The Influence of Innovation Strategies on Employees’ Job Performance of UAE Government Sector

Mohamed Ahmed Lari, Norhadilah Binti Abdul Hamid, Shafie Bin Mohamed Zabri

Abstract—This study is applied to the government sector in the UAE, to ascertain the Role of Innovation Strategies on Employees’ Job Performance. 250 Questionnaires are distributed to the sample of operations staff in the Ministry of Culture, Youth and Community Development of UAE to find out the effects of innovations on employees; job performance. Similarly, Quantitative analysis using SEM were used to evaluate and measure a relatively large sample in order to test hypotheses and examine relationships between variables. The findings revealed that, Organizational innovation has a direct and positive prediction on Technology. In addition, as anticipated, Product Innovation, Process Innovation and Marketing Innovation were adversely connected with the Employees’ Job Performance. On the other hand, the examination didn’t discover any help for the set positive effect of Product Innovation, Process Innovation and Marketing Innovation on Technology. The non-noteworthy effect of Product Innovation, Process Innovation and Marketing Innovation on Employees’ Job Performance and Technology was expected mostly to co-sharing of fluctuations with different IVs in the mind bogging model.

Keywords: Product Innovation, Process Innovation and Marketing Innovation, Job Performance and Technology

1. INTRODUCTION

Innovation is an important component of the economic growth of a country and is fast becoming a public sector (Fu et al., 2011; Fagerberg et al., 2010; Hall, 2011). Until recently, the sector has been undermined by a lack of protective rules and truly diverse options. The advancement of technology has made data storage and processing power faster and cheaper. Browsing the Internet has become a preferred weekend activity for many. Increased reliance on robotic process automation (RPA) is one of the main areas of innovation.

Over the next 15 years, some analysts suggest that at least half of the public sector - and perhaps three-quarters of back and middle office jobs - will be employed by the RPA. And it’s not just administrative roles. Today's complex world requires unprecedented technology with speed, accuracy and cost efficiency - far beyond what a human can provide. That is why government agencies are increasingly turning to RPA and AI-driven cognitive automation to transform their businesses (Pera, 2017). It illustrates the importance of innovation in improving job performance. The present study focuses on the role of innovation in employees’ job performance.

Joseph Schumpeter was regarded as the father of innovation from his primary work in 1934, where he argued that economic development drives innovation through a process of “creative destruction.” He argues that innovations can be considered “radical” when they create large disruptive changes, but these innovations can be considered "incremental" if they produce small improvements that create a slow change process (Villanova et al., 2012). Most studies of innovation depart from this framework.

In order to become innovative, an organization must develop its innovation capability, which "includes factors that affect a firm's ability to manage innovation" (Rhee et al., 2010). The concept of innovation capability includes: Innovation potential, which includes factors that affect the current innovation capability. Factors reflect the ability of firms to produce innovations. And innovation processes, which are systems and operations that enable organizations to utilize their innovation potential and therefore initiate innovation. They are the way systems and activities are organized (Saunila et al., 2012; Nagano et al., 2014).

These capabilities must be applied to a variety of innovations. From the literature on innovation, it can be concluded that innovation is about its strategies and types of problem solving, thinking outside the box, going beyond radical innovation, and learning. The United Arab Emirates (UAE) is one of seven states in the process of developing plans to become a commercial and industrial hub of the Middle East and North Africa (UAE MFT 2012).

It is considered one of the fastest growing markets in the region and one of the most innovation-oriented economies in the Arab world. As it shifts from an oil-based economy to a knowledge-based economy that integrates into the global market economy, it requires a large investment in infrastructure and requires changes in the free market system. It hopes to attract businesses and investment from many parts of the world by adopting an external-oriented development strategy, prioritizing economic policy reform and diversification, and streamlining foreign investment regulation (Hsu, &Ziedonis, 2013). It combines the features of developed and emerging market economies by creating a hybrid environment and provides a combination of challenges and opportunities for companies of all sizes to adapt to their existing business models and create new market conditions (Hussain, 2013).
Of the seven states in the UAE, the state of Dubai is the focus of this study because it enables greater reforms, greater economic and market growth, and a stronger position in the business world (UAE MFT 2012; OBG 2016). It reflects the characteristics of the UAE economy in the areas of infrastructure, business activity, investment destination, competitive environment and economic and social change.

As an emerging market, Dubai has achieved significant levels of modernization, industrialization and rapid economic growth, which is considered a transitional phase between the emerging and the developed market economy (El Mallah, 2014). It is developing into an emerging market economy with a strategic plan to increase local debt and equity market liquidity, set up a market exchange and regulatory body, provide opportunities for foreign direct investment, sourcing and trade, and adopt international technology. Establish a solid foundation and maintain competitive advantage in the era of knowledge-driven economies (UAE MFT 2012; OBG 2016).

There are a wide variety of innovation strategies that can be activated under different types of innovations, such as proactive strategy, active strategy, reactive strategy and passive strategy (Dodgson et al., 2008). Joseph Schumpeter proposes that there are five types of innovation: 1) the introduction of new products, 2) the introduction of new product lines, 3) the opening of new markets, 4) the development of new resources for raw materials or other inputs, and 5) new market structures in the creation industry.

The competitive environment has changed in many countries and in many companies (irrespective of size and sector), as production is more technology-driven and knowledge-based, and competition has become globalized and more innovation-oriented. Firms recognize the importance of being able to adapt and maintain innovation to survive today's global market economy and achieve long-term success, overcome intense competition and meet changing market demands (Elonen, Jantunen & Kuvalinnen 2011).

Small and medium enterprises also need to look for new strategies and business models, introduce new and improved products and services, and consider new knowledge and technologies. Despite the size of firms, innovation is considered to be of paramount importance in creating economic values and competitive advantage and with great leverage in driving change (Alvarez, Barney, & Anderson, 2013).

In this study, the following four dimensions of job performance are the dependent variables: task performance, contextual performance, positive performance, and negative productive work behavior. According to a previous brief review, the problem of the study is that it examines the impact of different types of innovation (services, process, organizational and marketing) on different aspects of job performance (task, contextual and adaptive). In the public sector in the UAE, performance in relation to counterproductive work behavior, this research wants to study the relationship between innovation strategies/practices and job performance.

II. LITERATURE REVIEW

A major vehicle for organizational adaptation and change, especially for scarce resources, is changing the dynamic business environment, fierce competition and customer demands for improved quality (Burgessonetal., 2014; Jansen et al., 2006). Dharmadasa (2009) argues that innovation can be seen as a major competitive area in the world for many firms of the same industry.

Companies face great challenges and challenges in an ever-changing environment; High cost of research and development (R&D), low product lifecycle, geographically dispersed innovation teams, increasing complexity of products and rapidly changing markets. Therefore, in order to overcome the above challenges and increase the efficiency of innovation, some companies have built innovation networks (van der Walck, et al. 2011).

The OECD reports that organizations that have created developments in an increasingly conclusive manner and quicker, have progressively qualified laborers, paid more significant compensations, and gave increasingly solid likely arrangements to their workers. Undoubtedly, the impacts of developments on organization execution differ over an expansive range from deals, piece of the overall industry, and gainfulness to profitability and productivity (OECD Oslo Manual, 2005).

Imaginative execution effectively affects long haul organizations' item, advertise and money related execution; However, for the time being, speculations started and usage of inside assets may cause misfortunes first. Rebellious and Anderson (1996) expressed that the selection of new advances for development may have an underlying punishment.

Correspondingly, Damanpur and Ivan (1984) underscore that normally the term of a period can be surpassed to watch the constructive outcomes of advancements on firm execution. Hence, the impacts of inventive exhibition are first connected with the non-money related parts of corporate execution, for example, expanded consumer loyalty or item speed, which at that point prompts higher monetary returns. When imaginative execution is upgraded, item and showcasing exhibitions will likewise improve, and afterward through their intermediation, monetary execution will start to improve, and others, (2011).

III. METHODOLOGY

For the purpose of this research, this study is applied to the government sector in the UAE, as Raja & Wei (2014) agreed that innovation methodologies in the private sector are still applicable in the public sector. The questionnaires are distributed to the sample of operations staff in the Ministry of Culture, Youth and Community Development of UAE to find out the effects of innovations on employees’ job performance. The selections of the actual respondents were arrived at through stratified random sampling of the population. In view of that, two hundred and fifty (250) staffs form the sample size of this research as classified below: management staffs 50, HR staffs 50,
employee relations staffs 50, operations staffs 50 and training staffs 50. The sample frame was made up of five dimensions (management, HR, employee relations, operations and training staffs) all within the ministry of culture, youth and community development UAE. This study applied Quantitative analysis, because of its capability to evaluate and measure a relatively large sample in order to test hypotheses and examine relationships between variables.

This research used five Likert scale from strongly disagree to strongly agree. The survey instruments used for this study were validated scales, used by reputable researchers in this field. Despite the fact that all the constructs rooted from the literature, their validities were further tested using SPSS 20.0 for internal validity and overall scale reliability. As clearly depicted, this research revolves around the three working hypotheses that formed the basis of the research framework. Now, attempts have been made to bring to limelight the construct embedded in each of the research hypotheses as reviewed from the literature, along with their levels of reliability. Before that, it’s worthwhile to recognize that different schools of thought viewed the issue of reliability differently. While some held the view that the value of the Cronbach’s alpha should be > 0.8, others suggested alpha = 0.7, but the most “lenient” authors consider the 0.6 <= alpha < 0.7 range suitable for exploratory purposes (Garson, 2012).

However, in the literature, PLS-SEM is viewed as an appropriate method for examining the relationships between less rigid and LVs. Despite all the criticism, recently PLS-SEM has been increasingly applied in various fields. This makes the PLSEMM method more robust in estimating the structural model. PLS-SEM is seen as an alternative method when CB-SEM does not meet distributional expectations (Hair et al., 2011). Therefore, in determining which statistical method is suitable to use, this study follows the rules of thumb proposed by Hair et al. (2011) to choose between CB-SEM and PLSSEM.

The focus of the analysis in this study does not include measuring model volatility. The focus of this study is the impact of innovation strategies on the job performance of employees in the UAE Ministry of Culture, Youth and Community Development. Therefore, it is important to use latent variable (LVs) scores to examine the underlying relationship between LVs. This study uses a large number of LVs and complex modeling of the research model. According to (Hair et al. 2016; Klein, 2015), PLS is suitable for large complex models with many latent variables consisting of 100 constructs and 1,000 indices. Therefore, the focus of this study is to test relationships according to prior theoretical knowledge. The ability of PLS-SEM to evaluate the interactions between residues and their effects on the model makes this technique an appropriate approach used in this research.

IV. FINDINGS

After satisfying the need for measurement model validity, the SEM analysis was used to estimate the causal relationship between the exogenous variables (product innovation, market innovation, process innovation and organizational innovation) with the intervention variable (technology). And the exogenous variable (job performance).

Figure 1 shows the initial output of the first structural model. Although other fitness indicators achieved, some indicators did not meet acceptable levels. For example, all the observed factor loadings and their associated square multiple regression meet the required thresholds of .50 and .30, respectively. With respect to fit indices, RMSEA, CFI and GFI do not satisfy the criteria for acceptance, but only p-value values that are reported within the acceptable limit. This suggests that model re-specification is required.
A re-specified model is presented in Figure 2. The model re-specification is carried out by freeing off some parameters through co-variation. As shown in figure 2, all the fitness indexes are achieved.

![Figure 2: Final structural model](image)

Table 1 shows a summary of the fitness indexes obtained from the initial and final structural model. The analysis indicated that the final model satisfied all the necessary requirements for model acceptance.

<table>
<thead>
<tr>
<th>Category</th>
<th>Parsimonious fit</th>
<th>Absolute fit</th>
<th>Incremental fit</th>
<th>Absolute fit</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fitness Indexes</td>
<td>Chisq/df ≤ 30</td>
<td>GFI ≥ .90</td>
<td>CFI ≥ .90</td>
<td>RMSEA ≤ .08</td>
<td>Fitness level achieved, model accepted</td>
</tr>
<tr>
<td>Acceptance Threshold</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial Structural Model</td>
<td>1.774</td>
<td>.779</td>
<td>.841</td>
<td>.701</td>
<td>Fitness level not achieved, model not accepted</td>
</tr>
<tr>
<td>Final Structural Model</td>
<td>1.225</td>
<td>.907</td>
<td>.980</td>
<td>.902</td>
<td>Fitness level achieved, model accepted</td>
</tr>
</tbody>
</table>

Table 1 presented the standardized regression coefficients of the direct relationships of Product Innovation, Market Innovation, Process Innovation, Organisational Innovation and Technology with the endogenous construct Job Performance. From Table 1, it is shown that all the direct relationships reported positive effect. However, only the path $JP \rightarrow \text{Org}_\text{Inno}$ indicated a statistically significant effect ($\beta = .892; \text{CR} = 5.517; p > .05$) the remaining path coefficients are not statistically significant.

All together, the four exogenous constructs together with the mediating construct explained 84 percent variation in Job Performance. Additionally, the table also presents the path relationship between the mediator construct, Technology and the four exogenous constructs (Product Innovation, Market Innovation, Process Innovation, and Organisational Innovation). From the result, it is shown that collectively the four exogenous constructs explained less than 1 percent variability in Technology.
Table 2: Standardized regression weight of the path relationship

<table>
<thead>
<tr>
<th>Path relationship</th>
<th>Estimate</th>
<th>S.E</th>
<th>C.R</th>
<th>P-value</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>JP ← Prod_Inno</td>
<td>.111</td>
<td>.107</td>
<td>1.201</td>
<td>.230</td>
<td></td>
</tr>
<tr>
<td>JP ← Mkt_Inno</td>
<td>.125</td>
<td>.092</td>
<td>1.326</td>
<td>.185</td>
<td></td>
</tr>
<tr>
<td>JP ← Proc_Inno</td>
<td>.084</td>
<td>.103</td>
<td>.889</td>
<td>.374</td>
<td></td>
</tr>
<tr>
<td>JP ← Org_Inno</td>
<td>.892</td>
<td>.064</td>
<td>5.517</td>
<td>***</td>
<td></td>
</tr>
<tr>
<td>JP ← Techn</td>
<td>.016</td>
<td>.039</td>
<td>.174</td>
<td>.862</td>
<td></td>
</tr>
<tr>
<td>Techn ← Prod_Inno</td>
<td>.062</td>
<td>.187</td>
<td>.877</td>
<td>.381</td>
<td></td>
</tr>
<tr>
<td>Techn ← Mkt_Inno</td>
<td>-.004</td>
<td>.161</td>
<td>-.052</td>
<td>.959</td>
<td></td>
</tr>
<tr>
<td>Techn ← Proc_Inno</td>
<td>-.074</td>
<td>.182</td>
<td>-1.027</td>
<td>.305</td>
<td></td>
</tr>
<tr>
<td>Techn ← Org_Inno</td>
<td>-.180</td>
<td>.066</td>
<td>-2.482</td>
<td>.013</td>
<td></td>
</tr>
</tbody>
</table>

*** indicates significance at p<.05

V. CONCLUSION

It is often seen that innovation strategies are a major problem in establishing, developing, and maintaining the job performance of successful employees (Jimenez and Sanz-Valle, 2011; Bell, 2005; Cho and Pusik, 2005; Gopalakrishnan and Damanpour, 1997; Damanpour, 1996; Fyol, 1996). Comparative Business for Innovation Strategies and Employee Job Performance Technology plays an important role in raising rayojananni. However, with respect to employees’ job performance, it is important to understand innovation strategies but in particular cases scholars do not consider this (Jankingtong et al., 2012; Schmillan, 2016). It has likewise been uncovered that there are some driving variables behind advancement methodologies, which can be thought of as a model to approve debates.

To decrease the exploration question, there has been a broad survey of the writing to layout the precursors of advancement systems for workers’ activity execution in an assortment of settings, including rising local substance. Potential forerunners incorporate item development, process advancement, hierarchical development and showcasing advancement. An exploration worldview has been created to approve the proposed ramifications of these predecessors of advancement procedures 'relationship with representatives' activity execution.

The proposed and contending models were tried utilizing AMOS, and with certain changes the proposed model (Figure 1) was seen as better than the contending model as far as miserly model fit and informative force. The fit records of the amended proposed model (Figure 2) show an excellent model fit (TLI = .977, CFI = .980, NFI = .902, GFI = .907 and RMSEA = .027). The changed proposed result model, the two different ways significant and hypothetically legitimized. More or less, the consequences of the reconsidered proposed model yield recommend that hierarchical advancement has an immediate and positive effect on workers' work execution.

Essentially, the modified proposed model recommends that yield has an immediate and positive assessment on authoritative advancement innovation. What's more, item development, process advancement and promoting development are adversely connected with representatives 'work execution. Interestingly, the examination found no help for the positive effect of promoting development on item advancement, process development and innovation. Non-huge effect of Product Innovation, Process Innovation and Marketing Innovation on workers’ activity execution and innovation is co-imparting the distinctions to different IVs in an intricate model.

REFERENCES


AUTHORS PROFILE

MOHAMED AHMED LARI is a PhD student at Universiti Tun Hussien Onn, Malaysia at Department of Technology Management. Faculty of Technology Management and Business

Dr. NORHADILAH BINTI ABDUL HAMID is a lecturer at Universiti Tun Hussien Onn, Malaysia at Department of Technology Management. Faculty of Technology Management and Business

Dr. SHAFIE BIN MOHAMED ZABRI is a lecturer at Universiti Tun Hussien Onn, Malaysia at Department of Technology Management. Faculty of Technology Management and Business