

THE IMPACT OF ORGANIZATIONAL STRUCTURE DIMENSIONS' ON KNOWLEDGE MANAGEMENT PROCESSES COMPARATIVE STUDY BETWEEN MANUFACTURING & SERVICE SECTORS IN EGYPT

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ABSTRACT

This study aims to investigate the difference between the impact of Organizational Structure dimensions on Knowledge Management activities in manufacturing sector and service sector in Egypt .The study implemented on 7 organizations :4 manufacturing organizations,3 service organizations by distributing questionnaires on 211 respondent employees in different managerial levels:110 manufacturing sector,101 service sector company. After collecting and analyzing data based on correlation coefficient of Pierson and stepwise regression, the results clearly showed that is a direct relationship between organizational structure dimensions and knowledge management in service sector more the product and opens up new questions to be explored by future research such as: studying the impact of the control variables on the relationship between organizational structure dimensions and knowledge management activities. The study conducted in 2 months. The paper surveyed the literature review of the Knowledge Management concept, organizational structure dimensions.

JEL Classifications: O19, F15, B28

Keywords: Knowledge management, Organizational Structure, Structural dimensions

INTRODUCTION

Knowledge Management (KM) in the organizational management, an area that has received increasing attention. This is the era of knowledge, in which the creation and management of knowledge have become the central aspects of decisions and economic growth. Corroborating with the above-mentioned idea, Terra (2000) affirms that "the main input of workers is not the physical effort anymore, but the capacity to create, to learn and to develop new concepts, products and services based strictly in knowledge ."

According to Muller e Grings (2003), the competitive factor is knowledge and the abilities of people in each organization. Thus, many organizations have realized the importance of easy systematic actions to identifying, developing, sharing, using and holding back knowledge .

Organizational knowledge, as the most important improvement source and organizational expansion, as a valuable and invisible wealth, provide a valuable opportunity to promote quantity and quality indicators of all organizations. The most important problem in an organization is the large amount of information and knowledge in organizations which managers need them, but they are not available at a needful time or there is no KM [1].It seems that it must be examined carried out at Ernest&Young center that KM helps in depth and obstructive elements must be detected in organizations to improve their service quality and increase this field. Although we know that knowledge is the main wealth of an organization that must be detected and acquired in all around of the organization and also we know that knowledge is an endless source from and Mc. Oyli proved in their researches in 2005 that destructible resources of organization that provide possibility of growth, development and survival of organization among world formidable competitions.

Knowledge management is a new viewpoint for organization which believes that if organizations want to be successful, they must access to knowledge and have a deep understanding of it in all layers. Today, knowledge management rush to develop its domain on organizations and we can observe newer and more applicable models of knowledge management, however, many organizations do not consider knowledge management and it seems that there is no meaningful and organizational movement in this field .

In one hand, based on previous studies about KM and its related factors, it is clear that a social factor affects KM (Afragh&Abbas, 2006). It also can be distinguished from the researches carried out at Ernest&Young center that KM helps organizations to improve their service quality and increase their organizational empowerment. In addition, the results of relevant studies confirm that KM is an important factor in governmental organizations (Hasanzadeh& Mohamed, 2007). Furthermore, Rikans and Mc. Oyli proved in their researches in 2005 that network structure can influence knowledge (Youghesh, 2007).

On the other hand, Iranian researchers also focused on this matter in the recent years. Takabi's studies about structural dimensions about the KM in Zamiaad manufacturing company at 2007 showed a relation between

organizational complexity, formality, focus and KM (Prost et al, 2006). Moreover, in a study about KM implementation parameters which was done in 2009, it was strongly confirmed that organizational structure has a meaningful role in KM implementation process (Fariba, 2003). Fathollahi (2010) also proved in his research that organizational structure and organization processes have an important role in KM implementation (Robins, 2006).

The organizational structures were transformed in many modern Organizations. The need and dependence of organizations on structure, and dependence on decreasing and their process, is toward more trust on employees, decentralization, upgrading of humanity resource's authorities, and team working. The change of top level manager's approach is because of changing in modern, complicated and competitive environment, increasing of education level and effective communication systems, and consequently increasing of employees' knowledge (through knowledge management). Many organizations have implemented knowledge management to increase organizational agility (seng, 2010) and lead to innovativeness (Maqsood&Finegan, 2009; Alwis, & Hartmann, 2008). The concept of knowledge will be more important in modern, complicated and global environment step by step (Ghelichli, 2010). The new field of thinking capital attracts managers' attention to itself. According to strategic approach, thinking capital can be used in creating and applying of knowledge to increase an organization's value, and the organization's success depends on the ability to manage this exceptional source. Now and future success in competition between organizations are based on strategic allocation of physical and financial sources to some extent and based on strategic knowledge management more. Also the organization's environment has important effect on structure's designing. Stability and predictability capability of uncertainty of environment has a direct effect on organization's ability to do its' responsibilities. If the Environment were unstable and changed rapidly, the predictability would be fewer. The organization should have the ability of compatibility with environment; it should provide a flexible structure to create more coordination among its units. This, will not be met unless by wing of knowledge employees who should have high repaid adaptability (Daft, 1998).

Also, the main reason for selecting that topic is the scarcity of previous studies investigated the relationship between knowledge management activities and organizational structure dimensions as we will see in the previous studies section.

So this research aims at testing the impact of Organizational Structure dimensions on the Knowledge Management activities of the employees in different managerial levels of product and service sectors, as those sectors considered the cornerstones of the economics of any country and they need to cope with the changeable and competitive business environment.

The rest of the paper is organized as follows: Section two discusses the relevant literature. Section three presents research methodology, model, and data collection. Section four examines the results and analysis of this investigation. Finally, section5: concludes this paper by outlining limitations& recommendations for future research.

LITERATURE REVIEW

2.1 Knowledge Management:

Nisembaumapud Costa e Gouvinhas (2004) defines KM as being the process through which the generation, the storage and sharing of valuable information, insights and experience is supported, inside and between communities of people and organizations with similar interests and necessities.

Running an organization which is based on the principles of knowledge management is a simple task and has already been explored for a long time, as affirm Davenport e Prusak (1999) when they say that: KM is based on existing resources, which the organization can already be counting on - good information system management, organizational change management and good practice in human resources management. If you have a good library, a textual database system or even efficient educational programs, probably your company is already making something that can be called knowledge management.

Corroborating with the above idea, Sveiby (1998) defines KM as a competitive strategic tool resistant to the buzz word of operational efficiency and capable of taking advantage of existing resources in the company itself, providing the employment of best practice. According to Terra (2001), KM implies, necessarily, in: Development of abilities interrelated in the strategic, organizational and individual plans; Acceleration of competitive value new knowledge generation; Finding out intellectual capital and knowledge already existing in the company; Generating new revenues based on reusing existing intellectual knowledge/capital in the company; Protecting the existing intellectual capital in the company; Improving the decision making process at managerial, production and front line levels of the company; Reducing costs and redoing the job.

Confronted with these challenges, Costa e Gouvinhas (2004) affirm that mapping the processes is a foundation for all and any work of knowledge management, for a company needs to know the way it works, that is, as its

operations, its businesses and its activities are carried out. McKeen et al. (2006), define KM practices as “observable organizational activities that are related to KM”. They identified four key dimensions of KM practice: the ability to locate and share existing knowledge; the ability to experiment and create new knowledge; a culture that encourages knowledge creation and sharing; and a regard for the strategic value of knowledge and learning (McKeen et al., 2006). KM encompasses the managerial efforts in facilitating activities of acquiring, creating, storing, sharing, diffusing, developing, and deploying knowledge by individuals and groups (Zheng et al., 2010). Many frameworks for KM processes have been identified. This study examines three processes that have received the most consensus: knowledge generation, sharing, and utilization (Zheng et al., 2010). Knowledge generation refers to the process in which knowledge is acquired by an organization from outside sources and those created from within (Davenport and Prusak, 1998).

The KM capability of a firm refers to the degree to which the firm creates, shares, and utilizes knowledge resources across functional boundaries. This definition focuses on the firm’s KM activities at the organization level rather than at the department, team, or individual levels. Knowledge creation refers to the degree to which the firm develops or creates knowledge resources across functional boundaries. The creation of knowledge resources does not occur in abstraction from the current knowledge and capability of the firm (Alavi and Leidner, 2001) since knowledge is path dependent (Cohen and Levinthal, 1990). The creation of knowledge across functional boundaries requires the capability to generate new applications from existing knowledge and to exploit the unexplored potential of new skills (Liao et al., 2011). Nonaka’s (1994) dynamic theory of organizational knowledge creation provides a theoretical backdrop on which to conceptualize the knowledge creation process. Knowledge sharing refers to the degree to which the firm shares knowledge resources across functional boundaries. The ability of sharing and distributing knowledge resources across functional boundaries enables the firm to fundamentally change its business processes. The sharing of knowledge resources not only facilitates cross-functional interaction but also allows the sharing of knowledge repositories among process participants, thereby allowing greater collaboration and understanding of the entire process rather than having fragmented parts of the process.

Knowledge utilization refers to the degree to which the firm applies the knowledge resources that are shared across functional boundaries. It allows the firm to reap returns on its knowledge resource. A firm may have capabilities in creating, sharing, and utilizing knowledge resources, but these capabilities are irrelevant if the firm cannot ultimately utilize the knowledge resources efficiently. The capability to utilize a related knowledge base in decision making and problem solving allows the firm to respond more effectively to environmental changes, which, in turn, has a positive impact on the organizational structure such as integration mechanisms. In the absence of firm capabilities to use and act on knowledge, knowledge resources cannot have a positive effect on organizational structure (Liao et al., 2011).

2.2 Organizational structure

Ghani et al. (2002) and Robbins (1990) define organizational structure as the formal allocation of work roles and administrative mechanism to control and integrate work activities. This study focuses on the four most important aspects of structure which include centralization, formalization, complexity, and integration. Centralization describes the degree to which the right to make decisions and evaluate activities is concentrated. Zheng et al (2010) pointed that a decentralized structure has often been seen as facilitative to KM success. High centralization inhibits interactions among organizational members, reduces the opportunity for individual growth and advancement, and prevents imaginative solutions to problems. Structure can influence KM processes through shaping patterns and frequencies of communication among organizational members, stipulating locations of decision-making, and affecting efficiency and effectiveness in implementing new ideas. KM can carry over the structural impact onto organizational effectiveness, because the way knowledge is organized, KM activities are coordinated, and the extent to which KM practices are embedded in the daily work processes influence the effectiveness and efficiency of organizational performance. Formalization measures the extent to which an organization uses rules and procedures to prescribe behavior. Complexity refers to the degree to which different functions are distinguished with respect to goals, task orientation, and degree of autonomy. Integration describes the degree to which the activities of separate players in the organization can be coordinated through formal coordination mechanisms. Although these are not the only structural factors affecting organization design, they are the four fundamental elements in control and coordination and are often vital to firm performance (Liao et al., 2011)

2.3 Organizational structure Dimensions & Knowledge Management activities Relationship

Ghorbaniet al(2011)In pervious study conducted to evaluate the relation between organizational structure and knowledge management in Iran ministry of education's organizations units, the results clearly showed that there is a meaningful relation between organizational dimensions and knowledge management, there is a positive relationship between formality and knowledge management which is mismatching with the other studies which stated that there is a negative relationship between formality and knowledge management, may be is related to some conditions as the type of industry and sector, also the study concluded that there is a meaningful negative relationship between centralization and Km ,there is no meaningful relation between complexity and knowledge management. Another study conducted byAzadehdel et al (2012) to evaluate the extent of environmental uncertainty, dimensions of organization structure, and the degree of knowledge management usage within 69public organizations the findings support the ability of Knowledge Management capabilities. Mahmoudsalehi&Moradkhannejad (2012) conducted a research to identifying the impact of organizational structure on knowledge management (KM) and the results suggested that organizational structure is positively related to knowledge management if the characteristics of organizational structure were less centralized, less formalized, and more complicated and more integrated, the levels of Km would be enhanced.

From the above presented previous studies it concluded that organizational structure dimensions impact differ from study to another according to the industry and sample type, also the range of studies focused on that point are few and the focus on the relation between organizational structure dimensions and KM, so our study focused on the relationship between each organizational structure dimensions and knowledge management creation, sharing and utilization as will be explained through the paper.

So based on the previous literature the study hypothesis will be as follows:

H1: the organizational structure dimensions affect knowledge management in both sectors.

H1a: the organizational structure dimensions affect knowledge creation in both sectors.

H1b: the organizational structure dimensions affect knowledge sharing in both sectors.

H1c: the organizational structure dimensions affect knowledge utilization in both sectors.

RESEARCH METHODOLOGY & DESIGN

According to the purpose, this study is in the category of explanatory research and according to research design is in the category of survey research.

3.1 Research objective:

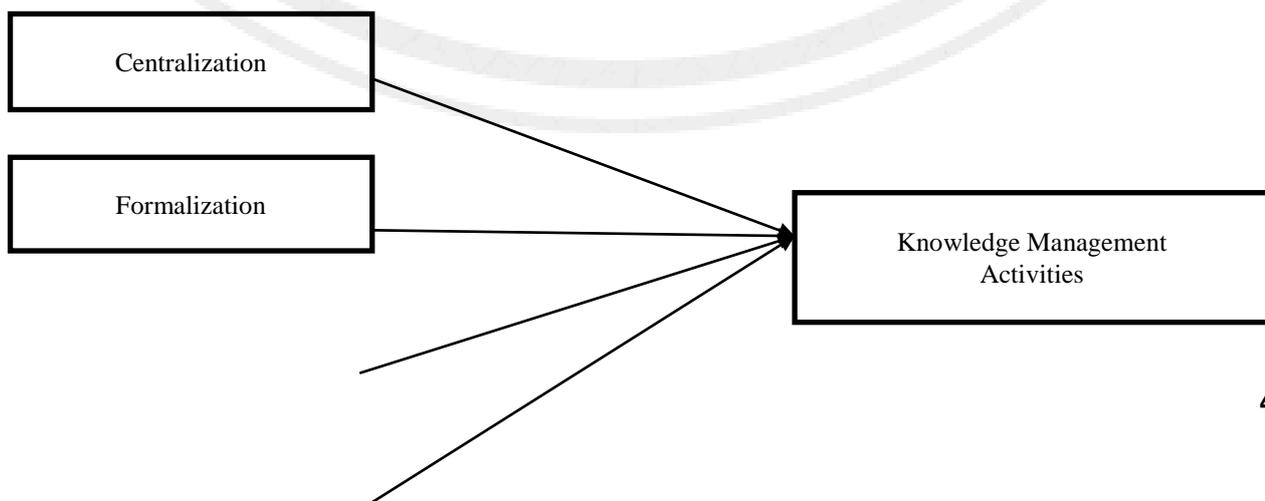
To investigate the impact of organizational structure dimensions on knowledge management activities in manufacturing and services sectors.

3.2 Research problem:

Is there a difference between a relationship organizational structure dimensions and knowledge management activities manufacturing and services sectors?

3.3 Research Model & Study Variables:

There are two variables in present study, independentvariable is Organizational Structure dimensions and dependent variable is Knowledge Management. This study will find out the effect of Organizational Structure dimensions on dependent variable is Knowledge Management in manufacturing and services sectors. This study has multilevel unit of analysis which are: organization structure dimensions and knowledge management activities, while the unit of observation: the employees working in companies in both sectors.



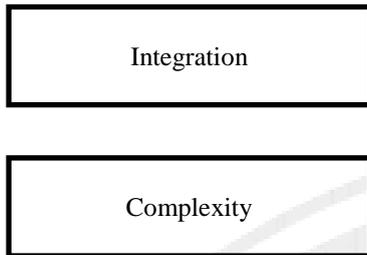


Figure (1): Research Model

3.5 Questionnaire

The study instrument is a questionnaire consists of 3 parts: 1st part: personal information, 2nd part Knowledge Management capabilities such as: knowledge creation, sharing and utilization. 3rd part measuring the organizational structure dimensions. The statements assessed by using Likert scale of five points scale ranging from 1 "highly agree" to 5 "highly disagree". The questionnaire based on some previous studies of (Mahmoudsalehi et al, 2012), In order to assess the reliability, the reliability coefficient was calculated using Cronbach's alpha, as seen in table (1) that the values of Cronbach's alpha for the variables under study exceeds 0.6, which is an acceptable level for the reliability of the variables.

Table 1: Reliability analysis

Variable	Cronbach's Alpha
Knowledge management creation	0.631
Knowledge management sharing	0.615
Knowledge management utilization	0.672
Organizational structure Dimensions	0.634

3.6 Sample:

The selected two independent convenient samples, product sector group consists of 110 employees, 101 employees working in service sector were as follows: 77.3% male, 22.7% female, 4.5% aged 26-30 years, 12.7% of sample aged 31-35 years, 12.7% of sample aged 36-40 years, 30.9% of sample aged in range 41-45 years, 8.2% of sample aged more than 50 years. 86.4% fulltime job and 13.6% part-time job, 13.6% of the sample had working experiences 16-20 years and 45.6% had working experience more than 20 years. 83.6% of the sample had bachelor degree, 16.4% had master degree. Service sector group consists of 101 employees as follows: 81.2% male, 18.8% female, 5% aged 26-30 years, 16.8% of sample aged 31-35 years, 37.6% of sample aged 36-40 years, 17.8% of sample aged in range 41-45 years, 22.8% of sample aged more than 50 years. 83.2% fulltime job and 10.9% part-time job, 57.4% of the sample had working experiences 16-20 years and 43.6% had working experience more than 20 years. 85.1% of the sample had bachelor degree, 14.9% had master degree.

The sample size was estimated according to (Tabachnick & Fidell, 2007) formula:

$$N > 50 + 8M$$

N = number of participants

M = no. of IVs

$$N > 50 + 8 * 4$$

$$N > 82$$

3.7 Data analysis technique:

The data analyzed by using SPSS 16 software package .For assuring the accuracy of the analysis, it used more than one way to analysis which are: Reliability analysis, Correlation analysis, and Step wise analysis.

RESULTS

4. 1 Correlation Matrix

Correlation analysis is conducted to assess the relationship between variables under study and each other in both sectors, which organizational structure dimensions are tested to check their significance and impact on Knowledge Management capabilities. As mentioned in table (2,3) It was found that there a strong positive correlation between the variables, but there is a difference between 2 sectors as service sector has strong positive significant relation ($r=0.775$, $n=101$, $p=0.00$) than the product sector($r=0.546$, $n=110$, $p=0.00$) ,with a regard to the relationship between organizational structures dimensions and Knowledge management creation it was found that there is strong positive significant relationship in product sector($r=0.828$, $n=110$, $p=0.00$),Sharing($r=0.922$, $n=110$, $p=0.00$) and utilization($r=0.772$, $n=110$, $p=0.001$) while in service sector it was found weak negative and non-significant relationship , which means that their impact disappears in the presence of other variables.

This will lead the researcher to use stepwise regression to be able to check which variables can be deleted from the model, so as to find a significant model with minimal number of variables.

Table (2)Correlation between organizational structure dimensions' &knowledge management activities in product sector (n=110)

Variable	1	2	3	4	5	6	7	8	9
1-cent	-								
2-form	.122	-							
3-comp	.332**	.585**	-						
4-integ	.380**	.398**	.668**	-					
5-creation	.335**	.344**	.492**	.351**	-				
6-sharing	.414**	.238*	.331**	.400**	.580**	-			
7-utilization	.290*	.313**	.227	.323**	.451**	.713**	-		
8-Org struc	.653**	.660**	.843**	.831**	.504**	.473**	.713**	-	
9-Km activities	.422**	.337**	.433**	.428**	.828**	.922**	.772**	.546**	-

* $p<0.05$

** $P<0.01$

*** $p<0.001$

Table (3)Correlation between organizational structure dimensions' &knowledge management activities in service sector (n=101)

Variable	1	2	3	4	5	6	7	8	9
1-cent	-								
2-form	.395**	-							
3-comp	.740**	.301*	-						
4-integ	.682**	.388**	.422**	-					
5-creation	-.050-	.053	-.048-	-.194-	-				
6-sharing	-.023-	-.069-	-.266*	.055	.550**	-			
7-utilization	-.020-	-.088-	-.117-	-.163-	.488**	.739**	-		
8-Org struc	.894**	.655**	.777**	.812**	-.084-	-.092-	-.128-	-	
9-Km activities	.735*	.357**	.701**	.638**	-.085-	-.120-	-.051-	.775**	.-

* $p < 0.05$
** $p < 0.01$
*** $p < 0.001$

4.2 Multiple Regressions

The SPSS regression procedure was employed in the table (4) to assess the causal relationships between the variables.

The model regression equation is created from the "Unstandardized Coefficients" in the coefficients table (6) For product sector As shown in model (2) the R square =29.8% which means centralization and formalization dimensions predict the knowledge management capabilities than other dimensions, coefficient for Centralization equals $B=.335$ which is significant ($p=.000$, change in $f=12.953$), formalization equals $B=.216$ which is significant ($p=.000$, $f=3.599$). So, it was significant relationship between integration and centralization and knowledge management capabilities.

.The model regression equation is created from the "Unstandardized Coefficients" in the coefficients table (3). Thus, the regression equation for predicting knowledge management is:

$$Y = \beta_0 + \beta_1x_1 + \beta_2x_2 + \dots \beta_{pxp} + \epsilon .$$

The table above proposes the following model:

$$\text{Knowledge Management Activities} = 1.134 + 0.335 * \text{Centralization} + 0.216 * \text{formalization}$$

From the above equation it was found that the organizational structure dimensions that explain the knowledge management capabilities in the product sector are: formalization (positive impact), Centralization (positive impact). Which means that if the characteristics of organizational structure were more centralized and more formalized the level of KM would be enhanced which contradicted with Chen & Huang(2007),Zheng(2010) Mahmoudsalehi&Moradkhannejad(2012)which pointed that Knowledge management capabilities enhanced by less centralization, more complexity and more integrated organizational structure.

For service sector As shown in model (5) the R square =63.5% which means centralization, formalization & complexity dimensions predict the knowledge management activities than other dimensions, coefficient for Centralization equals $B=.288$ which is significant ($p=.01$, $f=2.590$), formalization equals $B=.218$ which is significant ($p=.003$, $f=3.091$), complexity equals $B=.0.360$ which is significant ($p=.000$, $f=4.120$). So, it was significant relationship between formalization, centralization and complexity and knowledge management capabilities.

.The model regression equation is created from the "Unstandardized Coefficients" in the coefficients table (4).

Thus, the regression equation for predicting knowledge management is:

$$Y = \beta_0 + \beta_1x_1 + \beta_2x_2 + \dots \beta_{pxp} + \epsilon .$$

The table above proposes the following model:

$$\text{Knowledge Management activities} = -0.423 + 0.288 * \text{Centralization} + 0.218 * \text{formalization} + 0.360 * \text{complexity}$$

From the above equation it was found that the organizational structure dimensions that explain the knowledge management capabilities in the service sector are: formalization (positive impact), Centralization (positive

impact), & Complexity (positive impact). Which means that if the characteristics of organizational structure were more centralized, more formalized and more complicated the level of KM would be enhanced which agreed with Mahmoudsalehi&Moradkhannejad(2012)which pointed that Knowledge management capabilities enhanced by less centralization, more complexity and more integrated organizational structure.

Table4 Summary of Stepwise Regression Analysis for Variables Predicting knowledge management activities in product sector (N = 110)

Variable	Model 1			Model 2		
	B	SE B	β	B	SE B	β
1-cent	0.323	0.06	.462**	.235	0.62	.335**
2-form				0.216	0.06	.318**
3-comp						
4-integ						
1-cent						
R ²		.214			.298	
F for change in R ²		29.331**			12.953**	

* $p < .05$. ** $p < .01$.

Table(5) Summary of Stepwise Regression Analysis for Variables Predicting knowledge management activities in service sector (N = 101)

Variable	Model 1			Model 2			Model 3		
	B	SE B	β	B	SE B	β	B	SE B	β
1-cent	0.739	0.06	.738**	0.498	.092	.497**	.288	0.11	.288**
2-form				0.330	.090	.335**	0.218	0.07	.267***

3-comp			.360**	.087	.366**
4-integ					
1-cent					
R^2	.545	.599			.635
F for change in R^2	118.402**	13.266**			9.554***

. * $p < .05$. ** $p < .01$.

For service sector As shown in model (6) the R square =69% which means centralization, formalization complexity & integration dimensions predict the knowledge management activities than product sector , coefficient for Centralization equals B=.202 which is significant (p=.01, f=2.590), formalization equals B=.135 which is significant (p=.003, f=3.091), complexity equals B=-.086 which is significant (p=.000, f=4.120). So, it was significant relationship between formalization, centralization and complexity and knowledge management capabilities.

The table above proposes the following model:

$$\text{Knowledge Management creation} = -0.413 + 0.202 * \text{Centralization} + 0.135 * \text{formalization} - 0.086 * \text{complexity}$$

From the above equation it was found that the organizational structure dimensions that explain the knowledge management creation in the service sector are: formalization (positive impact), Centralization (positive impact), & Complexity (negative impact). Which means that if the characteristics of organizational structure were more centralized , more formalized and less complicated the level of KM would be enhanced which conflicted with Mahmoudsalehi&Moradkhannejad(2012)which pointed that Knowledge management capabilities enhanced by less centralization, more complexity and more integrated organizational structure.

Table6 Summary of Stepwise Regression Analysis for Variables Predicting knowledge creation in product sector

(N = 110), service sector (N= 101)

Product Sector

Service Sector

Variable	B	SE B	β	B	SE B	β
<i>1-cent</i>	.209	.115	.205	.202	.227	.198
<i>2-form</i>	.142	.169	.108	.135	.130	.136
<i>3-comp</i>	.479	.205	.373**	-.086-	.170	-.090-
<i>4-integ</i>	-.019-	.147	-.018-	-.289-	.140	-.344-*
R^2		.283			.069	
F for change in R^2		6.596**			0.69**	

Table4 Summary of Stepwise Regression Analysis for Variables Predicting knowledge sharing in product sector
 (N = 110),service sector (N=101)

Variable	Product Sector			Service Sector		
	B	SE B	β	B	SE B	β
<i>1-cent</i>	.230	.087	.308	.285	.168	.361
<i>2-form</i>	.096	.127	.099	-.057-	.096	-.075-
<i>3-comp</i>	.014	.154	.015	-.397-	.126	-.538-
<i>4-integ</i>	.177	.110	.234	.042	.103	.064
R^2		.249			.144	
F for change in R^2		.249**			.144**	

Table4 Summary of Stepwise Regression Analysis for Variables Predicting knowledge utilization in product
 sector (N = 110),service sector (N=101)

Variable	Product Sector			Service Sector		
	B	SE B	β	B	SE B	β
<i>1-cent</i>	.158	.085	.222	.316	.165	.421
<i>2-form</i>	.272	.125	.296	-.034-	.094	-.047-
<i>3-comp</i>	-.164-	.152	-.183-	-.198-	.124	-.283-
<i>4-integ</i>	.174	.109	.243	-.192-	.102	-.312-
R^2		.08			.194	

F for change in R^2

4.034**

1.451**

For service sector As shown in model (7) the R square =19.4% which means centralization, formalization complexity & integration dimensions predict the knowledge management utilization than product sector , coefficient for Centralization equals $B=.202$ which is significant ($p=.01$, $f=2.590$), formalization equals $B=.135$ which is significant ($p=.003$, $f=3.091$), complexity equals $B=-.0.086$ which is significant ($p=.000$, $f=4.120$). So, it was significant relationship between formalization, centralization and complexity and knowledge management capabilities.

From the above equation it was found that the organizational structure dimensions that explain the knowledge management creation in the service sector are: formalization (positive impact), Centralization (positive impact), & Complexity (negative impact). Which means that if the characteristics of organizational structure were more centralized , more formalized and less complicated the level of KM would be enhanced which conflicted with Mahmoudsalehi&Moradkhannejad(2012)which pointed that Knowledge management capabilities enhanced by less centralization, more complexity and more integrated organizational structure.

FINDINGS & CONCLUSION

Regarding the results there is a significant direct relationship between organizational structure dimensions and knowledge management activities in service sector is greater than product sector, knowledge management activities in product sector predicted by centralization and integration dimensions. Also, in service sector knowledge management activities is more predicted by centralization, integration and complexity which is conflicted with. Mahmoudsalehi&Moradkhannejad(2012)conducted a research to identifying the impact of organizational structure on knowledge management(KM)and the results suggested that organizational structure is positively related to knowledge management if the characteristics of organizational structure were less centralized ,less formalized, and more complicated and more integrated ,the levels of Km would be enhanced, which is may be referenced to industry type or technology used in each one or the country culture as egypt is individualistic culture compared to the counties with collectivistic cultures .

Also for the future points research it is recommended to investigate the impact of demographic characteristics as control variables and the cultural dimensions on the relationship between organizational structure dimensions and knowledge management activities, also its recommended to measure the effect of other organizational dimensions such as: professionalism, personnel ratios

The limitations faced this study was the survey collection problems because it was so difficult to collect the

whole sample because of the work load of the employees, also the previous studies in this topic were few to support the structure of the study

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