defined as the ability of the supply chain to successfully face changes in demand or supply, using current operations or improving current activities. For example, inventory management could be enhanced based on in time information about fast changing environment. Demand forecast could be more precise by interacting and exchanging information with business partners (suppliers, distributors, retailers). In today’s economy, forecasting, demand management, supply planning, namely the operational level of supply chain, has become increasingly important to achieve competitive advantage. Thus, the agility of the operational level of the supply chain is imperative to face the volatile business environment.

Besides the operational flexibility of the supply chain, structural agility is also a critical factor for supply chain management. The structural level of the supply chain management is related to all aspects of the business network (such as suppliers, partners, manufacturers) and the relationships between them. It refers to the ability to add new allies, to bring expertise together in order to reduce costs, to gain a wider distribution access and increase market share. It can be better achieved if the firm is prepared for changes without high expenditures for investments in specialized resources.

However, it should be noted that the above types of supply chain agility are interconnected with each other. Operational agility may sometimes require structural changes, while structural agility may also involve flexibility at an operational level.

OPPORTUNITIES AND RISKS OF CLOUD COMPUTING IN SCM

As businesses strive for efficiency and effectiveness demanding low cost expenditures, they develop or adapt technologies to fill their needs. Previous studies have showed that cloud computing technologies can make a major contribution to supply chain agility, such that supply chain partners can use them to enhance information sharing, support collaboration and facilitate decision-making in today’s volatile business environment (Fiala, 2005; Heisterberg and Verma, 2014). Cloud computing services have become a popular method of connecting business processes across the supply chain, thereby supporting transactions and enhancing their efficiency. This capability of the cloud enables ubiquitous access from any platform, at any time, from any place to all stakeholders. Supply chain partners are able to connect to platforms that can provide real time visibility of inventory levels, transportation processes and shipment tracking.

Inventory management can be further improved by organizations that are using RFID technology to better manage deliveries and share product information globally with cloud based systems (Leukel, Kim and Schlegel, 2011; Tiwari and Jain, 2013; Tokman et al., 2013). The service levels are being improved due to the collaboration of all supply chain partners (suppliers, distributors, retailers). The cloud services are using information that is updated and provide more accurate demand forecast that lead in avoiding bad inventory.

Previous research supports that cloud computing can help to transform fixed costs into variable due to the outsourcing of computing resources which are elastic and may change day by day (Tiwari and Jain, 2013; Heisterberg and Verma, 2014). In addition, it allows users to scale services and services costs, which leads in business flexibility through the ability of pay-per-use cloud computing model. One of the major benefits is the transformation of supply chain
systems into dynamic business networks able to focus on market opportunities and market
trends.

Research suggests that cloud computing is arguably one of the major advantages in the
history of computing. Cloud technology provides scalability and high configurability to meet
organizational needs and demands (Heisterberg and Verma, 2014; Aljabre, 2012; Azevedo,
Prata and Fazendeiro, 2013;). Amazon, Google and eBay have broken the firms’ mentality of
having the entire IT infrastructure in their premises. Cloud has led to a revolution in supply
chain industry through low cost investments by firms but without sacrificing efficiency and
effectiveness.

Even though cloud-computing systems provide cheaper and more efficient supply chain
transactions, they still involve constraints. One of the major risks that cloud creates is security
and data confidentiality (Heisterberg and Verma, 2014; Wu et al., 2013). Many companies still
use internal data storages, for example banks, to hold in their premises sensitive information
about their customers and also their inventories. It is argued that if supply chain partners use
the same technology (in this case cloud computing) they are locked-in and it is very difficult to
find alternatives or to change cloud-computing providers. The use of the exact same technology
may also lead to erosion of competitive differentiation. These limitations create issues of
uncertainty for the use of cloud computing, but there are still unclear and warrant further
investigation.

IMPACT OF THE CLOUD ON SUPPLY CHAIN AGILITY

In today’s volatile environment, flexibility is a key factor that drives firms to achieve
sustainability. One of the greatest advantages of cloud computing is that it generates
accessibility and visibility to all stakeholders and provides agility to supply chain management.
Agility is a great advantage that cloud computing could provide to a complex supply chain
(Cegielski et al., 2012). As shown in the conceptual framework in figure 1, cloud computing
gives the opportunity to organizations to improve the agility of their supply chain while
reducing the infrastructure’s investment cost (Goyal, 2010; Fiala, 2005; Heisterberg and
Verma, 2014; Jun and Wei, 2011; Leukel, Kirn and Schlegel, 2011). However, cloud
computing could be a disabler (as shown in figure 1) of supply chain agility and there are some
features that firms have to take care of in order to achieve agile supply chain.

Cloud computing directly and indirectly impacts on supply chain agility not only by
improving the collaboration between the supply chain’s partners (which is the most obvious
impact) but also by enhancing the focus on the core competencies of the firm.

Figure 1: Conceptual Framework
Analysing the concept of cloud computing we can divide its impact on supply chain agility based on its essential capabilities. These capabilities are:

1. Information Sharing: capabilities and information are available over the network in real time and can be accessed by the stakeholders. This capability shares the information all over the firm and it gives the opportunity to the stakeholders to take business strategy decisions based on real time information. Inventory management could be more precise because all the knowledge about the internal and external environment is available in real time.

2. Resource on demand: customer demands change at any time. In order to fulfill this demand, service providers of cloud computing pool their resources. Customers use computing resources without any knowledge about the resource location and without any delay in the fulfillment of the request.
   a. Scalability: it means that the customers can add or release cloud-computing resources such as servers, storage, network and applications. When more users are in need of the server, more calls are being bought. To the end customer, the capability of rapidly scaling in or scaling out appears to be unlimited and can be purchased in any time. For example, it is easier to add new partners in supply chain depending on the demand and at the same time you can release them without increasing the capital costs. With the cloud computing technologies, firms can adjust their computing power depending on their needs.

3. Geographic distribution: enables integration and creates a secure network between the firms’ departments, which most of the times are not located in the same place or even in the same country. Cloud computing offers immediate access from all the departments to all the supply chain’s information that is needed in order to proceed with decision-making. Logistics could be coordinated and monitored giving the opportunity for reduced annual freight costs for companies.

4. Smart collaboration with traditional EDI: cloud systems transact smoothly with the EDI that the firm already uses. Cloud computing systems have a broader impact on traditional EDI leading to optimizing the collaboration between the two of them. Cloud computing is an adaptive structure that shares a variety of solutions.

On the other hand, we have to further analyze the capabilities that create obstacles in achieving supply chain agility, and a firm has to overcome them.

1. Compatibility: the problem occurs when a firm needs to replace much of the existing IT infrastructure in order to make it compatible with the cloud. By the end of the day, using cloud computing it is more cost efficient but it is often associated with dysfunctionality issues.

2. Integration Standards: there are issues for integrating data to cloud because most of the companies are used to controlling the data sources that they are integrating. As there is lack of integration standards in cloud computing it is impossible for a firm to ensure the quality of its services.

3. Use of different Cloud based systems: it is not yet examined thoroughly how different providers of cloud computing could cooperate and collaborate with each other due to the different protocols that they are using.

However, these capabilities and the use of cloud computing are highly dependent on applications and other factors such as legislation, governance, politics, application architecture and operations needs. We argue that cloud computing is a technology that provides access to all the organization’s stakeholders and supports a variety of applications that a traditional IT infrastructure would be unable to or would have needed huge investment in order to achieve the capabilities of cloud computing as a pay-per-use model (Fiala, 2005). This is the core
competence of cloud computing which provides supply chain flexibility based on IT infrastructure flexibility.

CONCLUSION

This paper discussed how cloud computing can actually take several roles within the supply chain leading in flexibility. It argued, that cloud services’ capabilities fulfil basic needs of supply chain providing fast information sharing, scalability and collaboration with the traditional IT infrastructure. Cloud computing, also, allows users to access any company information at any time, in any platform using just a web browsing enabling mobility but without sacrificing service quality or capital expenditure (Leukel, Kirn and Schlegel, 2011; Tiwari and Jain, 2013; Heisterberg and Verma, 2014). Any firm can use one of the 4 service models (public, private, hybrid, community cloud service) depending on its needs. Cloud computing is a pay-per-use model whose infrastructure (SaaS, PaaS, IaaS) enhances companies’ service levels enabling collaboration with business partners. The major advantage of cloud computing versus traditional IT-based systems is the elimination of in-house IT staff and support. Using cloud services is easier and costless, allowing businesses to transact more flexibility with business partners all over the world.

However, as this paper showed cloud computing is still associated with constraints. It creates concerns about the security of business data and it carries the risk of a company being locked-in to a specific service provider or solution. Therefore, the final decision of the firm to invest or not in cloud computing needs to be further investigated.

This paper argued that cloud computing offers a tremendous number of advantages in supply chain, but not without risks. It analysed cloud computing infrastructure, cloud service models and the impact of them in supply chain flexibility. To discuss these, it presented an initial conceptual framework, which will be further developed and examined through future empirical work.

ACKNOWLEDGEMENT

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EXPLORING SOCIAL MEDIA MARKETING: A CASE STUDY OF ART ORGANISATIONS
PIM SOONSAWAD

ABSTRACT
Social media marketing has undergone massive growth in the number of users over the past few years. Social media marketing provides information, advertising, and marketing. Prior research has affirmed the significance of social media marketing in various industries, yet little research has investigated social media marketing techniques that affect performance. The purpose of this paper is to explore social media marketing techniques that would provide support for sales or the size of audiences in the arts. The paper describes art organisations including art museums and art galleries. The research surveyed 38 owners or marketing directors in the United Kingdom, Hong Kong, and Thailand. The result demonstrates that art organisations have already tended to apply Facebook and Twitter to their marketing strategies. This paper proposes an interactive AIDAM model of social media marketing for art. The paper also illustrates metrics for social media marketing effectiveness. Finally, the paper presents guidance for applying social media marketing in art organisations.

Key Words: Social media marketing, Art organisations, A case study

INTRODUCTION
Indicating a new version of the World Wide Web after the dot-com bubble burst in 2001, Web 2.0 brought an unprecedented change in the online users’ behaviour (Chan and Guillet, 2011). In Web 2.0, websites are collaborative, dynamic and interactive, and users are actively participating in enrichment of content (Adebanjo and Michaelides, 2010; Kaplan and Haenlein, 2010). Accordingly, companies worldwide use a popular new tool called social media (Hogan, 2010). Social media marketing holds great promise for many nonprofit arts organisations (Arnold and Tapp, 2001). Art museums have relied heavily on benefactors for donations of works of art. Recently, these donations have declined (quickly) as a result of the changing tax laws (Blattberg and Broderick, 1991). Therefore, museums must reevaluate their marketing strategy. For support, museums and art galleries increasingly have to compete for funds and provide evidence of their own attempts to attract visitors and, hopefully, donations (Todd and Lawson, 2001). Clearly, goal-oriented museums focus on the number of visitors, while the objective of most art galleries is based on sales (Baker et al., 1998).

The purpose of this paper is to explore social media marketing techniques that would provide support for sales or audience size in the arts. To achieve this research goal, the relevant literature on the topic of social media marketing and art organisations will be described. Also, the study will present the consumer decision process model. Case studies of art organisations are also shown. The paper will be rounded off by a short discussion of the results; additionally, a number of managerial implications and future research directions will be discussed.

LITERATURE REVIEW
Social Media Marketing and Art Organisations
Social media reached a penetration of 70.2, 74.6, and 60.6% in the United States, Europe, and Asia-Pacific, respectively, in 2008 as a percentage of the total number of Internet users.
Social media marketing presents to consumer-generated media “a variety of new sources of online information that are created, initiated, circulated and used by consumers intent on educating each other about products, brands, services, personalities, and issues” (Blackshaw and Nazzaro, 2004). Social media marketing is perceived by consumers as a more trustworthy source of information concerning products and services than corporate-sponsored communications transmitted via traditional media (Foux, 2006). Social media marketing techniques help to increase content quality (Chen and Wang, 2011) and speed of outreach and maintain loyal customers more effectively than traditional media. Bickart and Schindler (2001) indicate that social media provides an unparalleled platform for consumers to publicise their personal evaluations of purchased products and thus facilitate word-of-mouth communication. Obviously, social media encompasses a wide range of online sites, word-of-mouth forums including blogs, company-sponsored discussion boards and chat rooms, consumer-to-consumer e-mail, consumer product or service ratings websites and forums, Internet discussion boards and forums, moblogs (sites containing digital audio, images, movies, or photographs), and social networking websites (Mangold and Fauld, 2009).

Social media has become a buzzword in arts organisations. Social media marketing connects users with similar interests who make fully customisable profiles displaying their identity and then share these with friends or fans. Social media marketing is particularly helpful for performing arts organisations. The most used social network, Facebook, also integrates other applications. This helps to make marketing in the arts through social media cost-effective (Hausmann and Poellmann, 2013). To support sales or audience growth in the arts, social media platforms have challenged basic assumptions concerning the purchasing process. Hudson and Thal (2013) studied the impact of social media on consumer decision-making processes in the tourism industry. Social media is a platform for consumers to publicise their personal evaluations of purchased products (Chen et.al, 2011). Obviously, social media marketing has become a main factor in influencing various aspects of the consumer decision process.

**Consumer Decision-Making Process**

Lately, an increasing number of marketing scholars have examined the implications of online consumer product reviews (Chen, Wang and Xie 2011; Chen and Xie, 2008) and the usefulness of online consumer product reviews for consumer decision-making (Sen and Lerman, 2007; Smith, Menom and Sivakumar, 2005). Social media marketing has become a main factor influencing various aspects of the consumer decision process, including awareness, information acquisition, attitudes, purchase behaviour, and post-purchase communication and evaluation. The consumer decision-making model is composed of four stages: (1) consider; (2) evaluate; (3) buy; and (4) enjoy, advocate and bond. Social media makes the “evaluate” and “advocate” stages increasingly relevant (Court et.al, 2009). This study will examine five steps in the consumer decision-making process model: 1) need recognition; 2) information search; 3) alternative evaluation; 4) purchase; 5) post-purchase evaluation (Kotler and Armstrong, 2012).

The process starts with the stimulation of a need where the consumer is faced with an imbalance between the actual and desired states of need. After that, the consumer searches for information about the various alternatives available to satisfy the need. The consumer’s information search will ultimately yield a set of preferred alternatives. The consumer evaluates and compares alternatives. Purchases are made based on the chosen alternative. Post-purchase evaluation is carried out with a view to aiding future decision-making. Good experience with a brand will provide information that may lead the customer to that brand when a similar product is to be purchased. Dissatisfaction may result in post-purchase dissonance. In other words, the message should gain Attention, hold Interest, arouse Desire, and elicit Action, a model known as AIDA (Lin and Huang, 2006). In practice, few messages take the consumer all the way from
awareness through to purchase. Nevertheless, the AIDA framework proposes desirable qualities for any communication (Kotler, 2010).

Based on the consumer purchase decision-making process, there are five factors that may affect consumer intentions to shop online or offline: channel-risk perceptions, price-search intentions, search effort, evaluation effort, and delivery time (Gupta et al, 2004). Peterson and Balasubramanian (1997) compared the Internet to conventional retail and catalogue distribution channels on dimensions of product features and kinds of consumer decision-making processes. Rangaswamy (1997) shows findings on how consumer choice in electronic settings differs from traditional in-store choices. Beatty and Smith (1987) showed that search effort is related positively to purchase involvement, time availability and attitudes towards shopping. Obviously, social media techniques such as discussion boards influence a customer’s adoption and use of products and services (Subramani and Rajagopalan, 2003).

RESEARCH METHODOLOGY

This study selects the case study approach. The research surveys 38 owners/marketing directors of art organisations among three countries: the United Kingdom, Hong Kong, and Thailand. The sample was representative of members of art organisations among three regions. The author surveyed 10 art directors of art museums that are members of the Art Marketing Association in the United Kingdom: Tate, Mima, Barbican, etc. The author surveyed 18 owners of art galleries who are members of the Hong Kong Art Gallery Association. Further, the author surveyed 10 owners of art galleries in Thailand, such as Number 1 Gallery, Koi Art Gallery, Akko Gallery, etc. The questionnaire is based on the AIDA model and social media marketing techniques. Careful analysis of holistic messages confirms the effect of the social media marketing techniques on the AIDA model.

RESULTS AND DISCUSSIONS

This study proposes social media marketing techniques for art organisations that would support sales and a higher number of visitors. The research presented here suggests that art organisations should concentrate on implementing social media marketing techniques. The research demonstrates that art organisations, both museums and art galleries, have already tended to use Facebook and Twitter. However, other social media techniques are also popular in different countries. For example, YouTube is ranked the number three most popular social media marketing technique among art organisations in the United Kingdom. Ranking number four and five in popularity of social media marketing techniques used by art organisations in the United Kingdom are Pinterest and blogs respectively.

As Figure 1 identifies, the model of social media marketing for art is called “Interactive AIDAM”, which is social media marketing effects in consumer decision-making process. The goal of this model is to identify maximum sales or audience numbers. Horizontal axis and vertical axis present consumer decision-making process and the level of customer engagement of each customer. Horizontal axis stands for awareness, interest, desire, action, and maintain respectively. Vertical axis illustrates the levels of customer engagement have been shown to be: 1) visitor; 2) potential customer; 3) engaged customer; 4) highly engaged customer; 5) new customer; and 6) loyal customer.

Awareness step relates to visitor or potential customer. The organization creates awareness for customer to perceive about artwork products such as Facebook fanpage or blog. Interest step presents to higher level of customer engagement than visitor that called engaged customer. The organization needs to urge target audience from visitor or potential customer become engaged customer. Desire step indicates highly engaged customer. This step should explain about source and detail of artwork in order to urge emotion of engaged customer to become highly engaged customer. Action step relates to new customer. This step shows that
customer purchases artwork from the art gallery or customer becomes a membership of museum. Maintain step identifies to creating loyal customers. The loyal customer revisits or repurchases social media of art organisations, and also shares the artwork of organisations to friends. Marketing directors of art organisations should develop visitors to become new customer and then loyal customer. Then, art organisations can expect to receive continuing revenue from such customers.

Once social media marketing techniques apply the “Interactive AIDAM” model, each step in the customer decision-making process can be back and forth. Also, the starting step of customer decision-making process does not require starting at awareness step. The first step of the process can be interest or desire or maintain step. The research shows three empirical cases of this model. Case A: The customer reads good reviews of a close friend’s experience with an online purchase of the artwork, so the starting step of AIDAM could be the desire step. The awareness and interest steps are skipped. On the other hand, if a customer reads negative reviews of a close friend’s experience in an online purchase of the artwork, the starting step of AIDAM is awareness of negative perceptions. As the result, a customer would not interest to buy this artwork. As Case B: a customer follows and shares Facebook fanpage art gallery to his/her friends, the customer’s friends sees the fine artwork on their own news feed. They are quite interested in artwork then they click “like” to that facebook fanpage art gallery. As a result, they continually receive information about the artwork and art gallery event or activities. Finally, they buy the artwork from this art gallery. Thus, the starting step of AIDAM in this situation is interest step, then it is desire and action step respectively. The awareness step is skipped. As Case C: The starting point of consumer decision-making process is desire stage. A customer intends to buy this artwork since a customer like the art piece. Nevertheless, a customer gets a positive comment about other artwork of previous customer in new feeds. Accordingly, a customer believes it and wants to buy this new artwork. As can be seen, from desire step in one artwork is changed to be desire step in another artwork as quickly.

Figure 1: Interactive AIDAM
The results of this study indicate that most art organisations are applying social media marketing as a promotional mixing of tools. A few art organisations apply social media marketing with e-commerce. The study illustrates that the Interactive AIDAM model needs to be applied with efficient social media marketing tools. As the result, it will lead to higher sales and/or increasing number of visitors. In support, the effectiveness metrics of social media marketing are noteworthy. Art organisations can apply any social media marketing techniques and social media measurement in each step of the consumer decision-making process.

The first step in the consumer decision process is Awareness. Art organisations may use Facebook to promote its brand to visitor or potential customer. Facebook metrics employ the number of visits and number of shares.

Secondly, Facebook and Twitter may apply to the Interest step. Facebook metrics employ the number of “likes” of friends’ feeds. Twitter metrics indicate the number of accounts followed and followers.

Thirdly, the Desire step may identify items using Facebook and blogs. Facebook metrics in this step present the number of visitors with comments that can be both positive and negative. Blogs indicate the number of user-generated items (i.e. replies). Consumers feel more engaged with products and organisations when they are able to submit feedback (Mangold and Faulds, 2009). For instance, Toyota facilitates its customers’ provision feedback on a broad range of issues via its “Open Road Blog” (Toyota, 2008).

The fourth step, Action, uses Facebook and websites. The Facebook metric is based on the number of registrations of an event. The website metric identifies the number of purchases. Maintain is the last step in the consumer decision process. Art organisations may apply Facebook and YouTube. The Facebook metric indicates number of reposts or shares as well as the number of responses to friend referral invites. And the YouTube metric specifies the number of reposts or shares.

In summary, art organisations apply social media techniques since it diminishes time spent in communication with the customers versus traditional media. Visitor can quickly become new customer and loyal customer. On the other hand, loyal customer can rapidly become potential customer. Besides, social media techniques are measurable.

CONCLUSIONS

Art organisations are likely to have differential effects on sales or audience size in the arts, depending on the social media marketing technique that they employ for their target audience. The paper proposes the interactive AIDAM model – Awareness, Interest, Desire, Action, and Maintain which is dynamic. The model is beneficial for top management, or the marketing director of an art organisations in adapting social media marketing tools to customer decision-making process. The model supports sales and/or audience size; it proposes faster time in communicating with the target audience. In addition, the interactive AIDAM model accelerates the customer decision-making process versus applying traditional media techniques. The visitor rapidly becomes new customer and loyal customer.

For managerial implementation, the art organisations should realize about notability of artist and message or content that communicate to customer especially creating step of desire, action and maintain. Likewise, the art organisations should propose the story and value of artwork, including regular updates for the awareness step in AIDAM. The study demonstrates that art galleries/museums also can maintain their audience by using social media marketing techniques such as Facebook, Twitter, and YouTube to communicate their artworks and activities such as exhibitions and artwork promotion. Besides, art organisations should send the right art pieces to the right customer in order to maintain customer interest. This study recommends future research to explore a quantitative survey of how each social media
marketing tool affects the consumer decision-making process model. Also, future research could examine the effect of different cultural regions on the consumer decision-making process via online purchases.

REFERENCES


VOCATIONAL EDUCATION AS A PANACEA FOR REDUCING UNEMPLOYMENT IN NIGERIA: LAGOS PERSPECTIVE

ATUGHONU VICTORIA¹ AND ODUWOLE ABIODUN

ABSTRACT

The correlation between employment generation and Socio-economic wellbeing of her citizens is so significant that almost all nations in the world over take the issue of employment generation as atop priority in their agenda. This paper therefore, is written to explore the role of Vocational Education as a strategy for reducing unemployment Nigeria especially in Lagos State. The research elicits data from both primary and secondary sources. The hat analyzed using table and chi-square statistical tool. The paper concluded that, by putting the mechanism in place. Vocational Education will play a pivotal role in the socio-economic advancement in Nigeria. Thus recommends that; government at all levels should encourage both employers and employees in Vocational sector through funding and infrastructural facilities should be provided to reduce cost of doing business in Nigeria.

INTRODUCTION

Over the past years, Scholars have asked whether vocational education should really be seen as a marginalized sector, which mops up excess or entrenched workers or as a vibrant, entrepreneurial part of the Nigeria economy which can stimulate economic growth and job creation (African Union, 2008). It should be noted that around the world, about two-thirds of all employers works stand as vocational work (World Bank, 2009). In spite of this, there has been a persistent increase in the rate of unemployment oh over the world, particularly in Lagos Nigeria. Unemployment occurs when a person who is actively searching for employment is unable to find work. It is a state of not having jobs. Unemployment is one of the developmental problems that face every developing economy in the 21st century. This has become a global concern and more direct consequences on the youth who would have been the next generation of potentially productive economic and social sectors. International statistics portray that industrial and service workers living in developing regions account for about two-thirds of the unemployed, and global youth unemployment rate ‘a as projected at 15.7% (UNESCO, 2006).

The International Labour Organization indicated that 45 per cent of jobless people worldwide were young. However, government was insensitive to the plight of youths, who spend their youthful years and vigor going in search of non-existent jobs ILO. Despite the fact that Nigeria is Africa most populous country, unemployment rate in Nigeria for the ear 2011 stood at 25.9 per cent with youth unemployment rate at over 45 percent. In comparison to other Africa countries, unemployment rate in South Africa increased to 30.20% in the first quarter of 2013 from 27.90% in the fourth quarter of 2013. Kenya unemployment rate reached an all time high of 50.010 in December of 2012. Benin Republic, Nigeria’s close neighbor has an unemployment rate of 22% in 2011 (National Bureau of Statistic, 2013). In Nigeria, unemployment has become a threat to political, socio-economic fortunes vis-a-vis peace and stability. World Bank survey in 2010 showed that 40% of those who join bad gang and miscreants in the society say they are motivated by alack of jobs, and 50% of those who are involved in one form of criminality or the other are also motivated by lack of jobs. The dreadful state of unemployment in Nigeria is well known to all Nigerians with its excruciating and biting presence in their lives. With current unemployment rate at 25.9 per cent and unemployed youth population put at 22.5 million. Nigeria generated about 3.5 million new entrants into the labour market yearly 3.2 million primary school leavers not proceeding to secondary school, one million secondary school leavers not proceeding to the tertiary level and 500,000 graduates finding no placement anywhere for

¹ Business Education Department, Adeniran Ogunsanya College Of Education, Otto/Ijanikin, Lagos – Nigeria
productivity, and yearly graduate turnover at over 600,000 (Federal Office of Statistic, 2011). Government at various levels has introduced various policies and programme aimed at reducing this menace but to no avail. However, vocational education contribution to economic development in the area of job creation has helped to ameliorate the unemployment saga (Donald and Stephen, 2010), as most of them operate the traditional method of production and services. Thus, workers in vocational education characterized by unstable and less income earned, and this leads to little or no access to basic protection and services.

Available statistics in Nigeria indicates that the vocational contributes about -15 per cent of the nation’s Gross Domestic Product (GDP). Like many other developing countries, the sector is considered crucial to job creation as it accounts for about 70 percent of jobs in the country. In Ghana, the sector generates 60 per cent of employment and contributes about 28 per cent to the nation’s Gross Domestic Product (GDP) (Federal Office of Statistic, 2012). The foregoing therefore, points to the fact that the vocational education given the needed support and regulatory framework could be a major player in the combat against unemployment saga in Nigeria particularly, Lagos state.

The vocational education is neither static nor well organized but contributes greatly to economic growth. The activities are considered purely as vocational (Business Education) are: business centers, sale and processing, entrepreneur skills technical skills. Small manufacturing, production, construction and repair of goods (World Bank, 2010, p. 32-33). Others includes Artisans, Hair dressing, furniture entertainment industry, educational services etc.

In recent time, there has been a tremendous increase in the population of people in the vocational field within the major cities of Lagos State. According to national bureau for statistic, the number of people involved in vocational in Lagos State was 4.5million in 2009 and 6.2million in 2010 respectively (National Bureau of statistic 2010). This has been largely due to the privatization of the public sector as rise in the unemployment rate especially among the youth, and this has resulted to increase in the commercial activities among the major places in the State. The vocational in Lagos State may be categorized into the following section: (i) Productive. (ii) Service.

1. **Productive section:** This section encompasses all economic activities involving the production of tangible goods. They include agricultural production, mining and quarrying (excluding petroleum), small-scale manufacturing, building and construction.

2. **Services section** especially in the rural areas, include traditional birth attendants, herbalists and other traditional medical practitioners. There are also traditional spiritualists who offer counseling services. These services are rendered for fees paid to those who render them. However, this work will be useful to both private and Government in policymaking and execution targeted at reducing unemployment in Nigeria.

**STATEMENT OF THE PROBLEM**

There has been a general outcry on the persistent rise in the unemployment rate in Nigeria.

This has led an army of angry and desperate unemployed youths prowling cities and the unending influx of youth into the urban areas which has now posed further threat to an already precarious state of national security Hernando [6]. The unemployment situation has denied its victims their legitimate means of livelihood, and in order to survive, they now involved in all forms of criminality which threaten the peace of the society. The vocational education which ought to be a saving grace for the unemployed has continued to suffer societal neglect, vocational education facilities, access to the business friend credits, unfair competition through dumping of manufactured goods from ‘more industrialized countries, inadequate infrastructure, lack of representation and participation in decision-making processes resulting in unworkable, corruption prone public policies and programmes that have failed significantly to solve the problems in the vocational education. It is against this background that this research is being carried out.

The major objective of this research is to examine the role of the vocational education in employment provision and generation and its function as a buffer between employment and unemployment.
HYPOTHESES

The research will test the following hypotheses:

**Ho:** The vocational education in Nigeria is not a threat to the Socio-economic fortune of Lagos state.

**Hi:** The vocational education in Nigeria is a threat to the Socio-economic fortune of Lagos state.

**Ho:** Vocational education activities do not significantly increase unemployment in Lagos State.

**Hi:** Vocational education activities have significantly increase unemployment in Lagos State.

REVIEW OF RELEVANT LITERATURE

Unemployment

The term unemployment denotes a condition of joblessness or lack of employment. In other words, anyone who is fit and available to work but fails to get one may be considered as being unemployed for the concerned period (Olubukola, 2013). In the work of Arosanyin et al. (2011), unemployment and poverty are two of the challenges facing the Nigerian economy. Most urban, semi and unskilled labour have found solace in vocational education. Akintoye (2008) noted that, in 2003 Nigerian’s unemployment rate declined substantially to 2.3 percent. This decline x as attributed to the various government efforts aimed at addressing the problem through poverty alleviation programmes. He further noted that the decline also pointed to an increased number of people who engaged in the vocational activities. Akintoye (2008) observed that unemployment as one of the macroeconomic problems could be reduced through the vocational education participation provided it is well supported and managed. Moreover, Olubukola (2013) stated that the rapid rise in the country’s unemployment rate has become a major source of concern. Several school leavers and employable adults are either finding it difficult to secure employment or are laid off work for one reason or the other. Also, Sanda et al. (2006) used a sample of 360 firms in Kano and its environs to examine whether or not, large firms were better than small firms at creation of employment opportunities. Their results were positive in that small firms were found to be relatively better, and the conclusion they derived was that a policy that gives special preference to small firms is justified. Fajana (2000) also opined that unemployment can lead to the following: loss of status, loss of prestige and economic strength or poor as a result of the loss of wages and benefits of job, infliction of psychological; injury as a result of the breakdown in social contacts and isolation from the world of work, loss of responsibility, identity and respect which the position at work ensures, loss of purchasing power, loss of union check off dues, loss of production and stunting of gross national product etc. Iwayemi (2013) argued that, the challenges to sustainable youth employment are multi-dimensional. They encompass economic, social, political and cultural issues which include weak economic, political and social institutions, accountability and transparency in governance, high cost of governance reducing available resources to support job-creation opportunities for young people at Federal and State level, jobless economic growth etc. Generally speaking, the contributions of vocational education to the development of the Nigerian economy cannot be over emphasized. Since the beginning of 1980s, the economic position of Nigeria has worsened seriously. The per-capita income fall considerably and wage employment has declined NISER Report (2007). One of the major social problems facing Nigeria youth is the high level of unemployment among youths. The youth has the highest unemployment rate in Nigeria, in the range of 40-60% among this age between 15 and 25 years. Youth unemployment denied them of their legitimate livelihood which resulted to visible idleness. This is referred to the gathering of youth in the bars and restaurants to drink and smoke, and at the end nurse a culture that encourages criminal behavior (Akande and Okuwa, 2009).

Concept of Vocational Education

Vocational Education is any form of education whose main objective or purpose is to prepare person for gainful employment in recognized occupations self employment. Vocational education provides necessary skills, knowledge and the attitudes for an effective employment in a specific occupation. Hence vocational education is an action based programme with an ultimate goal of preparing individual for employment in relevant and recognized occupation (Keshinro, 2005). According to
UNESCO and ILO (2002), vocational education is seen as that form of education involving in addition to general education, the study of technologies and related sciences and the acquisition of practical skills, attitudes, understanding and knowledge relation to occupations in various sectors of economy and social life.

**Government Effort in Reducing Unemployment in Nigeria**

The Nigerian government, at various levels, has adopted policies aimed at enhancing the performance of the vocational education in order to reduce unemployment. As a result, different administrations, often in collaboration with the private sector, have embarked on youth employment programmes, leading to the establishment of the National Economic Empowerment and Development Strategy (NNEDS). National Directorate of Employment (NDE), Small and Medium Enterprises Development Agencies (SMEDAN), the poverty alleviation programme, the Subsidy Reinvestment and Empowerment Programme (SURE-P), and the Youth Enterprise With Innovation in Nigeria (YOUWIN).

Better Life Programme, Peoples’ Bank, National Agency for Poverty Eradication, (NAPEP), the National open apprenticeship scheme, the graduate job creation loan Guarantee Scheme and Agricultural sector Employment program. Despite these policies and programmes, youth unemployment empowerment remains a major challenge to the developmental process of the Nigeria economy (Salami, 2013).

**Study Area**

The study area for this work shall be Lagos State. Using three major local government and this are Alimosho, Ojo and Badagry local government areas. These are taken in Lagos west senatorial districts.

- **Alimosho**: Alimosho Local Government is the largest local governments in the Awori land in Lagos State. It has the largest population in Lagos state and Nigeria at large as at 2006 census.
- **Ojo**: Ojo is majorly dominated by Awories, its surrounded by water and the traditional occupation in the area is mainly fishing and mat weaving. Currently the population of OJO local government is 1.2m.
- **Badagry**: Badagry is one of the oldest local governments in Lagos state and in Nigeria. It’s the local government that share border with Nigeria and Benin Republic. Its traditional occupation includes fishing, farming and mat weaving.

**Population and Sample size**

The populations used for this study are drawn from three local governments in Lagos west senatorial district of Lagos State.

<table>
<thead>
<tr>
<th>Local Govt. area in Lagos West Senatorial District</th>
<th>Population</th>
<th>Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alimosho</td>
<td>1,277,714</td>
<td></td>
</tr>
<tr>
<td>Ojo</td>
<td>598,071</td>
<td></td>
</tr>
<tr>
<td>Badagry</td>
<td>241,093</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2,116,878</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>


**Sampling technique**

The sampling technique used to draw the sample for the study is cluster sample. This technique is employed in order to reduce cost and time in getting information normally: this type of sampling is used where society reaches heterogeneous state and has geographical diversity. The procedure used with regards to the sample as the study area is heterogeneous is the selection of few sub-population within each LGA which we believe provides a cross section of the entire population. which are (8) eight quarters out of each LGA from different direction serve as our cluster of the study, fifteen (15) people are sampled out from each cluster or sub-population which composed of the entire sample size.
of each local governments. The method employed in selecting this people cut of each cluster is non probability sampling method using accidental sample by simply interviewing the first (15) fifteen people in each cluster that happen to be part of the population.

**Methodology**

The Survey research design was adopted in this study. The researchers employed both primary and secondary sources of data collection. Primary data were collected through the administration of questionnaire while secondary data were gathered through related research works, textbooks, newspapers, bulletins and periodicals. The study was conducted in three local government areas: Alimosho, Ojo, and Badagry. These areas were selected to cover Lagos West senatorial district of Lagos State. The focus groups within these areas were both employers and employees in the business sectors (vocational). Three hundred and sixty nine (369) questionnaires were distributed but three hundred and forty eighty (348) were returned giving a response rate of 94%. The Taro Yamane statistical formula was used in determining the sample size. The formula is

\[ n = \frac{N}{1 + N(e)^2} \]

Where

- \( n \) = sample size
- \( N \) = population size
- \( e \) = sampling error
- 1 = constant

\(^\text{raised to the power of}\)

Applying the formula in the three LGA,

For Alimosho = 1277714

\[
\begin{align*}
N &= 1277714 \\
1 + 1277714(0.09)^2 &= 1277714 \\
1 + 1277714(0.0081) &= 1277714 \\
1 + 1035 &= 123
\end{align*}
\]

For OJO = 598071

\[
\begin{align*}
N &= 598071 \\
1 + 598071(0.09)^2 &= 598071 \\
1 + 598071(0.0081) &= 598071 \\
1 + 4844 &= 123
\end{align*}
\]

For Badagry = 241093

\[
\begin{align*}
N &= 241093 \\
1 + 241093(0.09)^2 &= 241093 \\
1 + 241093(0.0081) &= 241093 \\
1 + 1953 &= 123
\end{align*}
\]
Method of Data Collection

Since this is a survey method, questionnaire and interview techniques were used. Questionnaire were distributed to the educated respondents while to non educated respondents questions involved in the questionnaire were personally asked orally and the researchers at the same time filled the appropriate space on the spot. On the interview method, it was only the non educated part of the sample that was personally interviewed, and in most cases, questions were translated in the local languages whenever the need arises.

METHOD OF DATA ANALYSIS

The researchers shall adopt the Chi-square statistical tool in analyzing the data. The hypotheses earlier formulated shall be subjected to statistical analysis to ascertain the authenticity of the research instrument.

Hypothesis I

Table I: Whether vocational education in Nigeria is NOT a threat to the socio-economic fortune of Lagos State.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Employers</th>
<th>Employees</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agreed</td>
<td>35</td>
<td>80</td>
<td>115</td>
</tr>
<tr>
<td>Disagreed</td>
<td>95</td>
<td>138</td>
<td>233</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>218</td>
<td>348</td>
</tr>
</tbody>
</table>

Source: Field Research (2015)

Hypothesis II

Table II: Vocational education activities do NOT significantly increase unemployment in Lagos State.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Employers</th>
<th>Employees</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agreed</td>
<td>50</td>
<td>72</td>
<td>122</td>
</tr>
<tr>
<td>Disagreed</td>
<td>86</td>
<td>140</td>
<td>226</td>
</tr>
<tr>
<td>Total</td>
<td>136</td>
<td>212</td>
<td>348</td>
</tr>
</tbody>
</table>

Source: Field Research (2015)

Table III: Computation of Expected frequencies (1)

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Employers</th>
<th>Employees</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agreed</td>
<td>35(43)</td>
<td>80(72)</td>
<td>115</td>
</tr>
<tr>
<td>Disagreed</td>
<td>95(87)</td>
<td>138(146)</td>
<td>233</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>218</td>
<td>348</td>
</tr>
</tbody>
</table>

Source: Field Research (2015)

The figures in parenthesis are the expected frequencies while those without parenthesis are the observed frequencies. The expected frequencies are calculated as follows:

\[ E_i = \frac{\text{Corresponding Column Total} \times \text{Corresponding Row Total}}{\text{Total Sample Size}} \]
Grand Total

For response relating to AGREED

\[ E = \frac{130 \times 115}{348} = 43 \]

\[ E = \frac{218 \times 115}{348} = 72 \]

For responses relating to DISAGREED.

\[ E = \frac{130 \times 233}{348} = 87 \]

\[ E = \frac{218 \times 233}{348} = 146 \]

Table IV: Computation of Expected frequencies II

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Employers</th>
<th>Employees</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agreed</td>
<td>50(48)</td>
<td>72(74)</td>
<td>115</td>
</tr>
<tr>
<td>Disagreed</td>
<td>86(88)</td>
<td>140(138)</td>
<td>233</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>218</td>
<td>348</td>
</tr>
</tbody>
</table>

Source: Field Research (2015)

For responses relating to AGREED

\[ E = \frac{136 \times 122}{348} = 48 \]

\[ E = \frac{212 \times 122}{348} = 74 \]

For responses relating to DISAGREED

\[ E = \frac{136 \times 226}{348} = 88 \]

\[ E = \frac{212 \times 226}{348} = 138 \]

From table iii and iv, the chi-square is calculated as follows:

\[ X^2 = \sum \frac{(o_i - e_i)^2}{e_i} \]

Where degree of freedom (df)

\[ df = (R-1)(C-1) \]

\[ df = (2-1)(2-1) = 1 \]

\[ \frac{(3543)^2}{43} + \frac{(80-72)^2}{72} + \frac{(95-87)^2}{87} + \frac{(138-146)^2}{146} = 0.37 + 0.22 + 0.184 + 0.110 = 0.884 \]

\[ \frac{(50-48)^2}{48} + \frac{(72-74)^2}{74} + \frac{(86-88)^2}{88} + \frac{(140-138)^2}{138} = 0.083 + 0.054 + 0.045 + 0.029 = 0.211 \]

Decision Rule

At 5% level of significant of chi-square and table value of 3.841 both 0.884 and 0.211 <critical value. Hence, the null hypothesis is accepted. Therefore, the vocational education in Nigeria is not a threat to the socio economic fortune of Lagos state and the vocational education activities has significantly reduced unemployment in Lagos State.
Data Analysis

Table I provides the data disclosing the responses from the respondents whether the vocational education is not a threat to the socio-economic fortune of the State. One hundred and fifteen (115) respondents agreed while two hundred and thirty-three (233) disagreed. The result was further subjected to statistical test in table III using the chi-square tool ($X^2$) significant level of 5% was chosen as the probability and it gave a computed figure of 0.884, therefore it was accepted.

Table IV provides the data disclosing the resources from the respondents whether vocational education activities do not significantly increase unemployment in Lagos State. One hundred and two (102) respondents said yes while two hundred and forty six (246) said no. The result was further subjected to statistical test in table IV using the chi-square tool ($X^2$). A significant level of 5% was chosen as the probability and it gave a computed figure of 0.2 hence, it was rejected. Thus, the vocational education is not a threat to socio-economic fortune of Lagos State and the vocational education activities has significantly reduced unemployment in Lagos State.

CONCLUSION

From the foregoing, it shows that the vocational education plays a pivotal role in the socioeconomic advancement of Nigeria. Yet enough mechanism has not been put in place to encourage it through funding, capacity building, and infrastructural facilities since its impact to the wellbeing of the citizen’s vis-à-vis overall national economy deserves more than effort being put so far to sustain it.

RECOMMENDATIONS

Although this paper pointed out the significant impact of vocational education in combating the unemployment rate in Nigeria and effort being put in place by various governments in recent time to encourage it. The paper recommends thus:

i. Government at all levels should set-aside funds that will mainly on vocational schools so as to encourage them.

ii. Infrastructural facilities should be provided and the dilapidating ones upgraded so as to reduce the cost of running vocational schools.

iii. Compulsory training of both employers and employees in the vocational schools should be carried out so as to broaden their professional and vocational skills for better performance.

iv. Government should establish more industries so as to broaden employment opportunities for the teeming unemployed youths.

v. The state of insecurity should be addressed so as to attract potential investors to open industries in the country.

REFERENCES


AVAILABILITY AND USE OF ICT RESOURCES BY LECTURERS FOR TEACHING AND LEARNING IN SVTE, AOCOED

OLUFUNKE O. KUDEHINBU & SAFURAT AJANI

ABSTRACT
This study investigated the extent of availability and use of ICT resources for teaching and learning in Vocational and Technical Education Courses. The population of the study comprised fifty (50) lecturers. A self-developed instrument on the extent of availability and use of ICT resources was used for the data collection. The reliability co-efficient of the instrument was 0.90. Mean scores, standard deviation, and t-test were used to analyse. The findings showed that, many of the ICT resources starting from digital library, digital laboratories, internet connected classroom / lecture halls, multimedia computers, multimedia projectors, videophone systems, to teleconference devices, and robots / artificial intelligent devices are not available and are not used. The findings also showed that the ICT resources available and in use are internet, e-mail support from the AfriHub, desktop / laptop computers and mobile phones are also not adequate. It was recommended among other things that, ICT resources should be made available in adequate quantities for e-learning to take off properly. A validated and adopted questionnaire was used.

Keywords: ICT, Availability, Resources and Use

INTRODUCTION
In today’s educational system, information and communication technology has dramatically changed teaching and learning at all levels of education. ICT is changing the way people learn, offering new alternatives to traditional classroom. Education is no more confined to the four walls of the classroom but to wherever and whenever the learner deems appropriate (Hadded and Draxles, 2002).

In education, ICT is both a school course and a tool which supports teaching and learning through the use of ICT resources. These resources are multimedia projectors and multimedia courseware namely: flash drives, diskettes, slides and CD-ROM (Clarke, 2006). The Federal Government of Nigeria in the National Policy on Education (FRN, 2004) introduced ICT “Computer Education” as a subject of study in the school curriculum to be done at all levels of education, pre-primary, primary, secondary and tertiary education. This implies that, there should be teachers, learners and availability of ICT resources at all levels of education. And this makes education to be challenged by digital/technologies in terms of its availability and use. It is against these backgrounds that this study is being carried out to determine the availability and use of ICT resources by lecturers in School of Vocational and Technical Education.

Statement of the Problem
The emergence of ICT have dramatically changed teaching and learning in Education at all levels worldwide, it has created a new environment where human capital has become the most critical element in achieving a competitive advantage. In fact, the ICT revolution makes knowledge a competitive resource, and in this technological era, economic prosperity depends

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1 Olufunke O. Kudehinbu (Author) and Safurat T. Ajani (Co-author), Lecturers at Adeniran Ogunsanya College of Education Lagos, Business education Department, School of Vocational and Technical Education.
on “brain” rather than “brawn” and value is created by employing competent workers that has been trained in the use of ICT resources by teachers/lecturers who are competent and versatile in the use of ICT resources.

The problem is that, education is been challenged by the new technologies in terms of availability and use; as ICT resources such as e-books, computer laboratories/computers trained personnel, infrastructures and facilities are available for e-learning applications in library and in administrative offices. Only little of these ICT resources are seen in the classroom/lecture room and offices of lecturers. It is against this background that this study is carried out to determine the availability and use of ICT resources by lecturers and also recommend how it can be improved.

**Purpose**

*The purpose of this study will be to:*

1. Determine the extent of availability of ICT infrastructure and facilities in teaching and learning Vocational and Technical Courses.
2. Determine the extent of use of ICT infrastructure for teaching and learning in School of Vocational and Technical Education.
3. Determine the ICT learning materials/equipment available for teaching and learning in school of vocational and technical education.
4. Determine the extent of use of ICT learning materials/equipment in teaching/learning in school of vocational and technical education.

**Research Questions**

1. To what extent is ICT infrastructures and facilities available for teaching and learning in SVTE?
2. To what extent do lecturers use ICT infrastructure and facilities for teaching and learning in SVTE?
3. To what extent are the ICT learning materials/equipment available for teaching and learning in school of vocational and technical education?
4. To what extent do the two categories of lecturers use ICT learning material/equipment for teaching in SVTE?

**Hypotheses**

Two null hypotheses (Ho) were stated and tested at 0.05 level of significance.

1. There is no significant difference between extent of availability of ICT infrastructures and facilities for teaching and learning.
2. There is no significant difference between the mean response of lecturers on the extent of use of ICT infrastructures and facilities for teaching and learning.
3. There is no significant difference between the mean responses of the two categories of lecturers on the extent of availability of ICT learning materials/equipment for teaching and learning.
4. There is no significant difference between the mean responses of the two categories of lecturers on the extent of use of ICT learning materials/equipment for teaching and learning.

**Method**

This study adopted survey research design. The area of study was School of Vocational and Technical Education (SVTE), Adeniran Ogunsanya College of Education, Lagos State, Nigeria. Fifty (50) respondents (40 lecturers and 10 instructors) of the school were used as sample for the study. An adopted and validated questionnaire by Nwana (2012) was used. The copies were administered by the researchers to the respondents, returned and used for computation. The
data collected were analyzed using simple percentage, mean and standard deviation and t-test. The decision was that, a mean rating of 3.0 and above indicates a positive perception of the availability of and/or use of ICT resources while any mean rating below 3.0 indicates negative perception.

RESULTS

Research Question One:
To what extent are the ICT infrastructures and facilities available for teaching and learning in school of vocational and technical education?

Table 1(a)
Extent of Availability of ICT infrastructures and facilities for teaching and learning

<table>
<thead>
<tr>
<th>S/N</th>
<th>STATEMENT</th>
<th>GROUP</th>
<th>N</th>
<th>x̄</th>
<th>SD</th>
<th>DECISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>School virtual library</td>
<td>1</td>
<td>40</td>
<td>1.00</td>
<td>0.00</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>School database management system</td>
<td>1</td>
<td>40</td>
<td>1.00</td>
<td>0.00</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>School digital/internet library</td>
<td>1</td>
<td>40</td>
<td>1.00</td>
<td>0.00</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Computerized centre for educational technology, multimedia/online system</td>
<td>1</td>
<td>40</td>
<td>1.00</td>
<td>0.00</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Internet-connected lecture halls/auditorium/office</td>
<td></td>
<td>40</td>
<td>1.00</td>
<td>0.00</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Digital/internet microteaching laboratory</td>
<td></td>
<td>40</td>
<td>1.00</td>
<td>0.00</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>School digital/internet library</td>
<td></td>
<td>40</td>
<td>1.00</td>
<td>0.00</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Electronic independent study carrels/tables with earphones etc</td>
<td></td>
<td>40</td>
<td>1.00</td>
<td>0.00</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>School virtual laboratories</td>
<td></td>
<td>40</td>
<td>1.00</td>
<td>0.00</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Electronic tables and wireless application e.g. phones/microphones</td>
<td></td>
<td>40</td>
<td>1.00</td>
<td>0.00</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>10</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NB: AV – Available
NA – Not Available

Table 1(a) clearly indicates that virtually all the variables on infrastructures and facilities are not available in the school with mean of (1.00) and SD of .000

Hypothesis 1(b)

Table 1(b): T-test Results for Hypothesis One

<table>
<thead>
<tr>
<th></th>
<th>T-test Value</th>
<th>Critical Value</th>
<th>T-test Value</th>
<th>Table Df</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Var. 0001: Between Groups</td>
<td>.000</td>
<td>1.94</td>
<td>10</td>
<td>Not Sig.</td>
<td></td>
</tr>
<tr>
<td>Within Groups</td>
<td>.000</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>.000</td>
<td>50</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
In testing hypothesis one which says that there is no significant difference between the mean response of various categories of lecturers on the extent of availability of ICT infrastructures and facilities for teaching and learning vocational courses, the responses of two categories of lecturers to the relevant variables (1-10) were subjected to T-test analysis. The result shows that there is no significant different to all the variables. The critical value is .000 which table value is 1.94

**Research Question Two**

To what extent do lecturers use ICT infrastructures and facilities for teaching in the school?

**Table 2(a): Extent of use of ICT infrastructures and facilities**

<table>
<thead>
<tr>
<th>S/N</th>
<th>STATEMENT</th>
<th>GROUP</th>
<th>N</th>
<th>$x$</th>
<th>SD</th>
<th>DECISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>School virtual library</td>
<td>1 2</td>
<td>10 40 50</td>
<td>1.00</td>
<td>00</td>
<td>NIU</td>
</tr>
<tr>
<td>2</td>
<td>School database management system</td>
<td>1 2</td>
<td>10 40 50</td>
<td>1.00</td>
<td>00</td>
<td>NIU</td>
</tr>
<tr>
<td>3</td>
<td>School digital/internet library</td>
<td>1 2</td>
<td>10 40 50</td>
<td>1.00</td>
<td>00</td>
<td>NIU</td>
</tr>
<tr>
<td>4</td>
<td>Computerized centre for educational technology, multimedia/online system</td>
<td>1 2</td>
<td>10 40 50</td>
<td>1.00</td>
<td>00</td>
<td>NIU</td>
</tr>
<tr>
<td>5</td>
<td>Internet-connected lecture halls auditorium/office</td>
<td>1 2</td>
<td>10 40 50</td>
<td>1.00</td>
<td>00</td>
<td>NIU</td>
</tr>
<tr>
<td>6</td>
<td>Digital/internet microteaching laboratory</td>
<td>1 2</td>
<td>10 40 50</td>
<td>1.00</td>
<td>00</td>
<td>NIU</td>
</tr>
<tr>
<td>7</td>
<td>School digital/internet library</td>
<td>1 2</td>
<td>10 40 50</td>
<td>1.00</td>
<td>00</td>
<td>NIU</td>
</tr>
<tr>
<td>8</td>
<td>Electronic independent study carrels/tables with earphones etc</td>
<td>1 2</td>
<td>10 40 50</td>
<td>1.00</td>
<td>00</td>
<td>NIU</td>
</tr>
<tr>
<td>9</td>
<td>School virtual laboratories</td>
<td>1 2</td>
<td>10 40 50</td>
<td>1.00</td>
<td>00</td>
<td>NIU</td>
</tr>
</tbody>
</table>
From table 2, the average mean ratings indicate that all ICT infrastructures and facilities are generally not in use in school of Vocational and Technical Education for teaching and learning.

**Hypothesis 2**

**Table 2(b)  T-test Result for Hypothesis Two**

<table>
<thead>
<tr>
<th>Var. 0001:</th>
<th>Between Groups</th>
<th>Critical Value</th>
<th>T-test Table Value</th>
<th>Df</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.000</td>
<td>1.94</td>
<td>10</td>
<td>Not Sig.</td>
<td></td>
</tr>
</tbody>
</table>

| Var. 0002: | Between Groups | .000 | 10 | Not Sig. |
| Var. 0003: | Between Groups | .000 | 10 | Not Sig. |

Hypothesis two states that there is no significant difference between the mean responses of the two categories of lecturers on the extent of use of ICT infrastructures and facilities for teaching and learning. T-test analysis was adopted to test the hypothesis at (0.05 level of significant) across all variables. The result of T-test shows that all variables are not significant.

**Research Question Three**

To what extent are the ICT learning material/equipment available for teaching and learning in school of Vocational and Technical Education.

**Table 3(a): Extent of Availability of ICT learning Materials.**

<table>
<thead>
<tr>
<th>S/N</th>
<th>LEARNING MATERIALS/EQUIPMENT</th>
<th>GROUP</th>
<th>N</th>
<th>x</th>
<th>SD</th>
<th>DECISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Desktop/Laptop computers and their accessories e.g. keyboard/mouse.</td>
<td>12</td>
<td>10</td>
<td>3.50</td>
<td>3.75</td>
<td>AV</td>
</tr>
<tr>
<td>12</td>
<td>Internet-connected to computers in the classroom</td>
<td>12</td>
<td>10</td>
<td>1.00</td>
<td>.000</td>
<td>N/A</td>
</tr>
<tr>
<td>13</td>
<td>Videophone systems in classrooms / lecture halls</td>
<td>12</td>
<td>10</td>
<td>1.00</td>
<td>.000</td>
<td>N/A</td>
</tr>
</tbody>
</table>
Table 3 represents variables 11-30 on the availability of learning materials/equipment. There is clear indication that all the variables with exception of variables 11 (3.65) and 17 (3.29) have mean ratings of 1.00 showing unavailability of ICT learning materials/equipment. However, with variables 11 and 17 the respondents affirmed that, the only available learning material / equipment include desktop/laptop computers and their accessories and mobile phones.

**Hypothesis 3**

**Table 3(b): T-test Result for Hypothesis three**

<table>
<thead>
<tr>
<th></th>
<th>T-test Critical Value</th>
<th>T-test Value</th>
<th>Table</th>
<th>Df</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Var. 0001:</td>
<td>Between Groups</td>
<td>2.23</td>
<td>1.94</td>
<td>10</td>
<td>Sig.</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>.000</td>
<td></td>
<td>40</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>.000</td>
<td></td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Var. 0002:</td>
<td>Between Groups</td>
<td>.000</td>
<td></td>
<td>10</td>
<td>Not Sig.</td>
</tr>
</tbody>
</table>
Hypothesis three states that there is no significant difference between the mean responses of the categories of lecturers on the extent of availability of ICT learning material/equipment for teaching and learning. All the relevant variables (11 – 24) were subjected to T-test analysis. The results show that only variable 11 and 17 are significant. For variable 11 the T-statistics of 2.23 is significant when compare with table value of 1.94 and variable 17 the T-statistics of is also significant. All the other variables (11-16, 18-24) are not significant.

Research Question Four

To what extent do the two categories of lecturers use ICT learning material/equipment for teaching in school of vocational and technical education.

Table 4: Extent of use of ICT learning materials/equipment.

<table>
<thead>
<tr>
<th>S/N</th>
<th>STATEMENT</th>
<th>GROUP</th>
<th>N</th>
<th>x̅</th>
<th>SD</th>
<th>DECISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Desktop/Laptop computers and their accessories e.g. keyboard/mouse.</td>
<td>1</td>
<td>10</td>
<td>3.64</td>
<td>4.40</td>
<td>IU</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>50</td>
<td>4.02</td>
<td>.824</td>
<td>IU</td>
</tr>
<tr>
<td>12</td>
<td>Internet-connected to computers in the classroom</td>
<td>1</td>
<td>10</td>
<td>1.00</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>50</td>
<td>1.00</td>
<td>.000</td>
<td>NIU</td>
</tr>
<tr>
<td>13</td>
<td>Videophone systems in classrooms/lecture halls</td>
<td>1</td>
<td>10</td>
<td>1.00</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>50</td>
<td>1.00</td>
<td>.000</td>
<td>NIU</td>
</tr>
<tr>
<td>14</td>
<td>Teleconference devices in classrooms/lecture halls</td>
<td>1</td>
<td>10</td>
<td>1.00</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>50</td>
<td>1.00</td>
<td>.000</td>
<td>NIU</td>
</tr>
<tr>
<td>15</td>
<td>Multimedia Projectors in classroom / lecture halls</td>
<td>1</td>
<td>10</td>
<td>1.00</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>50</td>
<td>1.00</td>
<td>.000</td>
<td>NIU</td>
</tr>
<tr>
<td>16</td>
<td>Slides/flash drives/diskette/CD-Rom for lectures</td>
<td>1</td>
<td>10</td>
<td>1.00</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>50</td>
<td>1.00</td>
<td>.000</td>
<td>NIU</td>
</tr>
<tr>
<td>17</td>
<td>Institutional produced educational software</td>
<td>1</td>
<td>10</td>
<td>1.00</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>50</td>
<td>1.00</td>
<td>.000</td>
<td>NIU</td>
</tr>
<tr>
<td>18</td>
<td>Readymade/teacher developed Multimedia courseware/software.</td>
<td>1</td>
<td>10</td>
<td>1.00</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>50</td>
<td>1.00</td>
<td>.000</td>
<td>NIU</td>
</tr>
<tr>
<td>19</td>
<td>Digital satellite system (DSS) in classroom.</td>
<td>1</td>
<td>10</td>
<td>1.00</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>50</td>
<td>1.00</td>
<td>.000</td>
<td>NIU</td>
</tr>
<tr>
<td>20</td>
<td>Electronic graphic board for illustration and visual literacy.</td>
<td>1</td>
<td>10</td>
<td>1.00</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>50</td>
<td>1.00</td>
<td>.000</td>
<td>NIU</td>
</tr>
</tbody>
</table>
Table 4 addresses research question No. 4 on the use of ICT learning materials / equipment. The mean ratings of all the variables except variable 11 (4.02) and variable 17 (3.85) suggest that ICT learning materials / equipment are generally not in use for teaching and learning in the school of vocational and technical education. The only learning materials / equipment in use in the school are desktop / laptops computers and their accessories like keyboards / mouse and printer (variable 11) and mobile phones (variable 17).

**Hypothesis 4**

**Table 4(b): T-test Results for Hypothesis Four**

<table>
<thead>
<tr>
<th>Var. 0011: Between Groups</th>
<th>T-test Critical Value</th>
<th>T-test Table Value</th>
<th>Df</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2.35</td>
<td>1.94</td>
<td>50</td>
</tr>
<tr>
<td>Within Groups</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Var. 0012: Between Groups</td>
<td></td>
<td>.000</td>
<td>1.94</td>
<td>Not Sig.</td>
</tr>
<tr>
<td>Within Groups</td>
<td></td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Var. 0013: Between Groups</td>
<td></td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within Groups</td>
<td></td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Var. 0014: Between Groups</td>
<td></td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>.752</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Hypothesis four states that, there is no significant difference between the mean responses of the two categories of lecturers on the extent of use of ICT learning materials/equipment for teaching and learning. The T-test result indicates that only two variables i.e. 11 and 17 are significant, for variable 11 the T-test calculated was 2.35 and variable 28 has t-calculated of 3.50 at 0.05 significant level. All other variables are not significant.

DISCUSSION

The findings of this study were discussed on research questions stated. With respect to question 1 and 2 (variables 1-10), the study revealed that, there is acute shortage of ICT infrastructures and facilities for teaching and learning in the school of vocational and technical education. All the variables (1-10) are not available and not in use. This finding agrees with Evoh (2007) and Nwana (2012) that ICT infrastructures and facilities such as virtual classrooms, virtual laboratories, e-libraries and internet facilities are not available for teaching and learning in developing countries like Nigeria (Evoh, 2007). Ololube, Ubogu and Egbezor (2007) reported that ICT infrastructures and facilities are not available for instructional delivery in Nigeria tertiary institutions.

This study is also consistent with the findings of Ikemenjima (2005), and Jegede and Owolabi (2008) that there are infrastructural deficiencies and shortage of facilities viz computer laboratories, online classrooms, telecommunications facilities and inadequate power supply for computer education in secondary schools. Jegede and Owolabi (2008) conducted their studies using twenty (20) secondary schools in six different states in Nigeria. It was reported that, dearth of infrastructures, facilities, equipment and lack of trained personnel have made computer education to be scarcely offered in any of the state secondary schools which constitute more than 80% of Nigerian schools.

The third research question boarders on the availability and use of ICT learning materials / equipment for teaching and learning (variables 11-28). For variable 11 (4.02), the respondents affirmed that desktop / laptop computers and their accessories e.g. keyboard, mouse and printers are available and in use. Meanwhile, they indicated that variable (12-27) viz internet in the classroom, videophone system, teleconferencing devices, electronics class roll (ECR), scoring machines, computer screen reading software, institutionally produced educational software etc. are not available for lecturers. The respondents affirmed that variable 28 (3.50), mobile phones are available and in use.

FINDINGS

The findings confirm the result of Akubuilo (2007) that ICT facilities usage in the universities is very low. Also Aginam’s (2006) reported that ICT application is less than 5%.

Ogiegbaen and Iyamu (2005) revealed that lack of relevant software, inadequate computers and the peripheral e.g. printers, scanner, papers, extra disk drive, limited access to the internet, weak infrastructures and lack of trained staff are obstacles to computer education in Nigeria. Also, Nwanu (2007 and 2009) pointed out that, internet computers, relevant
hardware and software, teleconferencing devices and Computer Assisted Instruction (CAI) are not available for instructional communications in the classroom and in open and distance education.

Research question four revealed the extent to which two categories of lecturers use ICT learning materials/equipment for teaching and learning. The respondents ratings affirmed that, ICT learning materials/equipment are generally not available and not in use for teaching and learning in school of vocational and technical education. The mean ratings indicated that only variable 11 (3.65) and 28 (3.85) are available and in use.

Ancillary reports to this study confirmed that apart from business education department that has computer education programme (word processing) all lecturers use computers mainly for administrative/management purpose e.g. typing of students results, examination, typing of documents and the mobile phones which the lecturers are using are their private phones and not for the school.

Most lecturers are ICT illiterates and lack basic training on ICT. As a result they tend to distance themselves from any computer related activities both in and outside the classroom. ICT provides innovative opportunities for teaching and learning, creates advances in research which enable lecturers to improve their content knowledge in different subject areas and concretize learning by enabling the students to manipulate the facilities. These help to improve the quality of instruction delivery (Aniebonam 2008). Lack of computer facilities exist among various high institutions in Nigerian, it is this lack that hinders lecturers from making effective utilization of ICT facilities to improve the quality of their instruction delivery.

CONCLUSION

Information and Communication Technology (ICT) materials/resources are indispensable for instructional delivery in this computer age. Unfortunately, the impression ICT has created is yet to have significant impact in enhancing the quality of teaching and learning in school of vocational and technical education. ICT materials should be provided so as to enable the lecturers to be able to use them for instructional delivery. If they are not provided, the implication is that, the laudable policies on e-learning may not be realistic.

RECOMMENDATIONS

The following are recommended based on the findings of the study.

- Since e-learning implies computer literate, lecturers and students should be trained on computer literacy and skills in schools. Also students need to be ICT literate because it is a pre-requisite for competitive job hassle in the ICT driven labour market.
- Modalities should be set in motion to enable school lecturers acquire ICT skills through training. This has the tendency of enabling them to enrich their content knowledge through searching for more meaningful and improve students’ learning outcomes.
- ICT facilities should be made adequately available by school authority so that lecturers can utilize them in their offices and classroom. This is necessary because ICT are regarded as integral parts of teaching and research in higher institutions.
- There should be standby generators and UPS should be procured in adequate quantities to curb the epileptic power supply which frustrates the use of computers and other ICT resources.

REFERENCES


A STUDY OF ORGANIZATIONAL PERFORMANCE AND STRATEGIC HUMAN RESOURCE MANAGEMENT

MS. DEVANSHI VERMA

ABSTRACT
Several studies have highlighted a significant relationship between strategic human resource management (SHRM) and organizational performance (OP). However, there is limited evidence (empirical studies) on the aforesaid linkage in Indian context. The influence of each variable measuring such major practice of strategic human resource management on organizational performance has not been tested in a comprehensive manner. Therefore, to address the gaps in the literature, an empirical investigation to explore linkages to organizational performance (OP) was deemed relevant. This study examined a) the aggregate influence of five best practices of human resource management on five measures of financial organizational performance; and b) the influence of measures of organizational performance on practices of strategic human resource management. The model was tested using multi regression analysis, ANOVA and chi square. Results indicate a strong relationship between SHRM practices and OP and vice – versa; however, the direction of the relationship remains unknown.

Keywords—strategic human resource management (SHRM), organizational performance (OP), Line managers, best practices.

INTRODUCTION
There has been research evidence in the past that have empirically validated the significant relationship between strategic human resource management and organizational performance (Schuler and MacMillan, 1984; Schuler and Jackson, 1987 and 2005; Purcell, 1989 and 1995; Cutcher and Gershenfeld, 1991; Storey, 1992; Arthur, 1992 and 1994; Ichniowski, Shaw and Prennushi, 1994,1995 and 1999; McDuffie, 1995; Dyer and Reeves, 1995; Huselid, 1995; Purcell, 1995; Delaney and Huselid, 1996; Huselid and Becker, 1996; Becker et al., 1997; Delery, 1998; Pfeffer, 1998; Wright and Snell, 1998; Gratton et al., 1999 and 2000; Wood, 1999; Guest, et al., 2000; Storey, 2001; Truss, 2001; Guthrie, 2001; Batt, 2002; Guest, et al., 2003; Paauwe, 2004; Paauwe and Boselie, 2005; Wright, Snell and Dyer 2005; Panayotopoulos, 2010). In particular, strategic human resource management (SHRM) scholars have suggested that organizations can use performance- and commitment-oriented human resource (HR) practices to drive organizational effectiveness (Becker and Gerhart, 1996; Dyer and Reeves, 1995; Wright, Dunford, and Snell, 2001) - a claim now supported by a large body of field research (e.g., Delery and Doty, 1996; Huselid, 1995; MacDuffie, 1995), as well as subsequent confirmatory reviews and meta-analyses of this literature (e.g., Combs, et al., 2006; Wright, et al., 2005). With the background to the imperativeness of strategic human resource management as source of competitive advantage influencing organizational performance and limited research in exploring the relationship in India, the purpose of this study is as follows - first, to conduct an in-depth review of evidences differentiating Strategic Human Resource Management (SHRM) and non-SHRM

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practices and also compile line managers perspective to what constitutes strategic human resource management practices; second, to undertake an in-depth review of existing evidences to the linkage between Strategic Human Resource Management (SHRM) and Organizational Performance (OP); third, to empirically validate relationship between Strategic Human Resource Management (SHRM) and Organizational Performance (OP); and fourth, To develop and test conceptual model highlighting the relationship between Strategic Human Resource Management (SHRM) and Organizational Performance (OP). It is proposed here that presence of certain set of strategic human resource practices is likely to positively influence the organizational performance i.e. organizations that use best practices of human resource management are likely to be better performing than those organizations that don’t use the same. The broad research model proposes to link strategic human resource management practices and organizational performance. It attempts to explore the possible relationship between practices of strategic human resource management viz. HR Processes (HRP), Recruitment (REC), Performance Appraisals (PA), Training (TRA), Compensation (COM) and five measures of organizational performance vis Revenue (REV), Return on Investment (ROI), Market Cap (MC), Sales Growth (SG), and Net Profit (NP).

BACKGROUND AND HYPOTHESIS

The focus of current study revolves around exploring the relationship between strategic human resource management and organizational performance. As the awareness of “strategic human resource management” has been raised in recent years, human resource managerial initiatives” are considered a magical weapon that enables an organization to increase/nurture intangible assets and subsequently build a sustainable competitiveness advantage (Barney and Wright, 1998; Jun-Long Hong, 2002). In the rapidly evolving social and economic milieu, characterized by globalization and liberalization, organizations realized that for being successful in the given competitive scenario, they must have sustainable competitive advantage over the rival firms (Bowman and Singh, 1993; Huselid, 1995; Guest, 1997; Zenger and Hersely, 1997). Traditionally, natural resources, economies of scale, technical know-how, and quality used to be sources of competitive advantage (Thurow, 1992). While, the above mentioned factors continue to be source of competitive advantage as they create value but are not enough given the market complexities (Becker and Gerhart, 1996) and failed to fulfill the role to beat their competitors (Pfeffer, 1994). The nature of managing human resources has become more complex and continues to pose serious challenges for organizations. The demographic profile of Indian workforce and professionalization of organizations along global competitors has created expectation among employees in terms of work values and style of management.

Approaches to SHRM

There are two major approaches to strategic human resource management i.e. contingency and best practice approach. The contingency perspective is a series of empirical studies designed to determine whether business units that have achieved vertical and horizontal fit performed better than those that had not (e.g. Arthur, 1992; MacDuffie, 1995; Youndt et al., 1996; Delery and Doty, 1996; Ichniowski et al., 1997). To elaborate, as per the contingency approach, the variation in HR practices across organizations should be explained by organizations’ strategies (Delery and Doty, 1996), and closer the match between organizational strategy and human resources, better the firm performance will be (Miles and Snow, 1984; Schuler and Jackson, 1987; Bird and Beechler, 1995; Gomez-Mejia et al., 1995). On the other hand, starkly contradicting contingency approach, the basic argument in favor of best practice approach is that there are certain set of HR practices that are better than the others and considered as positively influencing the performance. However, it is
imperative for them to be embedded in the HR architecture (Pfeffer, 1994; Becker and Gerhart, 1996). The current study exploring the relationship between strategic human resource management and organizational performance is based on “Best practice approach.

**Strategic human resource management and organizational performance**

From the discussion so far, this study suggests five strategic human resource management practices viz. HR processes, recruitment, performance appraisals, training, compensation that are likely to be significantly influencing organizational performance viz. revenue, return on investment, market cap, sales growth, net profit. The following paragraphs shall explain each of the major practices of strategic human resource management in detail.

**HR processes** – Presence of an HR department is the one that is considered by its stakeholders to meet all their expectations and objectives and adds value to the corporate governance leading to high performing organizations (Ulrich, 1997; Becker and Gerhart, 1998; Wright and McMahan, Snell and Gerhart, 2001). Takeuchi (2009) empirically validated the significant relationship between presence of an explicit and clear HR policy and organizational performance. An organization that implements SHRM includes the HR professionals as business partners by involving them in the strategic planning process (Ulrich and Beatty, 2001). The head of the HR function should be included at strategic decision making level by top management (Hall, 1984 as cited in Singh, 2003). Organizations that vertically align and horizontally integrate HR function and practices perform better and produce more committed and satisfied HR function employees who exhibit improve individual performance (Green et al., 2006).

*Hypothesis 1:* Organizations that are strategic in their HR Processes are likely to perform better in terms of (i) revenue; (ii) return on investment (ROI); (iii) market cap; (iv) sales growth; (v) net profit than those that are non-strategic in their HR processes.

**Recruitment** – A traditional practice of simply hiring the best doesn’t benefit the organization any more. Instead, the organization needs a best suited candidate (Pfeffer, 1998). The aforementioned fit between person – job – organizations plays an instrumental role in more rapid implementation of corporate strategy (Schuler and MacMillan, 1984) and obtaining more profit from their people (Pfeffer, 1998). Equally imperative is the type of skills and attributes organizations look for in a candidate. (Lepak and Snell, 1999; Pfeffer, 1998) found out that candidate’s knowledge, capacity to learn, interpersonal characteristics, personality, potential (Lepak, Snell and Youndt, 1996) would be among the high performance work practices. However, to attract most suitable candidate with the required credentials, it is also important to make use of validated section method. The argument in favor of a validated selection method is ensuring whether the job applicant has the knowledge, skills and abilities that align with the core competencies a business relies on to create a competitive advantage (Hargis and Bradley, 2011). The traditional practice of HR highlighted attracting large pool of candidates which was considered as appropriate and benefitting for the organization. However, in the context of strategic nature of HRM, this assumption doesn’t hold true anymore. The practice of attracting candidates from small applicant pool with high quality reflects reducing time and financial wastage (Phillips and Gully, 2011). Yet another practice of recruitment that is assumed to be strategic is use of multiple interviews and selection tests. It emphasizes the rigorous nature of selection process. The practice of hiring majority of employees as permanent reflects strategic orientation of the organizations. Permanent employees assumed to perform core work are more informative about the organization, have a feeling of being advantaged in terms of job security and
Hypothesis 2: Organizations that are strategic in their recruitment practices are likely to perform better in terms of (i) revenue; (ii) return on investment (ROI); (iii) market cap; (iv) sales growth; (v) net profit as compared to those organizations that are non-strategic in their recruitment practices.

Performance appraisals – Performance appraisals implemented with a developmental purpose yields direct relationship with job satisfaction and effective commitment (Youngcourt, Leiva and Jones, 2007), minimum rater bias and perception of being fair and accurate by the employees (Singh and Agarwal, 2011). A performance appraisal system based on result and behavioural criterion elicits a more accurate and fair system resulting into increased employee commitment and organizational commitment (Paul and Anantharaman, 2003). Another practice of performance appraisals that is considered as strategic is the use of 360 degree appraisals instead of traditional methods of evaluating employees. Appraisals from multiple sources are viewed as more accurate, and this may be because employees may perceive that feedback from multiple sources is less likely to be biased by political and personal factors as opposed to single-source appraisals. Moreover, appraisals that are feedback rich are perceived as fair in terms of procedural and interactive justice dimensions (Singh and Agarwal, 2011). Previous research in performance appraisal suggests that feedback richness (which indicates the extent to which appraisals are frequent, timely, and specific) can contribute to perceptions of appraisal fairness (Kinicki et al., 2004). Past researchers have shown evidence of measuring strategic performance appraisals by collecting response on the duration of performance appraisals to test the relationship between strategic human resource management and organizational performance (Guest et al., 2003). However, Performance management system as a whole requires extremely careful formulation and implementation. It has the potential to positively influence employee performance but an important consideration with the appraisals is that whether they are practiced effectively and in alignment with their intended purpose (Milliman, et al., 2002) and business strategy.

Hypothesis 3: Organizations that are strategic in their performance appraisals (PMS) are likely to perform better in terms of (i) revenue; (ii) return on investment (ROI); (iii) market cap; (iv) sales growth; (v) net profit than those organizations that are non-strategic in their performance appraisals.

Training – A number of researchers have proposed a significant relationship between training practices and organizational performance (Harel and Tzafrit, 1999; Huang, 2000; Kundu, 2000; Paul and Anantharaman, 2003; Lee and Bruvold, 2003; Aragón-Sánchez et al., 2003; Blair and Sisakhti, 2007). Jennings, Cyr and Moore (1995) found that training and development is perceived as the most important strategic HRM practice by managers. Evidence suggests that investments in training and development of required knowledge, skills and abilities improve quality of employees (Tsai, 2006).
create dynamic business environment (Jarventaus, 2007), reduce likelihood of employees leaving the job (Batt and Colvin, 2011) and produce beneficial organizational outcomes (Arthur, 1994; Bartel, 1994; Knoke and Kalleberg, 1994; Russell, Terborg and Powers, 1985; Pfeffer, 1984, 1998; Tsui and Wu, 2005; Frayne et al., 2002). To add to it, (Wayne, shore and liden, 1997) found out that organization pursuing profits through people show substantially larger training expenditures signaling commitment to their people. Presence of training policy, training calendar and practice of updating / revising training calendar could be a reflection of value organizations attach to the training function. Hence, the organizations that perform well are more likely to identify training and development as a highly valued function than those that perform poorly are (Fey et.al, 2000).

Training increases organizational performance (Harel and Tzafrir, 1999; Paul and Anantharaman, 2003). In an empirical study, Huang (2000) stated that organizations that provide training and development activities on a long term basis generally perform better than those firms that emphasize on short term basis. (Panayotopoulou et al., 2010) found a significant and positive relationship between percentage of trained employees and organizational performance. General skills provide value to a firm; however, they are transferrable across a variety of organization (Wright and Barney, 1998). On the contrary, firm specific skills provide value only to a particular firm and are of no value to competing firms. In another research it has been found that investments in firm specific skill development among employees lead to sustained competitive advantage (Arthur, 1992 and 1994; Tsui, 2006). (Logan et al., 2004) suggested that a successful organization doesn’t outsource its training activity and it doesn’t cut training when profitability eliminates.

Hypothesis 4: Organizations that are strategic in their training practices are likely to perform better in terms of (i) revenue; (ii) return on investment (ROI); (iii) market cap; (iv) sales growth; (v) net profit as compared to those organizations that are non-strategic in their training practices.

Compensation—Presence of a compensation policy / philosophy is imperative (Fred k foulkes, 1986) in playing strategic role. A policy related to compensation provides clarity and stability in the compensation practices. Variable pay based compensation system offers a potential means through which organizations can align employee behavior with organizational goals. It is equally imperative to also ensure that organizations provide team / organization based incentive to the employees as the same generates shared goals and common interests. It encourages employees to work in teams and to be present at work, because maximizing their efforts has a positive effect on their income (Arthur and Jelf, 1999). In any compensation system, individuals can compare their pay to people outside their organization (Foulkes, 1986). According to social exchange theory (Blau, 1964) and efficiency wage theory (Fairris and Alston, 1994), individuals in an advantageous situation compared with the market respond with greater productivity and adopt behaviors that exceed prescribed roles (Organ 1990). The firms that perform well are likely to pay higher wages to attract qualified applicants than firms with poorer performance (Becker and Huselid, 1996). Therefore, also paying employees above industry standards positively influence retention of employees (Tremblay and Che’nevert, 2008). Another imperative practice of strategic human resource management within the ambit of compensation system is employee ownership strategies such as employee stock option plans. When employees are owners, they act or think like owners. Employee stock options generate a feeling of loyalty among employee. At the same time, fear of losing monetary gains also motivates them to perform better. Also the practice of continuing to pay during recession ensures a sense of security in terms of the organization that the employees won’t be leaving the organization frequently.
Hypothesis 5: Organizations that are strategic in their compensation practices are likely to perform better in terms of (i) revenue; (ii) return on investment (ROI); (iii) market cap; (iv) sales growth; (v) net profit as compared to those organizations that are non-strategic in their compensation practices.

METHOD
The study is a combination of descriptive and exploratory research design. Responses to SHRM practices were collected through primary source and data on measures of OP was collected through secondary source. Prowess’ database was used to gather data on financial performance of the companies. Data was collected for each organization over a period of five years (2007 – 2012) on the five measures of organizational performance: revenue (REV), return on investment (ROI), market cap (MC), sales growth (SG), net profit (NP). Each respondent organization was categorized into either non-strategic, moderately or strategic HR group and low, moderate or high performing group. Moderately SHRM group was not used for any detailed analysis. A pilot study was conducted to validate the data collection tool. A questionnaire was administered to non-HR managers of the sample organizations to seek their perception on whether they considered a given set of HR practices as strategic or not. Based on the responses received, changes were made in the questionnaire by dropping those practices that weren’t perceived as strategic. The revised questionnaire was then circulated to a set of 40 HR managers. On the basis of responses received, modifications were made in the questionnaire for final data collection. The survey questionnaire was sent to 700 companies seeking response from a non-HR manager and HR manager. Therefore a total of 1400 survey questionnaire was sent. The sample companies were chosen from BSE listed organizations.

Table 1.1: Responses per survey questionnaire

<table>
<thead>
<tr>
<th>Total questionnaire sent N=1400</th>
<th>No. of questionnaire received</th>
<th>No. of usable questionnaire</th>
<th>Total No. of usable questionnaire</th>
<th>Response rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HR 700</td>
<td>Non HR 700</td>
<td>HR 354</td>
<td>Non HR 312</td>
<td>HR 246</td>
</tr>
</tbody>
</table>

* (out of 312 questionnaires received from non HR managers, 246 questionnaires were retained)

The Table 1.1 provides detail of the usable responses received out of the total number of questionnaires sent. Out of 700 BSE listed organizations approached for the purpose of the current study, total usable questionnaires were 246 resulting to a response rate of 35.14%.

MEASURES
Strategic human resource management practices were defined as a set of five major HR practices i.e. HR processes, recruitment, performance appraisals, training and compensation. Each of the practices was measured using a set of variables: HR processes (16 variables), recruitment (15 variables), performance appraisals (10 variables), training (16 variables) and compensation (8 variables). The respondents were required to put a tick against the practice they considered as strategic. The second tool was administered to the HR managers to capture whether the set of given practices are present or absent in their organization. The questionnaire comprised similar set of practices and variables, however, was structured differently. For the purpose of this study, organizational performance was measured in terms of five financial indicators i.e. revenue, market cap, net profit, sales growth and return on investment.
ANALYSIS AND RESULTS

Summary results pertaining to the influence of strategic human resource management practices and organizational performance

The following tables and paragraphs provide summary details of the relationship between practices of strategic human resource management and organizational performance. The study explores the relationship between five dimensions of practices of strategic human resource management viz. HR Processes (HRP), recruitment (REC), performance appraisals (PA), training (TRA), compensation (COM) and organizational performance measured in terms of five parameters viz. revenue (REV), return on investment (ROI), market cap (MC), sales growth (SG), net profit (NP).

**Table 2.1: Relationship between HR Processes (HRP) and Organizational Performance (OP)**

The table 2.1 provides detail of relationship between a practice of strategic human resource management i.e. HRP and OP in terms of REV, ROI, MC, SG, NP

<table>
<thead>
<tr>
<th>HRP &amp; OP</th>
<th>REV</th>
<th>ROI</th>
<th>MC</th>
<th>SG</th>
<th>NP</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\chi^2$</td>
<td>✓</td>
<td>X</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>ANOVA</td>
<td>✓</td>
<td>X</td>
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</tr>
<tr>
<td>Regression</td>
<td>✓</td>
<td>X</td>
<td>✓</td>
<td>X</td>
<td>✓</td>
</tr>
</tbody>
</table>

The summary results highlight a significant relationship between HRP and organizational performance in terms of REV, MC and NP.

**Table 2.2: Relationship between Recruitment (REC) and Organizational Performance (OP)**

The table 2.2 provides detail of relationship between a practice of strategic human resource management i.e. REC and OP in terms of REV, ROI, MC, SG, NP

<table>
<thead>
<tr>
<th>REC &amp; OP</th>
<th>REV</th>
<th>ROI</th>
<th>MC</th>
<th>SG</th>
<th>NP</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\chi^2$</td>
<td>X</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>ANOVA</td>
<td>✓</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>✓</td>
</tr>
<tr>
<td>Regression</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

The summary results highlight no significant relationship between REC and OP.

**Table 2.3: Relationship between Performance Appraisals (PA) and Organizational Performance (OP)**

The table 2.3 provides detail of relationship between a practice of strategic human resource management i.e. TRA and OP in terms of REV, ROI, MC, SG, NP

<table>
<thead>
<tr>
<th>PA &amp; OP</th>
<th>REV</th>
<th>ROI</th>
<th>MC</th>
<th>SG</th>
<th>NP</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\chi^2$</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>ANOVA</td>
<td>✓</td>
<td>X</td>
<td>✓</td>
<td>X</td>
<td>✓</td>
</tr>
<tr>
<td>Regression</td>
<td>✓</td>
<td>X</td>
<td>✓</td>
<td>X</td>
<td>✓</td>
</tr>
</tbody>
</table>

The summary results highlight a significant relationship between PA and organizational performance in terms of REV, MC and NP.

**Table 2.4: Relationship between Training (TRA) and Organizational Performance (OP)**

The table 2.4 provides details of relationship between a practice of strategic human resource management i.e. TRA and OP in terms of REV, ROI, MC, SG, NP
The summary results highlight a significant relationship between TRA and organizational performance in terms of REV, MC and NP.

**Table 2.5: Relationship between Compensation (COM) and Organizational Performance (OP)**

The table 2.5 provides detail of relationship between a practice of strategic human resource management i.e. COM and OP in terms of REV, ROI, MC, SG, NP

<table>
<thead>
<tr>
<th>COM &amp; OP</th>
<th>REV</th>
<th>ROI</th>
<th>MC</th>
<th>SG</th>
<th>NP</th>
</tr>
</thead>
<tbody>
<tr>
<td>(\chi^2)</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>X</td>
<td>✔</td>
</tr>
<tr>
<td>ANOVA</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Regression</td>
<td>✔</td>
<td>X</td>
<td>✔</td>
<td>X</td>
<td>✔</td>
</tr>
</tbody>
</table>

The summary results highlight a significant relationship between COM and organizational performance in terms of ROI.

**Summary results pertaining to the influence of organizational performance on strategic human resource management**

The following tables and paragraphs provide summary details of the influence of organizational performance on strategic human resource management. The study explores the aforementioned relationship between organizational performance measured in terms of five parameters viz. revenue (REV), return on investment (ROI), market cap (MC), sales growth (SG), net profit (NP) and five dimension of practices of strategic human resource management viz. HR Processes (HRP), recruitment (REC), performance appraisals (PA), training (TRA), compensation (COM).

**Table 3.1: Relationship between Revenue (REV) and Strategic Human Resource Management (SHRM)**

The table 3.1 provides details of relationship between a measure of organizational performance i.e. REV and strategic human resource management (SHRM) in terms of HRP, REC, PA, TRA, COM.

<table>
<thead>
<tr>
<th>REV &amp; SHRM</th>
<th>HRP</th>
<th>REC</th>
<th>PA</th>
<th>TRA</th>
<th>COM</th>
</tr>
</thead>
<tbody>
<tr>
<td>(\chi^2)</td>
<td>✔</td>
<td>X</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>ANOVA</td>
<td>✔</td>
<td>X</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Regression</td>
<td>✔</td>
<td>X</td>
<td>✔</td>
<td>✔</td>
<td>X</td>
</tr>
</tbody>
</table>

The summary results highlight a significant relationship between REV and SHRM in terms of HRP, PA, and TRA.

**Table 3.2: Relationship between Return on Investment (ROI) and Strategic Human Resource Management (SHRM)**

The table 3.2 provides details of relationship between a measure of organizational performance i.e. ROI and strategic human resource management (SHRM) in terms of HRP, REC, PA, TRA, COM.

<table>
<thead>
<tr>
<th>ROI &amp; SHRM</th>
<th>HRP</th>
<th>REC</th>
<th>PA</th>
<th>TRA</th>
<th>COM</th>
</tr>
</thead>
<tbody>
<tr>
<td>(\chi^2)</td>
<td>X</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>ANOVA</td>
<td>X</td>
<td>✔</td>
<td>X</td>
<td>X</td>
<td>✔</td>
</tr>
</tbody>
</table>
Regression | X | X | X | X | X

The summary results highlight no significant relationship between ROI and SHRM.

**Table 3.3: Relationship between Market Cap (MC) and Strategic Human Resource Management (SHRM)**

The table 3.3 provides details of relationship between a measure of organizational performance i.e. MC and strategic human resource management (SHRM) in terms of HRP, REC, PA, TRA, COM.

<table>
<thead>
<tr>
<th>MC &amp; SHRM</th>
<th>HRP</th>
<th>REC</th>
<th>PA</th>
<th>TRA</th>
<th>COM</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\chi^2$</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>ANOVA</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Regression</td>
<td>✓</td>
<td>X</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

The summary results highlight a significant relationship between MC and SHRM in terms of HRP, PA, and TRA.

**Table 3.4: Relationship between Sales Growth (SG) and Strategic Human Resource Management (SHRM)**

The table 3.4 provides details of relationship between a measure of organizational performance i.e. SG and strategic human resource management (SHRM) in terms of HRP, REC, PA, TRA, COM.

<table>
<thead>
<tr>
<th>SG &amp; SHRM</th>
<th>HRP</th>
<th>REC</th>
<th>PA</th>
<th>TRA</th>
<th>COM</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\chi^2$</td>
<td>✓</td>
<td>X</td>
<td>✓</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>ANOVA</td>
<td>✓</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Regression</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

The summary results highlight no significant relationship between SG and SHRM.

**Table 3.5: Relationship between Net Profit (NP) and Strategic Human Resource Management (SHRM)**

The table 3.5 provides details of relationship between a measure of organizational performance i.e. NP and strategic human resource management (SHRM) in terms of HRP, REC, PA, TRA, COM.

<table>
<thead>
<tr>
<th>NP &amp; SHRM</th>
<th>HRP</th>
<th>REC</th>
<th>PA</th>
<th>TRA</th>
<th>COM</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\chi^2$</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>ANOVA</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Regression</td>
<td>✓</td>
<td>X</td>
<td>✓</td>
<td>✓</td>
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</tr>
</tbody>
</table>

The summary results highlight a significant relationship between NP and SHRM in terms of HRP, PA, and COM.

**CONCLUSION**

The practice of Strategic human resource management from 246 organizations has been compiled under five broad dimensions using a total of 68 variables (set of HR practices). The overall objective of the study was to identify relationship between strategic human resource management and organizational performance. The statistical tests administered for the purpose were $\chi^2$ test, t-test, ANOVA, Linear and multiple regression analysis. The findings suggest that HR processes, performance appraisals, training and compensation practices influence revenue, return on investment, market cap and net profit. It is pertinent to suggest that there is significant relationship between strategic human resource management and organizational performance. The study also highlighted influence of organizational performance on strategic human resource management. The
findings pertaining to the same manifested that revenue, market cap and net profit influence HR processes, performance appraisals, training and compensation practices. Though the study found a significant relationship between strategic human resource management practices and organizational performance and vice – versa, the direction of the relationship is unknown i.e. whether organizations strategic in human resource management perform better or high performing organizations choose to invest in strategic practices of human resource management. From findings of the study it can be concluded that perhaps the role of human resource management in the Indian context appears to be strategic enough to influence organizational performance. It also throws light on the acceptance of HR as strategic business partner assuming to act as a source for organizations to attain sustainable competitive advantage. To add to it HR appears to be no more confined to the administrative role. Organizations can capitalize on their human resources by implementing the same with a strategic intent. The presence of certain practices of strategic human resource management can be expected to ensure high organizational performance. The findings of the study that there is significant relationship between strategic human resource management practices and organizational performance are in consonance with previous research evidence (Corbett and Harrison, 1992; MacDuffie, 1995; Huselid et al., 1997; Jayram et. al., 1999; Ichniowski and Shaw, 1999; Ahmad and Schroeder, 2003; Kuo, 2004; Sang, 2005; Katou, 2008; ALDamoe et al., 2011).

REFERENCES


IT'S NOW OR NEVER – THE CRITICAL NEED FOR OPERATIONS TO BECOME SUSTAINABLE AND STRATEGIES TO ACHIEVE IT

SAYYED MOHAMMAD DANISH MOHAMMAD ALAM

ABSTRACT

The Operations function is one of the most critical functions of an organization. Concerned with the management of the resources that produces the organisation’s goods and services, operations management plays a key role in establishing the competitiveness of an organisation.

Sustainability refers to the holistic betterment of the business as well as the society without endangering the environment. In this paper, an attempt has been made to highlight four areas (i) the importance of the operations functions in the contemporary world, (ii) the growing need to attain sustainability before it is too late and things go out of hand, (iii) the role of operations in the attainment of sustainability and (iv) the strategies that needs to be adopted in order to foster sustainability and sustainable practices in the organisations. Literature review has been analysed for the above areas and a model for strategies for sustainability has been presented.

Key Words: Operations management, sustainability, environment, strategy

INTRODUCTION

The Operations function is one of the most critical functions of an organisation (Beckman et al., 2008). Concerned with the management of the resources that produces the organisation’s goods and services, operations management plays a key role in establishing the competitiveness of an organisation. Any organisation, worth its name, has an offering to its customers in the form of a good and/or a service. This is produced and delivered by the operations function and hence there is an operations function in all organisations be it big or small, manufacturing or service.

Sustainability refers to the holistic betterment of the business as well as the society without endangering the environment (Bansal, 2005). It has been a cause of great concern that some businesses in their stride towards economic prosperity and development have caused detrimental effects on the resources of the world and are unmoved by the plight of the exploited people in this regard. Thus there is a need that businesses besides being concerned for the profit should also exhibit concern for the environment and the people involved in their businesses. This will cause overall prosperity for the planet too.

In this paper, an attempt has been made to highlight four areas (i) the importance of the operations functions in the contemporary world, (ii) the growing need to attain sustainability before it is too late and things go out of hand, (iii) the role of operations in the attainment of sustainability and (iv) the strategies that needs to be adopted in order to foster sustainability and sustainable practices in the organisations. Literature review has been analysed for the above areas and a model for strategies for sustainability has been presented.
LITERATURE REVIEW

The Operations function

Operations has been defined by Slack et al. (2013) as the function that is responsible for managing the resources which produce and deliver the products and services of the organisation to the customers. Thus in every organisation there is a need for an operations function because every organisation has some offerings for its customers. According to Waters (2006), operations are the activities that makes its products and consequently they are the heart of every organisation. Finch (2008) describes operations management as the management of the systems and the processes that create goods and provide services of the organisation to the customers. Klinderfor et al. (2005) defined operations management as “the business activity that involves the design, development, and maintenance of systems and processes that transform resources, such as raw materials, technology, and labor, into goods and services that meet customers’ needs.” Operations management (OM) has been defined by Corbet et al. (2001) as “the design, operation, and improvement of the systems that create and deliver the firm’s primary products and services.” Thus everything we own, use, buy or borrow is a product of some organisation and has been made by operations.

Operations function controls a vast segment of the organisation’s resources (Slack et al., 2011). In addition to it, it also coordinates with the other functions of the organisation such as marketing, finance, human resources, etc. The reason for this is the peculiarity of the discipline where it is has to work in tandem with other functions of the organisation in order to produce and deliver the goods and the services of the organisation (Finch, 2008) The main activities of the operations function include the design of the products, services, the processes that produces them as well as the technology employed in the same. Moreover it is also concerned with the planning and control of the capacity of the operations, inventory, and supply chain and quality management involved therein. Operations management is also responsible for quality improvement of the process, products and services of the organisation. The significance and role of the operations function is well spelt out in the framework given by Hayes and Wheelwright (Hayes et al., 2005) wherein the significance of the operations is mentioned as being initially internally neutral (not making major mistakes) to becoming externally supportive i.e. giving the company a competitive advantage.

The growing importance of the Operations function

As of now, there is an increasing role of the operations in the organisation. There are examples of organisations that have been successful simply because the operations department delivered what was required of it. Examples of RyanAir, Toyota Production Department and in more recent times, the success of Air Arabia can be attributed to the successful operations function in these organisations. At the same time, there are instances when inefficiencies and ineffectiveness of the operations department has resulted in the organisation being out of business. The tragedies that occurred due to the Bhopal Gas leak in India in December 1984 or the Chernobyl nuclear disaster in Ukraine in former Russia in 1986 or the recent BP Deepwater Horizon oil rig explosion in the Gulf of Mexico in 2010 were all due to faulty operations. The Hayes and Wheelwright model spells out clearly as to how operations can contribute to the organisation’s strategy and how the growing importance of operations can spell well for the industry as a whole when it redefines the industry expectations. Thus, organisations of today have begun to include operations strategy as part of the overall corporate strategy. This was first propounded by Skinner in 1969 (Slack et al.,
2011) when he emphasized the importance of operations and espoused that operations strategy must be included in the corporate strategy of the organisation.

**Sustainability and its dimensions**

Sustainability as a concept integrates economic prosperity along with social development and environmental conservation. The Bruntland Commission also known as the World Commission on Environmental Development in their report titled “Our Common Future” defined sustainable development as the “development which meets the needs of the current generation without compromising the needs of the future generation” (WCED, 1987). In this way the elements of sustainability covered not just the economic need of the companies to have a profit but it also concerned itself with the people of the world and the resources of the planet (Bansal, 2005). These 3Ps (profit, people and planet) thus became the focus of sustainable development. As has been discussed by Klinderfor (2005), sustainability includes the judicious use of resources, as well as closed loop supply chain and the triple bottom line concept which makes the organisations to consider in its strategy and operations the consideration for profit, people and the planet.

**Sustainability – an imperative call**

Sustainability as a concept began to gain ground by the book Silent Spring by Roger Carson in 1962 when it demonstrated that the pesticides and germicides that were sprayed on plants had damaging effects on the animals which fed on the chaff and the grass and the humans who consumed them. Since then there has been conferences by the countries of the world on the topic. Agenda 21 of the Rio Summit was the plan for the collective action of the world countries to work in a united manner for the environment. The world certainly wants development but the moot point here is that the development should be sustainable (Koplin et al., 2007).

The issue of sustainability is a very important and urgent issue that the entire world is facing and which can to a very great extent be worked out through effective operations management (Vachon et al., 2008). It is calculated that humans beings are using 30% more resources than the Earth can replenish each year. This leads to deforestation, degraded soils, polluted air and water, and dramatic declines in numbers of fish and other species. The world is in the middle of a dire crisis which unfortunately has not felt felt by the people around (Rao et al., 2005). In the name of profitability, there has been exploitation of the people and the planetary resources. Slavery and bonded labour is still abundant in many places. Labour has been exploited in many countries. Wanton and injudicious use of resources (both renewable and non-renewable) has led to the depletion and near extinction of many of them. Greenhouse gases have made an impact on the atmosphere resulting in climate warming (Steiner et al., 2006). As a result, the water level has risen and land is slowly beginning to sink in. The depletion of the ozone layer has laid out fresh danger of skin cancer being caused by the ultraviolet rays of the sun (Amaeshi et al., 2008). Pollutants released from factory operations into the air or in the sea have resulted in the contamination of both the water and the air. Acid rain, which results when precipitation comes in contact with the atmospheric pollutants is quite damaging. Smog which results due to air pollution is said to be quite dangerous for the human health. There is also an increasing shortage of fresh water too on the planet with aquifers getting exhausted and rivers getting dried up due to damming and diversions for irrigation. Unless new sources of energy are not discovered and renewable sources of energy such as biogas, wind, sunlight, etc are not harnessed, the world will soon see an end to the natural resources. Oil, given its current reserve and consumption rate will not last for long. Carbon footprints, food miles, carbon credits, etc are issues which the world should address.
However, it is seen that the major harm to the environment is done by the developed nations and since they wield considerable clout, there is not much that the other nations of the world can do against them (Klinderfor et al., 2005). The situation sounds very gloomy but there is one solution that can improve things and that is to have sustainable operations management.

**The challenge of measuring sustainability**

The first issue that comes up in this matter is the concern regarding the definition of sustainability in the Bruntland Commission report wherein the definition seems to require additional qualification in terms of the various needs of the present and the future and the usage of resources to maintain the compromise (Colby et al., 1995). It is important to draw the attention of the organisations towards sustainability but the moot question that then arises is “How much of sustainability can be achieved?” This question is a very relevant question too as there is many qualitative aspects regarding sustainability do not have any provision for absolute measurement (Zhu et al., 2005). In sustainability, there are many different dimensions which cannot be measured precisely and hence it is difficult to have an absolute value of sustainability of a process or a product or an organisation as a whole (Bansal, 2008). This is considered analogous to total quality management wherein the crux of the issue is to have zero wastages and to do things right the very first time. One can always move towards attaining sustainability by having the processes done in the most optimum method while having minimum energy consumption and ensuring good practices in the supply chain as well.

**The role of Operations in the attainment of sustainability**

Operations function plays a very critical element in sustainable development as it encompasses all the 3Ps in its ambit. It can have a very critical role to play in ensuring sustainability in the organisation. Operations are involved in the design of the new products as well as the manufacturing, transportation as well as their logistics (Slack et al., 2013). This involves the elements of resource handling and profit. Moreover, there is also an element of human element therein regarding the conditions people work in throughout the supply chain which handles the social element. The following paragraphs will clearly demonstrate how operations can cater to each facet of sustainability.

**Operations and the economic perspective (Profit) of sustainability**

Operations produces the goods and delivers the service of the organisation to the customers and earns revenue for the organisation. There are several performance objectives of the operations function and should it match the market requirements for the same, it is bound to be successful and certainly the success of the organisation lies connected with it (Holt et al., 2009). If the market demands quality and the operations function comes up with a product or service which meets and exceeds the expectations of the market, then surely there will be a high demand and high sales for the product and service and consequently more earning for the organisation. Similar will be the case when the operations exceed the market requirements with respect to speed, flexibility and dependability. Moreover, the organisation can also achieve overall cost leadership through a high level of effectiveness and efficiency and with tight control over its costs and overheads. Thus through proper operations, there can also be a high profit for the enterprise. The operations function is thus the engine of the organisation.
Operations and the social perspective (People) of sustainability

Operations can be equally effective with respect to the People’s element of sustainability. In the operations of the company, operations can ensure through proper job design that the employee working in the company has a supportive and invigorating work atmosphere with proper ergonomics and health and safety conditions backed up by a challenging work and commensurate payment and perks. This will ensure that the employee does not feel exploited. The same can be extended throughout the supply chain to ensure that none of the people employed in the supply chain suffer from any kind of exploitation and that there is a greater sense of equity prevalent among the citizens of the world.

In sustainability, the operations can take into consideration the needs and expectations of the different stakeholders of the operations and cater to them accordingly (Aras and Crowther, 2009). There needs to be an open and transparent dialogue with the stakeholders of the organisation so as to assess their needs and ensure that they are addressed. Nigel Slack (2013) has brought a practical model for stakeholders thus spelling out the responsibility of the Operations function towards the employees, customers, suppliers, shareholders and the society at large.

Operations and the environmental perspective (Planet) of sustainability

Operations can also do its part well in managing the resources of the earth. Operations use most of the resources of the organisation. Moreover, the design of the product and the process of the manufacture of the product and/or delivery of the service as well as the supply chain of the product/service are dealt with by operations. Operations determine which raw materials go into the product and how the transformation takes place of the raw materials into the finished products. Thus the energy that is being used for the transformation is determined by operations. (Jiminez and Lorananz, 2001) At the same time, technology used for the transformation is determined by operations. Moreover the manner in which the supply chain works is determined by the operations. Operations also play a major role in the elimination of wastes, cycling of elements from their end of life to become new products, minimize the storage of materials and intermediate products and at the same time to ensure that there is proper energy circulated within and between the processes in order to minimize external energy inputs.

THE WAY FORWARD

Having analysed the crucial role that operations plays in an organisation regarding its elements of sustainability, we will now see the challenges that operations have to face regarding sustainability and what needs to be done further by the consumers in order to put the operations on the path of sustainability.

It seems easier said than done in this day of intense competition that companies should be considerate towards the people and the planet too. Such an altruistic attitude may not work out for all companies. After all, for many companies profitability or increasing the economic value of the shareholders may be the most important objective. The moot question here is whether it is possible for a company to be financially successful while being sustainable. If the answer is in the positive, it will not require a superhuman effort to get the companies to operate in line with sustainability. Unfortunately, in today’s scenario, this may not work out alone. The companies will not want to forsake their cheap supply or raw material or labour for sustainable issues such as food miles or carbon dioxide emissions. It will also not be an easy task to convince the companies to change their process to more sustainable ones and to change their technology to an eco-friendly and energy saving one in order to have less detrimental effects on the environment. At the same time, getting
the companies to use environmental friendly materials as raw materials in their products which can later be reused and recycled requires considerable efforts. Companies will also not be able to quickly accept the concept of reverse logistics and closed loop supply chains favouring local suppliers and customers will not go well with the companies. All this is due to the fact that the sustainability concept will not in line with the corporate objectives of most of the organisations and ensuring sustainability will require making a great change in the way they function in the design and management of their products, processes, quality and supply chain activities. At the same time, the offerings which they make to the customers may change and possibly their revenue and the market share. These are genuine concerns of the companies which need to be addressed well in case the companies have to be made to agree on sustainability.

SOME STRATEGIES FOR SUSTAINABLE OPERATIONS

There are some strategies that can be worked out in this regard to ensure that companies operate in sustainable environments.

i) Getting the consumers to be environmentally conscious and to assert a strong bias in favour of those products which are environmentally friendly. There should also be a demand from the consumers from the companies as security from future liabilities due to unsustainable practices followed by them and the effect that it has on the consumers. Also there should be sustainability along the supply chain of the operations and the consumers should refuse to partake the products of any organisation which has not been adhering to it and is

ii) The local governments should put up standards to ensure sustainability and monitor the operations of the companies for the same. This will be with regard to the energy content of the operations and also the pollution that will be emitted from the processes of the operations. There could be fines or other repercussions for the organisations for those operations not cooperating or falling in line with the environmental directions. In extreme cases, the companies should be ordered to close down their operations should they continue to be unsustainable in their activities.

iii) There should be support from the government for the companies trying to operate on sustainable grounds in the form of subsidies and reduced taxation. As an incentive for companies to tread the path of sustainability, the government should foster support for the companies. It should provide subsidies to those who are fervent in their sustainability approach. This will, to some extent, make up for the additional costs which the companies have to bear for their sustainability efforts. At the same time, the companies should also be given subsidies to buy sustainable and energy efficient technology. Moreover, there should be some tax reduction given to these companies. These efforts will act as economic drivers for the companies to work towards sustainable operations.

iv) Having a new performance objective and indicator such as sustainability. There are certain performance objectives of the operations function. According to Slack (2013), the performance objectives of the operations functions are quality, dependability, flexibility, speed and cost. In addition to the above, sustainability should be a performance objective for the operations function. This will make the operations vigilant towards sustainability.
At the same time, there should be indicators adopted to understand the path of the company towards sustainability.

v) Adopting sustainable supply chains wherein there is the element of economic prosperity in the form of profit but then throughout the supply chain, there should be elements of social prosperity and judicious utilization of resources taking care to ensure minimum damage and detriment to the environment.

vi) Examples of successful adaption of sustainability by companies and their successes can be given. Marketing advantages will be available for companies who comply with sustainability standards. There are many companies who have attained their success by being sustainable. Examples of such organisations will remove the apprehensions of others to tread on the path of sustainability and will serve as precedents for others to emulate.

vii) Standards for sustainability such as ISO 14000 should be used. There should be a growing demand from customers that they will consider standards for sustainability. There are already some of the standards present for sustainability. Thus companies would be compelled to adopt sustainability. Efforts should be made to put environmental standards on a similar pedestal as quality standards. In fact the companies which have attained sustainable standards should be given preference by the government for government contracts and gradually an atmosphere be created which will make the consumers to buy products of these companies.

viii) Collaboration between companies to share knowledge and work together for the common good

ix) Explaining to the companies the benefits of adapting sustainability practices. It is clear that if the companies understand the economic and environmental benefits of sustainability, they will surely work towards its attainment. Sustainability concepts such as minimization of wastages, ensuring total quality of performance, working out product and process design and implementation in energy sufficient manner, etc will surely spell well for the companies and will promote their efforts towards sustainability. Moreover, working on the design of the materials and products such that there is less energy and waste production will make things even more lucrative for the companies. Thus companies will have the benefits of reduced costs, increased market reputation and thus greater share and penetration coupled with newer products and enhanced satisfaction of the customer. As an example, it is seen from an analysis by A.T. Kearny that during the recent economic slowdown, companies that showed a true commitment towards sustainability appeared to outperform their competition. An A.T. Kearny analysis revealed that during the current economic slowdown, companies that show a “true” commitment to sustainability appear to outperform their industry peers in the financial markets. In 16 of 18 industries examined, companies recognized as sustainability-focused outperformed their industry peers over
both a three and six-month period, and were well protected from value erosion. Stock prices of 99 companies identified as sustainable outperformed industry averages by 15% for the six months from May to November 2008. (Sustainability companies are defined by inclusion in either the Dow Jones Sustainability Index or the Goldman Sachs SUSTAIN focus list.) This performance differential translates to an average $650 million in market capitalization per company. (2009 AT Kearney Inc. “Green” Winners). A report by investment bank Goldman Sachs found that companies that are considered leaders in environmental, social and governance (ESG) policies also lead the pack in stock performance - by an average of 25% (Goldman Sachs, 2007).

x) Companies can get their employees involved in evolving sustainable practices

CONCLUSION

It is imperative in today’s competitive business atmosphere that the operations function gives the companies a competitive advantage over others. At the same time, one should not forget the critical need for sustainability. Sustainability will surely benefit the organisations, the society as well as the resources. From the consumers perspective, they are getting good quality products which are manufactured in an efficient and ethical manner. The business will benefit from the same because of repeat sales and loyalty of the customers. The people will be happy because they are working in good working conditions. Moreover the resources will be used judiciously thus paving the way for their longer survival. Operations and sustainability are said to be interdependent as there is a critical requirement by operations for sustainability for modified operational and organisational practices and at the same time, operations management need sustainability in order to gain a competitive advantage in the growing environmental conscious business scenario. Though the broader concepts of sustainability is still not fully established and there is a lot to be done in this regarding especially concerning the measurements and indicators of sustainability, yet there is a beginning of an effort easily seen in this regard by the operations. Things will work best if there is a synergetic collaboration between operations and sustainability. This can be achieved if strategies are adopted such as making the consumer aware of sustainability and changing his mindset so as to make him conscious to buy products from those companies which are having sustainable practices. At the same time, there should be pressures as well as support from the government and the other environmental support groups for companies to adopt sustainable practices. There should also be more sustainability standards set up to distinguish companies regarding their attainment of sustainable practices. These and other such strategies in this matter shall clearly pave the way for a better tomorrow for the operations to function in a sustainable manner and ensure betterment and prosperity for the earth as well as its people as well besides the profits made by the companies.

REFERENCES AND BIBLIOGRAPHY


ANALYSING THE CORRELATION BETWEEN CSR REPUTATION AND SOCIAL MEDIA

PROF. DR. ANDREAS DUTZI*1, ESHARI WITHANAGE2 AND JULIAN SCHRÖTER3

ABSTRACT
Due to the increasing trend in accessing Social Media (SM) by the stakeholders, many corporates nowadays tends to use various SM channels to communicate their Corporate Social Responsibility (CSR) activities. The two-way communication via SM channels supports corporates to provide immediate feedback to their stakeholders while enabling companies to build relationship and enhance their Corporate Reputation (CR). As stakeholders make their decisions based on corporate reputation, it is vital for the companies to ensure that their CSR activities are communicated effectively via SM channels. This study aims to review the correlation between six selected companies CSR reputation rankings and Twitter moods. A sentiment analysis is conducted to examine Twitter moods of the selected companies in comparison with six reputation indices. Results suggest that there is no significant relationships between Twitter moods and the reputation indices. Suggestions and implications are discussed to understand such variations between Twitter moods and corporate reputation.

Keywords: Social Media, Corporate Social Responsibility, Corporate Reputation, Microblogging, Twitter

INTRODUCTION
Presently most companies are under growing pressure to aid the well-being of the society as well as the quality of the environment. Being competitive in the rapid market environment has become a constant strive for the firms. Irrespective of the type of business operation, society is an integral part of every business. Disregarding the component of the society will lead to create adverse effect for the going concern of the business. By building complex framework of Corporate Social Responsibility (CSR) standards and norms which will advocate the policies and practices will lead to define the concept of good practice. When the dynamics of reputation become to see as the most vital corporate strategy, firms needs to discover ways to differentiate themselves from their competitors. Establishing reputation can be seen as the ability to distinguish ones position in the international corporate field by exercising social and economic standards and practices. With this thought it can be said that practicing CSR will aid firms to build positive reputation and there by advance the support of their stakeholders.

With the standpoint of firms, the significance of good corporate reputation is its ability of easily non imitable by its competitors. On the other hand bad corporate reputation may result in loss of consumer trust, loss of financial returns and increase employee turnover (Scott and Walsham, 2005). Hence, maintaining and enhancing corporate reputation is essential for firm’s success. Performance of corporate reputation management can be conducted with the use of information technology and communication technologies to create favorable distribution of

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information among public to generate positive and good reputation towards firms (Eccles, Newquist and Schatz, 2007). It is argued that the effect of CSR on corporate reputation is molded by not only the way in which the firms communicate their CSR activities to their stakeholders but also how these activities are conveyed in wide variety of social media channels. In the advent of Social Media (SM) it can be seen that the corporate communication has become democratized. The power of communicating information has shift from firms to communities and individuals. Creating, sharing and commenting on information and brands can be done with or without business consent has now become questionable. Hence, firms are to decide whether to go viral on SM and join this communication or continue to ignore it. Both of these has its own proses and cons.

Only limited research can be found to state how SM can be used to enhance reputation. However, empirical findings state that SM is vital to generate public relations among stakeholders and enhance reputation. This study aims to fulfill the gap by examining the relationship between CSR reputation rankings and Twitter moods. The analysis is conducted with the use of six selected companies and identifying their reputation rankings based on the selected CSR reputation indices. Hypothesis was developed from the empirical studies to test and fill the research gap.

The paper is organized as follows: after this introduction section, theoretical framework is illustrated to evaluate the empirical findings of the terms, CSR, SM, corporate reputation, corporate reputation on CSR and CSR reputation on SM. With the elaboration of Legitimacy and Stakeholder Theory the basis and the rationale of developing a collaboration between firms and society are discussed. Following on, the methodology, results and discussion sections are demonstrated. The final remarks, future research as well as the limitations are discussed in the conclusion section.

THEORETICAL FRAMEWORK

Corporate Social Responsibility (CSR)

As CSR is a multifaceted word it has been elaborated in many studies throughout the past years. The definition of the term varied from time to time rendering the needs of the society. It is inevitable for the going concern of the business in terms of being sustainable and to generate economic growth. It is the duty and the obligation of the businessman to ensure that they follow the policies of action to which are desirable for the values of the society (Carroll, 1979).

In past the ultimate objective of the business was to maximize shareholder wealth (Friedman, 1979). This thinking considering only on the economic aspect has changed overtime. Hence, currently CSR is considered to be the factor that elaborates the progression of business towards sustainability as the fundamental concept of religious ethics (D’Amato, Henderson and Florence, 2009). When a firm conducts activities which will enhance the society consisting humans and environment it will have an effect on firms CSR, corporate ability as well as its reputation (Piriyakul and Wingwon, 2013). Similar arguments are raised depicting that the business has its own responsibility in generating profits and satisfying its shareholders while ensuring that the necessary laws and regulations are followed while being ethical and being a good corporate citizen. With this thought Carroll (1979) identified four responsibilities in CSR, namely, economic, legal, ethical and philanthropic. In contrast it is argued that firms needs to have an enormous commitment towards the society in which it operates than focusing only in expanding their earnings (McWilliams and Siegel, 2000).
Social Media (SM)

Presently, there is a tremendous expansion in the use of SM not only among individuals but also among firms. The word ‘social’ in SM refers to the primitive necessity to connect with others, whereas the word ‘media’ denotes to the required technological infrastructure which make the connections (Safko and Brake, 2010). As part of Web 2.0 revolution, SM enables to create association and interchange information among its users. In the former Web 1.0, it was problematic to generate a two-way symmetrical communication among users. Yet with the rise of SM this gap was removed. Hence, it is said that Web 2.0 is the most inventive creation made by the humans after the era of dot-com. Users of SM have the possibility to tailor made the content as per their preference.

Although there are wide variety of SM communications channels available, only Twitter will be considered for this study. This is a microblogging service that allows users to transmit messages to the followers. As Twitter limits its characters to 140 it can be compared to SMS in internet where any user has the possibility in reading. Due to the ability of ‘retweet’ it enables the users to spread information where the original tweet is propagated to new audience, namely the ‘followers’. Moreover, it also enables to make comments on certain agreed and disagreed facts and users (Boyd, 2010). Several studies have confirmed the importance of using Twitter as a medium of information sharing (Kwak et al. 2010). Further findings depicted that individuals use Twitter mainly to inform others about their thoughts and ideas as opposed to share general information. However, in firms perspective Twitter is considered to be most used SM communication channel by the Fortune Global 100 companies.

Corporate Reputation

Corporate reputation is considered as the perception of the stakeholders (Fombrun and Shanley, 1990). This perception will depend on the extent on how much of their expectation are met. On the other hand it is argued that the reputation is the perceived capacity of the companies to meet the expectation of their stakeholders. Stakeholders built their perception of firm’s reputation based on certain aspects. Some of these aspects would be, company identity, culture, brand, image, responsibility towards society and ethics. Some studies have gone in deeper research even to find out how these aspects of reputation will relate to each other. One such study conducted by Castro et al. (2006) has dived corporate reputation into two sub categories namely, business reputation and social reputation. Where business reputation deals with business processes and stakeholders whereas, social reputations deals with all the social responsibility activities.

With respect to resourced based view, reputation is classified as a resource which is not possible to imitate and can create a sustainable competitive edge. Hence, it is vital for firms to ensure that they manage their reputation as a treasured asset. By considering this importance certain studies have conducted on reputation management. Studies from Scott and Walsham (2005), stated that the reputation management is linked with the proposition of how the firm expose their reputation risk and threats. Reputation management is not only significant in problematic situations but also in unproblematic situations. This enables firms to develop continuous engagement with their stakeholders by building trust and connections and take actions to avoid being connected to any threats. All in all by managing corporate reputation firms have the possibility in mediating the relationship between the public and the company with respect to diverse dimensions of corporate reputation.
Corporate Reputation on CSR

Evidence can be found in empirical studies on how CSR influenced corporate reputation (Brammer and Pavelin, 2004; Carroll, 1979 and Mahon, 2002). Stakeholder perception on firm’s reputation can be influenced based on the CSR activities that they conduct. Stakeholders make judgments on firms considering their social responsiveness. Stakeholders consider that the socially responsible firms have a good reputation by executing series of socially responsible activities. This reputation will not only aid firms to utilize as a reserve of goodwill in a crisis situation but also as a link to generate positive financial returns as the reputation is not imitable. As it take considerable period to develop such positive reputation it is worth protecting. Findings of Fombrun and Shanley (1990) stated that the long term components of reputation matters as the reputation can gain its constancy and structure in long term. By developing a good reputation firms have the possibility in enhancing stakeholder satisfaction. Additionally, consumer loyalty can be maintained and improved by communicating these activities. Further studies states that when managers were asked the reason for engaging in CSR activities they have conveyed saying the motive is to safeguard their brand and reputation.

Studies conducted by Siltaoja (2006) showed the relationship between reputation and CSR with the use of value theory. The study elaborates that the link is generated due to the fact that the individuals are attracted to the firms which they think that have similar values to those they consider as essential to themselves. Hence, although the value propositions are universally accepted by all, individuals tend to give weightages to these values. On the other hand trust also plays a vital role in determining good reputation. Studies conducted by Quedevo-Puente et al. (2007) also validates the link between CSR and reputation by stating that the past activities and behavior of the firms will lead to provide signal to future prospects. Where when a firm conducts good social performances it will lead to enhance their reputation level and vice versa. The scholars have proven these facts with the use of legitimacy theory.

It is argued that the key which drives firm’s reputation is determined by the CSR activities of the firm. With the use of The Fortune Reputation Index, a positive relationship between CSR and financial performance has found. However, criticisms were raised from other studies stating that, The Fortune Reputation Index is only a single measurement tool used to measure financial performances from CEOs perspectives and financial analysts (Mahon, 2002). Currently, it can be seen that there are multiple indices introduced by various reputational institutes to measure the CSR reputation of the firms. Although all indices have the same focus on measuring firms CSR reputation, each indices use various criteria’s to measure the same. The indices that are considered for this study depicts in Table 1.

Table 1: CSR reputation indeces and their dimensions

<table>
<thead>
<tr>
<th>The Reputation of the Most Visible Companies</th>
<th>Worlds Most Admired Companies</th>
<th>World Most Ethical Companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Social responsibility</td>
<td>• Innovation</td>
<td>• Ethics and compliance program</td>
</tr>
<tr>
<td>• Emotional appeal</td>
<td>• People management</td>
<td>• Corporate citizenship and responsibility</td>
</tr>
<tr>
<td>• Products and services</td>
<td>• Use of corporate assets</td>
<td>• Culture of ethics</td>
</tr>
<tr>
<td>• Workplace environment</td>
<td>• Social responsibility</td>
<td></td>
</tr>
<tr>
<td>• Financial performance</td>
<td>• Quality of management</td>
<td></td>
</tr>
<tr>
<td>• Vision and Leadership</td>
<td>• Financial soundness</td>
<td>• Governance</td>
</tr>
<tr>
<td>------------------------</td>
<td>---------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>• Financial analysis</td>
<td>• Long-term investment value</td>
<td>• Leadership, innovation and reputation</td>
</tr>
<tr>
<td>• Role of brand</td>
<td>• Quality of products or services</td>
<td></td>
</tr>
<tr>
<td>• Brand strength</td>
<td>• Global competitiveness</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Best 50 Global Green Brands</th>
<th>Global 100 Most Sustainable Corporations in the World</th>
<th>The Companies With The Best CSR Reputations</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Financial analysis</td>
<td>• Sustainability disclosure</td>
<td>• Product and service</td>
</tr>
<tr>
<td>• Role of brand</td>
<td>• Profitability</td>
<td>• Innovation</td>
</tr>
<tr>
<td>• Brand strength</td>
<td>• Product category</td>
<td>• Workplace</td>
</tr>
<tr>
<td></td>
<td>• Sanctions</td>
<td>• Governance</td>
</tr>
</tbody>
</table>

CSR Reputation and Social Media

With the emergence of SM channels firms decided to engage in such communication channels to publicize themselves in a positive manner. Although SM channels are initially utilized mostly by the general public to extant a mirror image of themselves, firms can also use this to make positive impressions (Kaplan and Haenlein, 2010). In contract to the traditional communication channels the use of SM for managing reputation requires firms to form a dialog with the public (Aula, 2010). This interaction leads to create opportunities as well as threats when concerning reputation. As the messages contains positive and negative sentiments, firms needs to be aware of the mood in SM. These sentiments are shared in a real time and at a greater speed. Fast dissemination of information among users can lead to create reputational risk to the firms. As there is a tendency that the individuals take the information that is communicated via SM into their decision making process, the success and the competitiveness of the firms will be depended. However, when considering about the proses of using SM, firms have the option of understanding about their customers as well as other stakeholder interest and their ideas which can be directly shared and communicated to the firms.

Although SM enables firms to boost their reputation there are situations where it can also leads to damage the same reputation. Hence, it is advisable for the firms to give adequate consideration on SM and take necessary actions to manage such activities (Shamma, 2012). This reputation damage will have an effect on company’s value, their existence in the market as well as the trust of their stakeholders. However, in the era of traditional communication channels firms had much power in controlling the information that they present and share among their stakeholders, as then it was only a one way communication and no interaction can be made among firms and stakeholders. Another aspect on which the firms have less control is due to the real time circulation of information. This allows the users of SM to comment and share information among others promptly. Henceforth, with the emergence of SM firms no longer hold sole control over information which in turn result in influencing in firms reputation.

After evaluating the empirical studies it can be seen that there is a positive relationship between SM and corporate reputations. However, it is not possible to directly identify any research conducted to identify whether these is a relationship between Twitter mood analysis and CSR-reputation.
reputation rankings. Hence, this study enables to fulfill this research gap. It is significant to understand whether there is an impact on reputation ranking on Twitter moods. Moreover, if such impact is available then whether that would have a positive or a negative effect. It is worth to understand whether a particular firm is ranked better in the reputation indices, will lead to create positive feedback and favorable responses among users and with firms via Twitter and vice versa.

**Hypothesis:** CSR reputation ranking can generate positive Tweets

**Legitimacy Theory and Stakeholder Theory**

The theory of legitimacy relies on the social contract where it stated that the firm will comply with the societal actions and expectations of the general public (Deegan, 2002). It is considered to the insights or the expectations that the actions of the stakeholders are desired or appropriate. However, due to the rapid and dynamic change in the society it is vital for the firms to establish the fact they conduct their business operations legitimately and that they behave as a good corporate citizen. To ensure this fact most corporates use to disclose their social activities via corporate social reporting. In contrast it is argued on the quality and the reliability of the information that contained in these reports. However, with the era of SM most corporates decide to share their CSR information via SM channels. Similarly, CSR communication intends to provide information that legitimize firm’s behavior by taking actions to influence their image among stakeholders as well as the public. Irrespective of the method of communication channels, it is advisable for them to be cautious in not sharing any negative information which will lead to damage the reputation of the firm. To avoid such situations firms tends to disclose only positive information which will endeavor to set off any negative information (Adams, 2002). Corporates who fails to communicate such social activities will tend to create a threat to firms legitimacy. When the information is not properly communicated it will not be possible for the stakeholders to understand on the CSR activities that the firm has conducted.

As opposed to legitimacy theory which focuses on the society as a whole, stakeholder theory focuses on a particular group. Stakeholder theory stated that the managers have a moral obligation towards its stakeholders (Freeman, 1994). Firms are obliged to disclose financial as well as non-financial information such as, social and environmental information to their stakeholders. The theory has also elaborated in a descriptive manner by indicating how the various parties of the stakeholders should be defined. The categorization of the stakeholders are made based on their power, legitimacy as well as urgency (Mitchell, Agle and Wood, 1997). The information that firm share among their stakeholders play a vital role in obtaining their support and approval or their disapproval.

Scholars stated that both legitimacy and stakeholder theories are political economic theories as they both focus around social, economic and political framework (Gray, Kouhy and Lavers, 1995). Although both these theories differ conceptually, they have the same focus on firms and its operations. Similarly, both theories argues on the external pressure, which has an effect on firms and suggest on the approaches that can be taken to eliminate or minimize such adverse consequences. Firms need to conduct their business operations legitimately and socially acceptable manner while ensuring that they strike a balance between the interests of the stakeholders.

**METHODOLOGY**

In order to test the hypothesis the study selected six companies and their Tweets. The selected companies namely, Coca-Cola, Ford, General Electricals (GE), IBM, Nike and Pepsi, have been ranked among the top ten companies in the Social Media Sustainability Index from year 2011-2013. To identify the reputation rankings of the said firms, six reputation indices are selected
(Table 2). The selected company CSR reputation rankings were then identified manually to verify where they stand in terms of the reputation indices. Similarly, 776,589 Tweets with hashtags #ibm, #pepsico, #nike, #generalelectric, #ford and #cocacola were captured from 2 February 2015 10:54:09 AM to 16 May 2015 0:03:47 AM, using Tweet Archivist which uses the Twitter Search API. The Tweets are then mined with standard software R 3.2.1. With the use of an own mood detection script (Figure 1) the Opinion Lexicon, then counted the positive as well as negative and total words (Hu and Liu, 2004). Nonparametric correlations (Spearman) were computed with SPSS using the function of Bivariate Correlation.

**Table 2: Reputation rankings**

<table>
<thead>
<tr>
<th>Reputaon Indices</th>
<th>Institute</th>
<th>Publication</th>
<th>Reputation Rankings (2014)</th>
<th>Coca-Cola</th>
<th>Ford</th>
<th>GE</th>
<th>IBM</th>
<th>Nike</th>
<th>Pepsi</th>
</tr>
</thead>
<tbody>
<tr>
<td>The reputation of the most visible companies</td>
<td>Harris Poll Reputation Quotient</td>
<td>Nielsen</td>
<td></td>
<td>2</td>
<td>31</td>
<td>18</td>
<td>29</td>
<td>15</td>
<td>25</td>
</tr>
<tr>
<td>Worlds most admired companies</td>
<td>Hay Group</td>
<td>Fortune</td>
<td></td>
<td>6</td>
<td>51</td>
<td>10</td>
<td>16</td>
<td>13</td>
<td>42</td>
</tr>
<tr>
<td>World most ethical companies</td>
<td>Ethisphere</td>
<td>Forbes</td>
<td></td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Best 50 global green brands</td>
<td>Interbrand</td>
<td>Fortune</td>
<td></td>
<td>20</td>
<td>No</td>
<td>23</td>
<td>25</td>
<td>29</td>
<td>30</td>
</tr>
<tr>
<td>Global 100 most sustainable corporations in the world</td>
<td>Corporate Knights Magazine</td>
<td>Forbes</td>
<td></td>
<td>43</td>
<td>No</td>
<td>59</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>The companies with the best CSR reputations</td>
<td>Reputation Institute</td>
<td>Forbes</td>
<td></td>
<td>52</td>
<td>78</td>
<td>72</td>
<td>29</td>
<td>20</td>
<td>91</td>
</tr>
</tbody>
</table>
RESULTS

It was noted that the analysis can only be conducted for the reputation indices of ‘The reputation of the most visible companies’, ‘Worlds most admired companies’ and ‘The companies with the best CSR reputations’ (Table 3). As the other indices, namely, ‘World most ethical companies’, ‘Best 50 global green brands’ and ‘Global 100 most sustainable corporations in the world’ have the rankings of ‘Yes/No’, the system recognised it as a missing value.

Table 3: Correlation matrix

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nielsen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fortune</td>
<td>.886*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forbes</td>
<td>0.429</td>
<td>0.486</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>rep.rank.median</td>
<td>.886*</td>
<td>.829*</td>
<td>0.771</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>rep.rank.range</td>
<td>-0.2</td>
<td>-0.086</td>
<td>0.771</td>
<td>0.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>t.words.rel.pos</td>
<td>0.143</td>
<td>0.029</td>
<td>0.257</td>
<td>0.371</td>
<td>-0.029</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>t.words.rel.neg</td>
<td>-0.2</td>
<td>-0.543</td>
<td>-0.029</td>
<td>-0.143</td>
<td>0.086</td>
<td>0.314</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>t.words.total</td>
<td>0.371</td>
<td>0.486</td>
<td>-0.314</td>
<td>0.143</td>
<td>-0.714</td>
<td>0.2</td>
<td>-0.257</td>
<td></td>
<td></td>
</tr>
<tr>
<td>t.median.follower</td>
<td>-0.486</td>
<td>-0.771</td>
<td>-0.6</td>
<td>-0.543</td>
<td>-0.371</td>
<td>0.371</td>
<td>0.6</td>
<td>-0.143</td>
<td></td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level (2-tailed).
DISCUSSION
In reviewing the results it can be observed that Twitter moods do not correlate with CSR reputation rankings. Hence, the hypothesis that was developed to perceive the relationship between Twitter mood and CSR reputation ranking can be rejected.

Hence, the presumption of, if the CSR reputation rankings contains any inappropriate information etc. will not lead to change the mood of the society and vice versa. Moreover, the society doesn’t seems to notice such harmful events by the firms into consideration. Moreover, this study is a greenfield-approach to analyze vast data (non-structured data) from SM (Twitter) to evaluate companies CSR reputation.

CONCLUSION
The analysis of the study has fulfilled the research gap by identifying that there is no statistical correlation that can be noted significantly between Twitter mood and corporate reputation rankings. Consequently, the hypothesis can be rejected.

However, although CSR reputation rankings doesn’t have a direct impact on Tweets, it has the possibility in strengthening the corporate reputation. It can be said that it’s vital for the firms to allocate and invest in CSR activities which in turn has the potential in influencing and enhancing their reputation, mostly in the long term. Eventually CSR will not only boost the firm reputation but also lead to create a competitive edge among others in the market. Due to these gains from CSR most companies have now tends to integrate CSR to the vision, mission, objectives and company stagey.

Although many limitations come into play according to the complexity of the research hypothesis, a new methodological and theoretical framework can be developed.

REFERENCES


13-K12-2133

FINANCIAL MANAGEMENT OF CO-OPERATIVE SUGAR FACTORIES IN MAHARASHTRA STATE (INDIA), A STUDY WITH REFERENCE TO AHMEDNAGAR DISTRICT

DR. JAYASING BHOR

Post Independent India has made tremendous development in various sectors like Education, Agriculture, Technology, Health and industries. Most importantly agro-based industries and mainly sugar industry, doesn't remain an exception in this regard.

As per the recent census of 2011, India has crossed 121 crores of population, of which 76% lives in rural area and 74% people are dependent on agriculture. Though, it has proudly expressed that, India crossed 180 million tonnes in the production of food grains, whereas it is going to become stagnant and it may make compulsory to import food grains. This heavy population resulting in shortage, not only in food grains but also in sugar.

Sugar industry is the second largest agro based industry in India after textile. This is the only industry, which is located in rural part of the country. About 5 crores of sugarcane farmers, their dependents and large mass of labourers are involved in sugarcane cultivation, harvesting and ancillary activities. This constitutes 7.5% of rural population. Besides over 5 lakh of skilled and semiskilled workers, mostly from rural areas, which are employed in the sugar industry, the annual wage bill of the industry is around Rs. 1,000 core per year. “Presently industry contributes 15% of the world sugar production. Though there are over 700 and odd sugar mills which are under different stages of installation out of which 450+ mills are in operation. The yearly turnover of the industry goes to Rs. 30,000 crores and cane growers use to get Rs. 6,000 crores as sugarcane price”1. “The area under sugarcane cultivation comes 44 lakh of hectors in the country. The industry contributes to the state and central exchequers per year to the tune of Rs. 17,625 crores as state and central taxes. The sugarcane yield stands nearing 68 M.T. per/ha with 10 percent of sucrose recovery”2. “It is also noticed that, the recovery in Indian Sugar Industry is hovering around 10 percent since last 50 years”3. Recently the industry has gone for cogeneration and use to supply the surplus power to the national grid which is based on by-product i.e. bagasse. It has also started producing ethanol a renewable energy for blending with petrol at 5%.

First co-operative sugar factory was established in 1949 at Pravaranagar, Dist. Ahmednagar, M.S., the first of its kind not only in India, but also in Asia. The successful experiment of first co-operative sugar factory reflected a tremendous enthusiasm amongst the cane producers and leaders - having much concern in the development of economically weaker marginal farmers, - to establish more and more sugar mills, particularly in co-operative sector. “There are about 427 sugar factories in India, which have produced 98 lakh tonnes of sugar in 1998–99, of which 116 factories are from Maharashtra state. It is specially mentioned that about 30-40% of Indian sugar business is from Maharashtra only. In the year 2002-03 there are 453 sugar factories in India and amongst them 269 are co-operative; in Maharashtra there are 160 sugar factories out of which 145 are co-operative”4

India is amongst the top producers of sugar in the world. No doubt, it is matter of pride, but sadly we have to say that, we are importing sugar since 1979-80. Today our internal sugar consumption is going to cross 12 lakhs tonnes per month reaching to 155.36 lakh tonnes per year in 1999-2000, whereas to maintain this level of production, is itself a great challenge before Indian

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1 Dr. Jayasing Bhor, Associate Professor, Padmashri Vikhe Patil College.
sugar industry. So, there is need to introduce new sugar mills but also improve the performance of existing ones.

Sugar industry which is one of the largest and important industry is facing number of problems in current situation and passing through its critical phase. This may result not only in disturbing the industrial development but also in reducing national income. No doubt, such a big industry is being a debating subject due to certain drawbacks. Though many authors and researchers have attempted to cover different aspects of the sugar industry in their studies however, no attempt has been made to study the problems and facts of co-operative sugar factories as a special study, from industrially backward and draught hitted district like Ahmednagar. Therefore, it is necessary to find out detailed problem factors and realities of such an important industry, which is in crisis. Visualizing this void in industrial research phenomenon, the researcher has confronted himself to deal with the major reasons which led the performance of sugar industries in rural area towards less efficiency. Hence, as a native person of Ahmednagar district, the researcher has selected this same district for in-depth study and decided to go through the financial causes which stand as a fundamental problem. There are total 18 sugar factories in Ahmednagar district out of which 17 are co-operative sugar factories.

47-K13-2006

THE GROWTH-IPRS NEXUS IN OPEC MEMBER COUNTRIES: AN EMPIRICAL ANALYSIS

DR. NASSER AL-MAWALI²

This study employs a parsimonious model of economic growth to investigate the impact of intellectual property rights protection (IPRs) on the economic growth of OPEC member countries. The growth model is estimated in the context of the Hausman–Taylor estimation technique in an annualized panel data framework. The principal finding suggests that IPRs per se is not important factor in explaining the economic growth of OPEC member countries. However, the interaction between IPRs and trade have exerted a positive and significant impact on the economic growth of OPEC member countries.

18-K20-1968

ANALYSING THE ROLE OF FINANCIAL PERFORMANCE MEASUREMENTS IN THE SUSTAINABILITY OF SMES IN GAUTENG PROVINCE

MR. EMMANUEL IMUEZERUA³

Small and Medium Entrepreneurs (SMEs) contribute greatly in economies around the world. In South Africa, SMEs have a low survival rate as entrepreneurs start businesses without knowing how to turn it into sustainable business. Managing of business by the owners and managers is one factor in ensuring the continuous survival of businesses. The difficulty by most SMEs to move from the existence stage of growth to the other stages such as survival, success, take off and resource maturity motivated this study. This study aimed to analyse the financial performance measurements as it relates to SMEs sustainability in Gauteng province. Using the cross sectional

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² Dr. Nasser Al-Mawali, Assistant Professor of Economics, Sultan Qaboos University.
³ Mr. Emmanuel Imuezerua, Lecturer, Vaal University of Technology.
study approach, this study explored through semi structured interviews with five small and medium enterprises how financial performance is measured. The findings reveal the need to improve the owners/managers level of education and business management skills through training programmes and short courses. It is also revealed that more important ratios should be focused on by SMEs in the improvement of their financial performance measure. Also it was recommended that accounting specialised software which has financial ratios computed in them would be efficient in calculating the financial strength of the SMEs.

40-K21-2186

CUSTOMER SATISFACTION AT DELHI METRO RAIL CORPORATION

DR. SOMNATH CHAKRABARTI4 MR. B.S. KIRAN

In a hyper competitive world with multiple service providers, service quality is often projected as the key differentiator enabling companies to acquire, sustain and expand their customer base. Academicians and practitioners have advised companies to indulge in customer delight rather than just aiming at satisfying customers, if they want to create long-lasting customer engagement. Customer delight, however is not just a by-product of a ‘Good Service’ which every provider claims to, rather, it is the outcome of an organization working in a synergistic fashion with its stakeholders to achieve service excellence. In case of emergent economies like India, customer facing government owned entities have had a poor track record in public perception, often faltering both in terms of profitability as well as in customer satisfaction. Hence organizations which combine the efficiency driven work culture with public services are like ‘Islands of service excellence’. Delhi Metro Rail Corporation’s (DMRC) service culture has raised stakes and aspirations for millions of Indians, who now, driven by a growing economy and through global exposure are demanding higher standards of productivity and quality from its service providers on a consistent basis. Also, even while staying within the regulatory framework, set directly and indirectly in a political economy, DMRC has to continue to push the service bar higher and higher. This makes a compelling case for service excellence for an organization which has received critical worldwide acclaim from multiple stakeholders. This case study has explored the service architecture and customer centric organizational philosophy of DMRC which was ranked in September 2014, in a matter of a decade, the second among 18 international Metro systems in terms of overall customer satisfaction in a global online customer survey (41,000 respondents) conducted by the Global Metro Benchmarking Groups, NOVA and CoMET. With a daily ridership of around 2.5 million passengers and a growing network, it has managed to become a benchmark for other Metro networks both in terms of project management and service delivery. The main task of the DMRC has been to provide mass transit facilities in an overpopulated, highly dense and socio-politically sensitive capital city. The visionary leadership of DMRC and its ‘People first’ service philosophy has been instrumental in designing and delivering a service enterprise, rivalling international standards and creating “Value” to customers consistently and reliably. The timely completion of the mammoth project without any budget overrun and its operational effectiveness is a proof of the fact that given the right impetus and the dynamic organizational leadership, the much maligned public services too can deliver world class services. Despite constraints, it has ended up becoming the lifeline to the city and a tangible symbol of service excellence with global recognition with laurels from across the world (as will be highlighted in the case). It is a source of

4 Dr. Somnath Chakrabarti, Associate Professor, Indian Institute of Management Kashipur.
pride in an emerging economy. The case is the culmination of an extensive study. Interviews, discussions and dialogue with key decision makers and staff within DMRC and qualitative interaction with external stakeholders, including the citizens of Delhi, and quantitative survey have helped to objectively present the case. An understanding of its ‘Service philosophy’ and its impending challenges is not only intellectually stimulating but also practically relevant for all service providers of all hues.

5-K24-2239

LINKING TRANSFER PRICE TO INTERNAL CUSTOMER VALUE

DR. BULEND TERZIOGLU5 ALAN DYMOND

Interest in the notion of internal marketing and customer value gained momentum after 1980s and 1990s, respectively. Most studies on customer value to date have concentrated either on the external customers or on the goods. Continually increasing proportion of services in developed economies’ gross domestic product and proliferation of service industries necessitate understanding of transfer pricing for services. The marketing literature stresses importance of internal markets and satisfaction of internal customers as well as value-based pricing for overall profitability. Among other things, presence of relatively more common costs joint costs suggests the complex nature of pricing of services. It is not known if the concept of value-based pricing has made inroads particularly in intra-firm transactions for services. A survey was conducted to collect data from divisional managers of 80 service organisations in Australia. Exploratory factor analysis was used to assess the relationship among variables. Our findings suggest that the three major driving forces of internal customer value as perceived by divisions of service organisations consist of internal customer’s reliability, responsiveness and assurance. Internal customer value creation is identified as lower priority and internal customers show little interest in prices of services acquired internally. Consistent with earlier studies carried out mostly in external market contexts, the results of this study demonstrate the imperfect understanding of internal customer value in Australian service organisations, lack of implementation of internal customer concept in intra-firm exchange of services, and finally the haphazard approach to setting transfer prices. In the face of escalating trend towards outsourcing of internal functions and budgetary restrictions, this paper helps for divisional managers gain better understanding of current practice, and how customer value-centric transfer pricing can be used to enhance internal customer satisfaction and retention. Theoretical and practical implications are discussed, and directions for future research are offered. The present study therefore seeks to add to the very limited body of knowledge in this under-researched area of pricing and customer value. This study differs from previous research in some important ways. First, to the best of our knowledge, this represents a first empirical attempt to focus exclusively on the role of transfer price on internal customer value in a services context.

Keywords: transfer price, customer value, service sector

5 Dr. Bulend Terzioglu, Lecturer, Australian Catholic University.

11-K26-1958
FESTIVAL’S CONTRIBUTION TO CITY BRANDING
MS. CHARLOTTE HAEWEN LIM

City festivals are thriving and various types are held in many cities in the world. Some popular festivals are called a city's representative festival or powerful brand festival and they have been sponsored by the city government and/or private corporations. One reason is because festivals are acknowledged to be an effective marketing tool by both the government and corporations. Generally most cities in the world are making efforts to build their city brand for many reasons. A city has various resources in order to brand the city and festivals are one of the potential resources that can contribute to the city branding process.

To find out the contribution of festivals to city branding, this study investigates festivals with different types of sponsorship. However, this study does not aim to measure brand image or the outcomes of a festival. It is about how festivals are used within the city branding process. Therefore, this study is a discussion of how and why a festival contributes to city branding. The city of Seoul is used as a case study. Seoul and its festivals have received relatively little attention in the context of festival and tourism studies. From a practical perspective, it seems as though the city of Seoul has been struggling to build its city brand. Meanwhile, the number of Seoul’s festivals has increased rapidly since a decade ago. These issues are discussed in this research. Using a Korean city allows the research to explore the relevance of Western literature (e.g. on branding, and festivalisation) to a non-Western context.

To address the objectives of the study, research has been undertaken in Seoul, South Korea. A total of 46 semi-structured interviews with relevant officials have been conducted. Various secondary data have also been collected from the city government and festival foundations. The data have not yet been analysed, but political issues in the festival industry of Seoul were a strong theme in the interviews. This research must therefore comprehend the political background of Seoul's government to understand if, how and why festivals are used within city branding.

PERCEPTION OF EMPLOYER BRANDS IN A STRONG ECONOMIC REGION EVALUATED BY FUTURE MANAGERS
 PROF. DR. ALEXANDER H. KRACKLAUER7 DR. BIBIANA GRASSINGER

Employer branding has become a popular topic in the last years. Due to various factors the main challenge of companies in the next years will be to find the “right potentials”. Germany faces an aging society, which means that the working population (between 20 and 65 years) will decrease from 49.7 million (2010) to 42.1 million (2030). Moreover, the labour market is increasingly international and develops to a knowledge society. Generation Y (born 1980-2000), who is in the focus of this study, show different values than baby boomers and the generation X: they prefer to mix business and personal time, work to live and lifelong learning is self-evident. What is more, big companies are more attractive for job applicants. Most of them have already installed employer branding strategies to satisfy their needs of skilled personnel. As a consequence, especially small and medium sized enterprises (SMEs) have to struggle for excellent and suitable employees.

6 Ms. Charlotte Haewen Lim, PhD student, University of Westminster.
7 Prof. Dr. Alexander H. Kracklauer, Head of the Centre for Growth and Sales Strategy, Neu-Ulm University of Applied Sciences.
Based on the three-component-model of attitudes (ABC-model) future managers (students) were asked to evaluate the employer brands of companies located in a very strong economic region (external brand perception by the target groups). The employer brand consists of three components: awareness (cognition), sympathy (affection) and attractiveness as an employer (behaviour). Selection criteria for the companies were having the head office in the chosen region (strong economic region in the Southern region of Germany – industry, trade and services) and showing an annual turnover of more than 50 million €. In total, the employer brand of 66 companies was evaluated. It is assumed that the higher the awareness and the sympathy of a company, the higher the attractiveness as an employer. The questions for each company were as follows:

Awareness: Do I know the company from own experience, from friends and relatives and from the media? (5=very well known, 1=not known at all)

Sympathy: Is it a friendly/pleasant company? (5=very friendly, 1=not friendly at all)

Attractiveness as an employer: Would I apply for a suitable job at that company? (5=very attractive as an employer, 1=not attractive at all as an employer).

In total, 585 students at three universities of the region were surveyed. Taking the overall judge of the company (mean of the three data), one enterprise could reach a rate over 4. 45 companies (68%) show a rate under 3, which means their employer brands reached moderate results. Big corporations come first in the ranking of the best perceived employer brands, with very few SMEs as an exception (SME definition according to the Deloitte Mittelstands institut). SMEs especially have a problem referring to the awareness of their company, less difficult seems to be sympathy and their attractiveness as an employer. But: due to the lack of awareness, only few students will apply for jobs at SMEs. Sympathy and attractiveness as an employer show a significant high correlation (r=0.843). As SMEs are the backbone of the German economy, it is essential for them to work hard on their awareness as an attractive employer.

9-K39-2326

DEVELOPMENT OF A SUSTAINABLE PROJECT PORTFOLIO SELECTION FRAMEWORK FOR IT PROJECTS

MR. ABDULLA ALMAHRI

This research aims to develop a sustainable project portfolio selection (PPS) framework for the selection of IT projects. In this regard, after presenting the refined research aims, objectives and research questions, this report presents the need of such a framework and a summary of our completed state of the art literature review on existing PPS frameworks. This has been done to carefully evaluate the current state of the research in this area. Based on these initial findings, this report further discusses the defined methodological plan for the achievements of all defined research objectives. Moreover, it presents our up-to-date progress towards formulating a project portfolio selection frameworks evaluation methodology to evaluate existing PPS frameworks and to aid in achieving the overall objectives of this research. This PPS evaluation methodology also includes the suggested ranking of the PPS frameworks evolution criteria defined by the project portfolio experts in Abu Dhabi Police (ADP), which is selected case study organisation in this research. This report also presents the outcome of the practical application of resultant PPS evaluation criteria along with rankings on various selected PPS frameworks. Finally, interviews

8 Mr. Abdulla Almahri, PhD Student, Brunel University.
were conducted with selected project portfolio managers to select one best PPS framework suitable for ADP. As a result, the final outcome of objective 1 has been achieved. Finally the report is concluded with the intended future research direction, timeline for the reminder of research program and a summary of key milestones achieved during the last year.

KEYWORDS: Project portfolio selection, sustainability, project management.

15-K42-2248

EFFECTS OF EMPLOYEE OWNERSHIP ON EMPLOYEE SATISFACTION
DR. TAREK BEN NOAMENE⁹ SARA LOUADI

Our paper examines employees’ ownership as a mechanism that stimulates employee-shareholders’ efforts and encourages them to adopt positive working behavior. Nevertheless, the expected effects of employees’ ownership are not direct and need the inclusion of mediating variables. Our study proposes, then, to investigate the impact of employee ownership on organizational attitudes, analyzing, in particular, the influence of incentives. To this end, we conducted a questionnaire-based survey of employees of French companies listed on the SBF 250. Using structural equations modeling, we were able to conclude to the importance of the considered mediating variables. Indeed, we found a positive effect of political participation and employer’s abandonment on employee-shareholders’ investment propensity. However, the simultaneous modeling of all the mediating variables in a global model reveals the mixed effect of the presence of an administrator employee-shareholder.

43-K46-2243

COMPARATIVE ANALYSIS OF EARNINGS MANAGEMENT LEVELS AMONG VARIOUS SECTORS IN INDIA
DR. ASHU KHANNA¹⁰ MS. RAGHUVEER KAUR

Earnings management occurs when management manipulates the accounts and use discretion in financial reporting for its own advantage. Issues related to earnings management and financial reporting has now become significant for the various stakeholders of the company. The fall of giant enterprises such as Xerox, Satyam and Enron has shaken investors’confidence. Securities and Exchange Board of India has mentioned in its working paper that in India the average earnings management is 2.9% of the total assets. The average discretionary accrual reported in U.S is 1% which is very low as compared to India. Most of the researches have focused on developed economies like USA, UK and Europe. The empirical investigation on the state of earnings management in developing countries has not been examined to a great extent. The current study is an attempt to fill the research gap on the empirical study of earnings management in India. Objective of the study. The study attempts to detect earnings management levels across various sectors. It aims to find that whether earnings management is sector specific.

Research methodology: The study uses Modified Jones Model to detect earnings management that purports to compute discretionary accruals. The paper focuses on earnings

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⁹ Dr. Tarek Ben Noamene, Assistant Professor, Emirates College of Technology.
¹⁰ Dr. Ashu Khanna, Assistant Professor, Indian Institute of Technology.
management that happens by altering discretionary accruals. Positive discretionary accruals indicate that earnings have been overstated while negative discretionary accrual means that earnings have been deflated. Appropriate test have been used to analyze the variance among various sectors.

Data Collection: The study attempts to understand the state of earnings management in India for a period of four years (2010-2013) across seven sectors of India. The findings of the study are based on empirical analysis of the data obtained from more than thousand companies in India. The data for all the sectors were collected from capitaline database.

Findings and conclusion: Earnings management is more prevalent at small-sized companies in India, as compared to their medium and large-size counterparts. The presence of discretionary accruals is present in almost all the sectors under consideration. There is also variation in earnings management among various sectors. The study recommends improved corporate governance practices and action by regulatory authorities against company or industry, which indulge in high level of earnings management that is above the average threshold of the industry.

Key words: Earnings Management, Discretionary Accruals, Modified Jones model, Sectors in India, Corporate Governance

22-K47-2115

MOBILE MEDIA ENGAGEMENT AND ADVERTISING EFFECTIVENESS: THE EFFECT OF CONTEXT ON CONSUMERS’ RESPONSE’

MR. SHADI BADAWOOD11

The smartphone has created a new face of engagement, and extended our access points for news and information. This encouraged advertisers and consumers from different sectors to benefit from the functionality and interactivity of smartphones in general.

Smartphones have become an important technological tool that is used frequently even when consuming other media. Now, news “apps” such newspapers, magazines and TV’s news apps engage consumers frequently, and provide a new media context for advertisers, as consumers’ responsiveness might be higher when they are engaged with media.

The research would highlight the importance of comprehending the impact of media engagement on advertising effectiveness, which is critical for both advertisers and publishers. It aims to explore the impact of media engagement on consumer’s response to advertising in a smartphone news context. The research addresses a critical question: How does media engagement impact on consumer’s response to advertising in the context of smartphone news “apps”? In building the theoretical foundation, the uses and gratification theory has been used to understand how consumers use specific media contexts. Also, congruity theory has been used in several studies to describe the relationship between advertising material and the editorial content in a media vehicle.

In order to understand consumers’ reactions and responses to advertisements, the researcher needs to explore consumers’ experiences with smartphone media apps and how these experiences generate a new face of engagement. As experiences are usually inherently qualitative, this implies the appropriateness of a qualitative approach in this research.

11 Mr. Shadi Badawood, PhD Student, The University of Hull.
An interpretive and inductive approach will be adopted, since media engagement is assumed to be a subjective construction based on individual experience. Semi-structured interviews technique will be used in collecting the data. A considerable sample of 30 news apps users will be interviewed.

23-K54-2257

AN ASSESSMENT OF SOCIAL MEDIA’S VALUE IN BUILDING AND DEVELOPING A COMPETITIVE STRATEGY. A CASE STUDY WITH MICRO-FIRMS.

MS. NILAY BALKAN

The marketing literature observes that social media has the potential be used in a strategic manner. However, Tsimonis and Dimitraides (2014) assert that one of the biggest gaps regarding social media is how it can be used to achieve and support marketing objectives and strategies. It is important to understand this gap because the technological innovations have created a shift in consumer behaviour. More customers are spending time online and on social media platforms, with the digital and physical world becoming increasingly interconnected (Tiago and Verissimo, 2014). Academics and practitioners are aware of the importance of social media but are uncertain how to use it effectively. Many practitioners have resorted to using social media experimentally. This is particularly evident amongst small firms who lack the larger firm’s financial resources and their implicit ability to absorb inefficient experimentation.

However, the social media literature does not often differentiate between companies of different sizes. Small firms make up 96% of UK businesses (Ward and Rhodes, 2014) but much of the research has either been intended to be transferable to firms of all sizes or for larger organisations (eg. Kietzmann, et al, 2012; Malthouse et al, 2013) In fact, it is a recurring issue that the literature does not distinguish between large and small firms. This is despite the acknowledgment that small firms have different needs compared to medium sized or larger companies. Small firms contribute to the local and national economy, therefore the support given to such firms becomes all the more important to ensure a healthy economy.

It is recognised that small firms possess fewer resources and this creates difficulties in generating brand awareness and, ultimately, sales. This makes small firms even more vulnerable. Research that can support micro firms by providing insight and guidance into effective social media usage will be beneficial to their survival and growth. This is the intention of this research.

This research will be using mixed methods. There will be twelve case studies and data will be collected using semi structured interviews (café managers), questionnaires (customers) and the cafes’ social media pages will be analysed using content analysis. The sampling strategy for recruiting cafes will be purposive but, for practical reasons, a convenience sample will be used for customers.

This research intends to develop a model that can be used by the cafes to assist with their social media strategy. The model would also help to fill the gap regarding effective social media strategy. The qualitative approach taken is an additional value of this research; until recently most of the research on small firms and social media were quantitative. A qualitative study will provide a deeper analysis, and may also uncover new knowledge not previously discovered due to the limitations of quantitative research (Cresswell, 2007).

12 Ms. Nilay Balkan, PhD Student, Glasgow Caledonian University.
The main contribution of this research would be to help improve the competitiveness of cafés and, in turn, support their survival and growth. This is important because this sector provides both economic and social value to local communities.

57-K55-2280

WORKPLACE SPIRITUALITY, PERCEIVED ORGANIZATIONAL SUPPORT AND AFFECTIVE ORGANIZATIONAL COMMITMENT AMONG AUDITORS IN MALAYSIA

DR. NASINA MAT DESA13 DORIS KOH PIN PIN

The accounting profession in Malaysia is suffering from a syndrome called the “brain drain”, as our Malaysian accountants are flocking to other countries such as Singapore, China, Hong Kong, United Kingdom and the Middle East particularly the Gulf Cooperation Council (GCC) nations (Tomlinson, Abdullah Kolesnikov-Jessop, 2008). This research also revealed that the motivators for them to commit with their organization is “the intrinsic factors” and not “the monetary factors”. Hence the objective of this paper is to determine the relationship between the workplace spirituality, which is among the intrinsic factors in an organization, and the affective organizational commitment among auditors who are working in the big Four Accounting Firms in Malaysia.

This paper extends the Rego & Cunha (2008)’s research on the impact of the workplace spirituality and the affective organisational commitment. They found that workplace spirituality is one of the predictor of the affective organisational commitment. Their study was conducted in Portugal. We have conducted the study in Malaysia by included the perceived organizational support as a mediator. Perceived organisational support in this paper is defined as “the extent to which the organisational values their contributions and cares about their well-being” (Eisenberger et al, 1986).

The workplace spirituality is based on the five dimensions of workplace spirituality which included team’s sense of community, alignment between organisational and individual values, sense of contribution to the community, sense of enjoyment at work and opportunity for inner life.

The affective organisational commitment is defined as the emotional attachment to the organization (Allen & Meyer, 1996).

The respondents of this cross sectional study are the 300 auditors, who worked with the big four public accounting firms in Penang, Malaysia. They are Deloitte Touche Tohmatsu, Ernst & Young, KPMG and Pricewaterhouse Coopers.

This paper used the Partial Least Squares (PLS) approach to analyze the constructs. Findings from the Partial Least Squares analysis revealed that perceived organisational support was found to have a significant and positive relationship with affective commitment. Moreover, perceived organisational support was found to partially mediate the relationship between workplace spirituality and affective organisational commitment.

This paper therefore, highlighted the importance of managing the employee’s intrinsic value and the organizational support in fostering employees’ commitment. The limitation and direction for future research also were discussed.

58-K56-2232

13 Dr. Nasina Mat Desa, Senior Lecturer, Univeristi Sains Malaysia.

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GLOBAL LEADERSHIP DEVELOPMENT APPROACHES: ESCAPADES FROM MNCS IN INDIA

MS. AMRUTA GHOILBA14 DR. LATA DYARAM, ASSISTANT PROFESSOR

The world’s top performing organizations have acknowledged the fact that they need to embrace and develop global mind-set to compete successfully internationally. Towards this end, companies across the globe are not only sweating it out through training their leadership teams and high potential performers but also are committed to achieving multicultural competencies. They have not only focused on developing their employees’ knowledge and skills to plan, operate and deliver results globally but also prepare them with global orientation to develop global mind-set.

In this paper, we set out to explore global leadership development approaches adopted by multinational companies (MNCs) in India. The study was carried out in eight industry sectors with an attempt to understand global leadership development from emerging countries perspective. A qualitative study was carried out involving semi-structured interviews with 18 senior business leaders and 7 senior HR leaders from 20 MNCs. Data was analysed using MAXQDA.

We found that global leadership development practices are largely similar to the leadership development practices, only with greater international exposure either through expatriate experiences or working with cross-cultural teams for various projects. Based on the data we gathered, we observed that the leadership development practices have changed over the years due to changes in business environment, needs of the people and leaders. Top management was reported to play a significant role in global leadership development and in adopting best practices across their operations internationally. Business need, revenues, drive for going global, political and economic stability of countries where the companies operate are reported as some of the important driving factors for companies efforts towards global leadership development. Effectiveness of the global leadership development was found to largely follow Kirkpatrick’s model. In the same vein, participants also specified about actual employee development through performance metrics post training, program level evaluation through monitoring and involvement of senior leaders and organization wide effect through return on investment (ROI). Participants described identification of top performers and high potential leaders, job rotations, coaching & mentoring by senior leaders, tie-up with universities for various courses and programs, foreign assignments/projects, employing expatriates as some of the effective ways to develop global leadership in their organizations.

Study lends itself to few limitations in terms of small sample size, potential bias and subjectivity in content analyses and leader’s self reporting and presentation. Regardless of the above, findings provide insights and perspectives on current leadership development approaches adopted in different MNCs operating in India. We also explored how development practices have evolved in these firms, their driving factors and senior management’s role in implementation success. We specifically draw insights on current global leadership development practices, ways of measuring the effectiveness of these practices and the best practices across various companies from different sectors. These may be resourceful for organizations which may not follow a structured approach towards leadership development.

Keywords: Leadership development, Global leadership development practices, Qualitative, Multinational companies

14 Ms. Amruta Gholba, Research Scholar (Masters), Indian Institute of Technology Madras.
10-K59-2331

THE BLACK BOX OF CSR-FP RELATIONSHIP EXPLAINED; AN EVIDENCE FROM TWO COUNTRIES.

DR. HAROON UR RASHID KHAN

This study has investigated the role of innovation and productivity as mediating factors between Corporate Social Responsibility (CSR) and firm’s performance (FP). The objectives of this research are to design and empirically test a theoretical model to discern the factors that potentially mediate the path between CSR and firm’s performance. The theoretical model is inferred from the existing literature which comprises of a variety of variables such as CSR, Innovation, Productivity, and Performance. Several hypotheses are generated to inspect the model. The data is collected for the 355 CSR practicing firms, 197 from Saudi Arabia and 158 from France, both among the G-20 economies. The psychometric properties of data are checked along with reliability and validity tests. Confirmatory Factor Analysis (CFA) lead to factor structure and measurement model which was subsequently tested using Structural Equation Modeling (SEM) path analysis. The results validate the hypotheses, exhibiting remarkable research and managerial implications. Two Sub-samples help in predictive validity of the hypothesized model. As a major contribution, CSR-FP relationship is found to be much complex and indirect, which is mediated through the factors of innovation and productivity. The study has empirically proved the business case for CSR in general by mining deep into the CSR-FP relationship. CSR practices are found to enhance innovation and productivity indirectly resulting in better financial performance. The study also endorses the adoption of CSR practices by firms and MNEs operating in the both developing and developed countries. This model is instantly useful for business managers who seek a competitive solution for overcoming a business crisis while being a part of the international business settings.

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LINKING TRANSFER PRICE TO INTERNAL CUSTOMER VALUE

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Interest in the notion of internal marketing and customer value gained momentum after 1980s and 1990s, respectively. Most studies on customer value to date have concentrated either on the external customers or on the goods. Continually increasing proportion of services in developed economies’ gross domestic product and proliferation of service industries necessitate understanding of transfer pricing for services. The marketing literature stresses importance of internal markets and satisfaction of internal customers as well as value-based pricing for overall profitability. Among other things, presence of relatively more common costs joint costs suggests the complex nature of pricing of services. It is not known if the concept of value-based pricing has made inroads particularly in intra-firm transactions for services. A survey was conducted to collect data from divisional managers of 80 service organisations in Australia. Exploratory factor analysis

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was used to assess the relationship among variables. Our findings suggest that the three major driving forces of internal customer value as perceived by divisions of service organisations consist of internal customer’s reliability, responsiveness and assurance. Internal customer value creation is identified as lower priority and internal customers show little interest in prices of services acquired internally. Consistent with earlier studies carried out mostly in external market contexts, the results of this study demonstrate the imperfect understanding of internal customer value in Australian service organisations, lack of implementation of internal customer concept in intra-firm exchange of services, and finally the haphazard approach to setting transfer prices. In the face of escalating trend towards outsourcing of internal functions and budgetary restrictions, this paper helps for divisional managers gain better understanding of current practice, and how customer value-centric transfer pricing can be used to enhance internal customer satisfaction and retention. Theoretical and practical implications are discussed, and directions for future research are offered. The present study therefore seeks to add to the very limited body of knowledge in this under-researched area of pricing and customer value. This study differs from previous research in some important ways. First, to the best of our knowledge, this represents a first empirical attempt to focus exclusively on the role of transfer price on internal customer value in a services context.

Keywords: transfer price, customer value, service sector