INTELLECTUAL CAPITAL AND COMPETITIVE ADVANTAGE

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Abstract - Organizations have long since been focused on being innovative. In the current market scenario, it is no longer a choice to be innovative, but rather a necessity. Being innovative not only helps the organizations become more competitive through their presentation of better products and services, but also makes it harder for others to steal their innovations since they would possess the necessary intellectual capital that was not or would not be present to those who are attempting to take the same. Over the years, KM systems or knowledge management systems have but been a major influence over various factors of organizational literature given the fact that they have helped the companies better acquire, store, process, retrieve, and apply knowledge. Therefore, intellectual capital has gone a long way towards ensuring that the organizations have increased their competency. However, in the Middle East and GCC, there exists a lack of proper/formal research on the subject as has been mentioned by previous researchers who attempted to study on how the variable of knowledge management (KM) has impacted other variables. To bridge this gap, this study focuses on 1 independent variable, knowledge management, and 3 dependent variables including innovation, relationship management, and organizational performance. With a survey thus designed to determine how those variables react with each other, about a population of 77 managers were surveyed in a sample size of 43 individuals with a 95% confidence level and a 10% margin of error. From the data collected, it could be determined that all 3 hypotheses in the study were accepted meaning that internal knowledge management (KM) did indeed have impacts on variables including innovativeness, relationship management, and organizational performance.

I. INTRODUCTION

Organizations need to be fast and innovative for them to survive in the market; however, at times or at some point, they all tend to slow down based on growth. In such cases, organizational performance is affected; as managers, the primary focus here is about understanding and making sure that whichever variables seek to affect the organizational performance in general.

Companies in the UAE do not have as much literature available to them in the basis of local context over what might affect the factor of organizational performance or even how intellectual capital might play a role or an important role in determining the competitive advantage of the organization (Abdul, 2018).

Research by (Copper, 2017) shows or demonstrates that further there is a dearth or lack of research material based on which organizational performance can be measured or checked.

In fact, compared to the efforts made by UAE organizations or GCC countries' companies in general to find out ways to boost their competitive advantages, there isn't enough research literature when viewed or checked from the perspective of knowledge management.

Therefore, to enable the organizations in the UAE and GCC to better determine how their organizational performance can be improved through the application of factors relevant to knowledge management in their organizations, this research study attempts to bridge the gap and ensure that the practical efforts of the organizations are supplemented with academic literature for their study (Abdel Nasser, 2012). There might be more than 1 target audience for this report; the biggest audience in this case would be those people who were trying to understand the impact of internal knowledge management (KM) based on organizational performance, innovativeness, and relationship management.

Therefore, they would be the ones who would be focusing primarily on this study. Secondly, this study also perhaps would list the managers who are dealing with knowledge management (KM) systems to be more eager or enthusiastic regarding the findings of this study, because it would perhaps enable them to research the topic on a deeper level.

II. INTELLECTUAL CAPITAL AND COMPETITIVE ADVANTAGE

In cases where the company or firm does not have a sufficient level of human capital or intellectual resources, they may not be capable of employing the best methods or strategies to utilize the other resources available better or optimally to them. Indeed, while every firm has machinery and tangible resources, it is the intangible resource of knowledge that helps develop them to maximize shareholder value and firm's performance over any period (Ahmed, 2015).

While it may be certain that the term has been defined in varying ways or focuses across a variety of contexts, there may be some basic assumptions or notes that have been made while the same has been

done. In other words, 'intellectual capital' refers to the sum of all knowledge management capabilities and resources thereof that are available to an organization at any period or instance of time; it may also refer to the total knowledge present in the firm and its internal and external stakeholder relationships (Jafar, 2014).

Another way to define the word is, intellectual capital is all the knowledge of information possessed by an organization that can help them develop a competitive advantage against their competitors or rivals. Hence, it is the broadest term which refers to all the knowledge resources that are possessed by an organization or firm which when continually renewed can ensure that the organization continues to obtain a superior position in the market as opposed to their competitors.

III. COMPONENTS OF INTELLECTUAL CAPITAL

Intellectual capital, as previously reported, is a broad term. It includes all the various terms and forms and components of knowledge that are available to an organization; when managers consider their objective to increase the intellectual capital of an organization, they mean (or perhaps intend) to increase the total sources and sum of all knowledge that is available or present to a company.

However, this objective in general does not match well given its lack of specificity. In perspective, intellectual capital has 3 main components (although those may be different depending on how the model has been proposed).

There are two main models of intellectual capital that suggest two alternative perspectives over what exactly is intellectual capital comprised of; this includes the traditional model and the modern model. Both are worthy of discussion given the context of literature that elaborates on the subject.

With regards to application, there aren't several significant differences between them, but the main element of distinction that sets them apart is the point of view they have been approached by). The traditional model considers it from the organizational-environment kind of perspective while the modern model considers it from the element/role kind of perspective.

H1: Innovation is influenced by Internal Knowledge Management (KM)

The first hypothesis of the study suggests that relationship management influences innovativeness at an organization; in other words, the company or organization is likely to innovate more frequently or effectively depending on how efficiently they have maintained their relationships with their stakeholders. The relationship management aspect explains that organizations need to ensure that they are quite capable when it comes to building strong relationships with their various stakeholders such as their suppliers, employees, customers, government authorities, etc. and this alone helps them determine how should they improve their intellectual capital acquisition capabilities.

In this case, the innovations of the company would be based such that they help improve the management's relationship with the stakeholders.

Hence, the premise of relationship management and the improvisation thereof helps the company continually innovate as per the requirements of their stakeholders with whom they interact professionally.

H2: Relationship Management is influenced by Internal Knowledge Management (KM)

Internal knowledge management (KM) practices are quite important because they directly determine how the company makes use of the intellectual information or capital that it has access to. In this case for the organization, the main element of focus would be the ability of the organization to derive the benefits through and with the help of which the same would be functioning directly in the case of its own.

H3: Performance of the organization is influenced by Internal Knowledge Management (KM)

Finally, at the organizational level, the performance of the company would have to be managed by the internal KM system as well. Organizational performance is an important factor because it helps determine how well a company focuses on its strengths and uses what it must get what it doesn't. In any case, internal KM systems can help an organization leverage its knowledge capital more efficiently.

Research Hypotheses

- H1: Innovation is influenced by internal knowledge management.
- H2: Relationship management is influenced by internal knowledge management.
- H3: Performance of the organization is influenced by internal knowledge management.

Sample size

The picture given here shows that the population size was about 77 individuals (IT managers who were experienced in the implementation of internal knowledge management systems) out of which there was a confidence level of 95% and a 10% margin of error which then gave away the sample size of 43 to be the optimal figure for the analysis of this research study's computation.

Research Analysis

H1: Innovation is influenced by Internal Knowledge Management

Dependent Variable: INN
Method: Least Squares
Sample: 1 43

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.513898	0.189855	2.706785	0.0099
IKM	0.672657	0.079412	8.470435	0.0000

R-squared	0.636358	Mean dependent var	2.000000
Adjusted R-squared	0.627489	S.D. dependent var	0.779499
S.E. of regression	0.475757	Akaike info criterion	1.397577
Sum squared resid	9.280142	Schwarz criterion	1.479493
Log likelihood	-28.04791	Hannan-Quinn criter.	1.427785
F-statistic	71.74827	Durbin-Watson stat	1.545715
Prob(F-statistic)	0.000000		

H1: Innovation is influenced by Internal Knowledge Management
The results obtained from the regression show that the Adjusted R-squared value is 0.62. Since the t-statistic is 8.47, this hypothesis is accepted and since the Probability of F-statistic is less than 0.05, this model is valid. The result indicates that innovation in the organization is influenced by internal knowledge management. The Hypothesis H1 is accepted.

H2: Relationship management is influenced by Internal knowledge management

Dependent Variable: RM
Method: Least Squares

Sample: 1 43

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.204340	0.162997	1.253641	0.2171
IKM	0.953123	0.068178	13.97991	0.0000

R-squared	0.826593	Mean dependent var	2.310078
Adjusted R-squared	0.822363	S.D. dependent var	0.969117
S.E. of regression	0.408453	Akaike info criterion	1.092516
Sum squared resid	6.840195	Schwarz criterion	1.174433
Log likelihood	-21.48910	Hannan-Quinn criter.	1.122725
F-statistic	195.4379	Durbin-Watson stat	1.717133
Prob(F-statistic)	0.000000		

H2: Relationship management is influenced by Internal knowledge management
The results obtained from the regression show that the Adjusted R-squared value is 0.82. Since the t-statistic is 13.97, this hypothesis is accepted and since the Probability of F-statistic is less than 0.05, this model is valid. The result indicates that relationship management is influenced by internal knowledge management. The Hypothesis H2 is accepted.
H3: Performance of the organization is influenced by Internal Knowledge Management

Dependent Variable: PER
Method: Least Squares

Sample: 1 43

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.411060	0.292404	1.405793	0.1673
IKM	0.940267	0.122306	7.687726	0.0000

R-squared	0.590414	Mean dependent var	2.488372
Adjusted R-squared	0.580424	S.D. dependent var	1.131204
S.E. of regression	0.732734	Akaike info criterion	2.261327
Sum squared resid	22.01285	Schwarz criterion	2.343243
Log likelihood	-46.61852	Hannan-Quinn criter.	2.291535
F-statistic	59.10114	Durbin-Watson stat	1.981452
Prob(F-statistic)	0.000000		

H3: Performance of the organization is influenced by Internal Knowledge Management
The results obtained from the regression shows that the Adjusted R-squared value is 0.58. Since the t-statistic is 7.68, this hypothesis is accepted and since the Probability of F-statistic is less than 0.05, this model is valid. The result indicates that performance of the organization is influenced by internal knowledge management. The Hypothesis H3 is accepted.
Hence, in this given case, all the 3 hypotheses were accepted which means that the models were done well and that the assumptions in the study were all correct or right based on the information or data thus collected from the respondents and the research methods used.

III. RECOMMENDATIONS

In this case, the findings from the research were used to come up with some recommendations over how the company could improvise its utility of intellectual capital and use internal knowledge management (KM) systems more efficiently to ensure that it continued to boost organizational performance along with relationship management efficiency and innovativeness. Firstly, in statement 4, where it talked about the continuous improvement of product and process technologies, about 6.98% disagreed. Hence, the management should communicate with those employees who do not think or feel that the process and product technologies are improving and attempt to figure out why or how they can improve. Secondly, 4.65% strongly disagreed that research and development processes for innovation are supported, so because there were people who strongly disagreed to this, the management needs to investigate what is happening in the company, because there might be cases where the management is trying to fix things but there are certain departments where there are problems happening due to which the innovation processes are not receiving adequate support. Design process needs to be prioritized or focused on, because

6.98% disagreed and 4.65% strongly disagreed to it ever being the case. The company needs to learn and see how markets are being penetrated because apparently 4.65% did not think that the company was penetrating new markets each year so it should focus on doing the same. Also, the organization needs to develop synergistic relationships between its employees because 9.3% disagreed that their fellow employees had synergistic relationships with them, so it is up to the management to see and ensure how that can so happen. Furthermore, investment decisions taken by the company must be simplified because about 16.28% do not have any idea about what goes on there (as they chose to be neutral about investment decisions for the company being proper). Additionally, the company's financial/economic structure needs to be revisited because perhaps it might be posing them a challenge from expanding relatively fast wherein, they need to make several other changes in their business functions due to which there might be disturbances.

The company needs to focus on improving their HR or human resources, because 16.28% disagreed that their company's HR was very strong, which means that there are some disagreements among the employees that need to be addressed directly by the managers to ensure that the HR business function continues to function effectively and that it does not have problems or concerns with the employees of the company. 9.3% of the employees disagreed that they had a strong content development team, so the company needs to perform a deeper analysis of why the same might be the case. Perhaps it is due to unbalanced delegation of responsibilities? In this case, it might be quite a challenge to fix it, but at the same time it is necessary that it is fixed to ensure smooth functioning.

Not just that, with about 13.95% disagreeing to the process of content creation development, evaluation, and implementation being good, the company needs to revisit the entirety of the content creation process and seek expert help on how they can fix the weak areas of the same. For example, they might need a good market research team to support the content creation team (as 16.28% disagreed with them having a good market research team in the company). Also, because 13.95% of the respondents disagreed to the sales team exploring new opportunities, there needs to be performance appraisals in the sales teams to motivate the sales team employees to work harder and explore new opportunities further and better. The organization also needs to focus on improving the work life balance because about 9.3% of the respondents strongly disagreed with there being any initiatives in improving the work-life balance. 9.3% of the respondents strongly disagreed that their training helped them do their jobs better, so the management needs to investigate the training process to better understand why it was not being of help to the employees. Managers of the company need to be professional as well because with 11.63% of employees feeling that it is a concern, this issue could quickly get out of hand. 6.98% of the employees disagreed that they were approached for new ideas and their contributions were recognized, so the company should have a formal process for managing contributions and rewarding them. The management also needs to provide the employees with the right kind of technology for them to work with, because 6.98% disagreed that they had access to the correct tech infrastructure to facilitate their work. Therefore, those are the steps the management needs to take to ensure that they are ready to develop their organization and improvise on their current situation.

IV. CONCLUSION

The research study thus successfully demonstrated the impact of internal knowledge management on the factors of relationship management, innovativeness, and overall organizational performance. In essence, an organization that manages its internal knowledge management system well can effectively leverage the information it has at its disposal to achieve targets more efficiently and rank higher than its peers in the markets.

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