

# The Impact of Knowledge Management on Organizational Performance: A Field Study at Safeway Group in Jordan

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**Abstract:** The present study aimed at measuring the impact of knowledge management (KM) on the organizational performance of Safeway Group in Jordan. It adopts an analytical descriptive approach to meet the sought goals. It used a survey. The questionnaire forms were distributed to 172 directors of the departments, deputy directors and heads of the branches of Safeway markets. 157 questionnaire forms were retrieved. Knowledge management dimensions jointly (knowledge acquisition, knowledge storage, application of knowledge, knowledge sharing) significantly affect – at the significance level of ( $\alpha = 0.05$ ) - the organizational performance dimensions jointly (completion of task, quality of work, a quantity of work). The researcher recommends promoting awareness of senior management leaders in Safeway Group about the importance of knowledge management. KM is important for suppliers and customers because they are responsible for providing the latter group with resources that enable the organization to achieve excellence and a sustainable competitive advantage.

**Index Terms:** Knowledge Management, organizational performance, Safeway group

## 1 Introduction

Project management plays an important role in the business field. To be specific, it promotes innovation when adopting, building or integrating IT infrastructure (Anantatmula & Thomas, 2010). It is defined as “the application of knowledge, skills, tools, and techniques to project activities to meet project requirements” (Ibrahim et al., 2013). Any project management methodology (PMM) will have a significant impact on project success, efficiency and quality (Joslin & Müller, 2015).

According to PMBOK Guide (1996), the project management processes consist of several phases; initiating, planning, execution, controlling and closing projects. The theory of project management consists of two theories; the theory of project and theory of management (Koskela & Howell, 2002). These two theories support one another. According to (Koskela & Howell, 2002), the theory of project defines the project lifecycle.

The theory of management consists of planning, executing, and controlling phases. The planning phase plays a major role in the completion of the projects efficiently and effectively with having the sought quality. The planning phase must offer a reliable project plan, which includes the necessary information about the project activities from the initial phase till the final phase (Koskela & Howell, 2002). The execution processes of the project plan includes coordination between the team members on the scope verification, quality assurance, team development, information distribution, solicitation, source selection, and contract administration (PMBOK Guide, 1996; Koskela & Howell, 2002).

The PMBOK Guide (1996) explains the monitoring and

controlling processes that assists in verifying the execution of the project plan. In addition, They guide the process of measuring the project performance and identifying variances evidence shows that overwhelming number of IT projects are regarded as failed projects due to not been delivered at all or projects that did not deliver their expected objectives mostly due to lack of project management expertise (Alotaibi & Mafimisebi, 2016; Cicmil & Hodgson, 2006; Papke-Shields et al., 2010). Also, there appears to be a lack of clear stakeholder expectations leading easily to project failures (Todorović et al., 2015; Desouza & Evaristo, 2006; Huang & Newell, 2003; Koskinen, 2004).

Knowledge management (KM) ensures showing a sustainable performance through achieving a high quality level when undertaking any project in the large or small organizations (Todorović et al., 2015; Alias et al., 2014; Al-Ahmad, 2012). The KM practices enable the entire organization to share knowledge collectively and systematically to achieve the project objectives (Hegazy & Ghorab, 2014).

In this regard, KM is a critical organizational asset for improving the processes and the ability to maintain a competitive advantage in the marketplace (Razmerita et al., 2016). KM significantly affects the organizational performance (Papulová & Mokroš, 2007; Girard & Girard 2015). Hence, KM practice is a critical part of project management for improving organizational efforts and performance (Al-Qarioti, 2015). It is known to be positively affecting project quality (Honarpour et al., 2012; Akdere, 2009).

Hence, the organizations' performance affects the project management. It assists the organizations in surviving in the market, winning the competition and achieving success in modern business (Richard et al., 2009).

This study aimed to propose a framework to evaluate the impact of KM constructs on organizational performance. Therefore, it's necessary to have knowledge about the factors affecting the success of the management processes. That affects the delivery, performance, and quality of projects successfully.

The rest of this paper is organized as follows: first is talking about research questions. Second is talking about

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the literature reviews. Third, the hypotheses and the conceptual model are shown. Fourth, the methodology of research discussion results finally recommendations and directions for future research are outlined.

## 2 The research questions

Based on the above argument, the research questions are listed below:

Main question:

Is there an impact of knowledge management dimensions jointly (knowledge acquisition, knowledge storage, application of knowledge, knowledge sharing) affect performance dimensions jointly (the completion of task, quality of work, a quantity of work) in Safeway Group?

The following sub-questions emerge:

Is there an impact of knowledge management dimensions jointly (knowledge acquisition, knowledge storage, application of knowledge, knowledge sharing) on completion of task in Safeway Group?

Is there an impact of knowledge management dimensions jointly (knowledge acquisition, knowledge storage, application of knowledge, knowledge sharing) on quality of work in Safeway Group?

Is there an impact of knowledge management dimensions jointly (knowledge acquisition, knowledge storage, application of knowledge, knowledge sharing) on a quantity of work in Safeway Group?

## 3 Literature review

### 3.1 Knowledge management

Organizational management plays a major role in the business field, especially in meeting business objectives, and increasing performance, and productivity. That can be done through utilizing resources effectively and efficiently. Such resources include: capital, labor, energy, information, and materials (Torabi & El-Den et al., 2017). The organizational knowledge is defined as the "information processed by individuals including ideas, facts, expertise and judgment relevant for the individual, team, and organizational performance" (Nonaka & von Krogh, 2009; Davenport & Prusak, 1998). There are many types of knowledge, such as: declarative, procedural, tactic, explicit, specific and general knowledge. The declarative knowledge can be either explicit or tactic. It can be either specific or general (Fernandez & Sabherwal, 2010)

Through KM, one can differentiate between tactic knowledge and explicit knowledge (Polanyi, 1966). Explicit knowledge can be transferred among individuals inside the organization. It can be expressed in formal language. As for the tactic knowledge, it is hard to transfer it among individuals. That's because it is generated through acquiring expertise. Each individual has his own unique tactic knowledge (Nonaka, & akeuchi 1995).

KM enables organizations to meet their objectives and utilize knowledge (Hegazy & Ghorab, 2014). It assists employees in organizations in acquiring knowledge on a specific time. That shall participate in improving the organizational performance and achieving the organizational goals (Girard & Girard 2015).

KM governs the way employees share, manage, and collect their knowledge capital. (Gunjal, 2005). It is based

on human-style, social life, efficiency and experiences from life (Holsapple, 2005). It can add value to the organization through the following methods:

- Carrying out the decision making process in a faster manner. KM helps the organization to accelerate the decision-making process and increasing the quality of this process (Verma, 2012)

-Achieving a competitive advantage: That's utilizing knowledge shall create a unique competitive advantage (Gold et al., 2002). Companies always gather, share, and analyze knowledge resources to run the decision-making process (Wen, 2009).

-Promoting innovation: Managing and analyzing knowledge resources shall help the organization in innovating new products and services. KM shall: (Edosio, 2014)

1- Increase the quality of the decision making process

2- Increase customer satisfaction (Birasnav, 2013)

3- Gain much revenue (Birasnav, 2013)

KM supports the upper management, and raises the economic performance in the organization. It transfers knowledge inside the organization, and motivates employees to use knowledge. It increases profitability. (Peyman, et al 2010).

The Economist Intelligence Unit states that KM is essential for improving corporate strategies (EIU.com, 2005). If KM isn't practiced much, a company will lose its competitive advantage and its profitability shall decrease. That shall lead to low motivation level among employees, rise of the turnover rate.

Organizations provide attention to the elements needed for transferring knowledge. Such elements may include: networks and communication, relationship inside organization and teams (Manasco, 1996).

### 3.2 Organizational performance

Knowledge management plays a major role in raising one's performance and affects the organizational performance. That's because KM aims at ensuring that individuals are functioning effectively and efficiently. It plays a major role in creating, and sharing knowledge. It enables the organization and employees to carry out various operations (Papulová & Mokroš, 2007) The researchers measured organizational performance by estimated about the firms for three economic years, and they are using six items to measured years (2009-2011) equalities by the primary competitors (Pertusa-Ortega et al., 2009) the six items: increase of sales, improve market share of organization, increase of cash flows, enhance return on investment and improve employment in organization.

Definition of organizational performance

Lebens & Euske (2006) provide many definitions for organizational performance:

1. To clear up the performance can use a causal model that explains how the actions affect future value

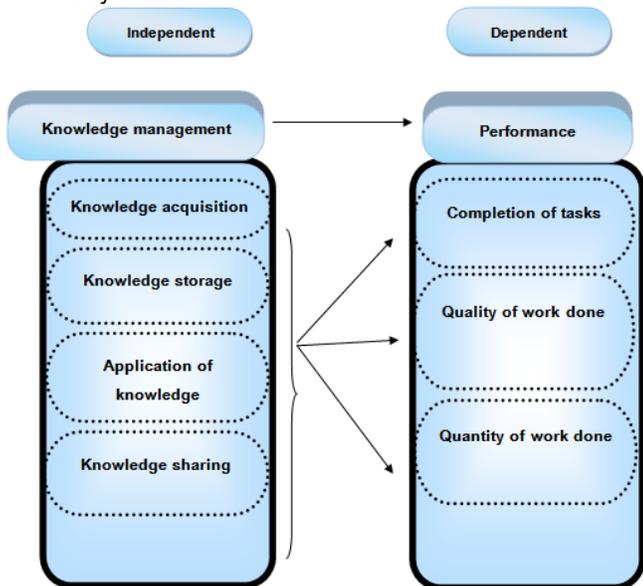
2. Performance indicators may be financial or nonfinancial. They provide information about the outcomes and the extent of accomplishing the intended goals by the organization.

To determine the organizational performance level, one should be able to determine the results of an organization

KM has many benefits that affect organizational performance by two ways: the performance is coming from when making innovative products that lead to getting revenue and profit, or when the strategy of KM it aligns strategy for the organization and will get a return on investment. The second way is an indirect method, The indirect method its impact KM on organizational performance through activates are not direct method and achieve the economy of scale and economy of scope in the organization this is indicting to performance in the organization (Fernandez& Sabherwal, 2010)

#### 4 Research Hypotheses and Model

The Study's Model



#### The Study's Hypotheses:

The researcher bases his study on the following important hypotheses

HO: There isn't any impact for knowledge management dimensions jointly (knowledge acquisition, knowledge storage, application of knowledge, knowledge sharing) -at the significance level of  $(\alpha \leq 0.05)$ - on the performance dimensions jointly (completion of task, quality of work, a quantity of work) in Safeway Group"

Ho1-1: There isn't any impact for knowledge management dimensions (knowledge acquisition, knowledge storage, application of knowledge, knowledge sharing) -at the significance level of  $(\alpha \leq 0.05)$ - on the completion of task in Safeway Group.

Ho1-2: There isn't any impact for knowledge management dimensions (knowledge acquisition, knowledge storage, application of knowledge, knowledge sharing) -at the significance level of  $(\alpha \leq 0.05)$ - on the quality of work in Safeway Group.

Ho1-3: There isn't any impact for knowledge management dimensions (knowledge acquisition, knowledge storage, application of knowledge, knowledge sharing) -at the significance level of  $(\alpha \leq 0.05)$ - on the quantity of work in Safeway Group.

#### 5 Research Methodology

#### 5.1 The Study's Population:

The study's population consists from all of the appointed unit managers, supervisors, and heads of departments in 8 Safeway markets. .

#### 5.2 The sampling and analysis unit

The inspection unit consisted of the managers of the branches, and their deputies and heads of departments, especially the procurement departments of Safeway Group. The questionnaire forms were distributed to 172. 157 questionnaire forms were retrieved and considered valid for analysis. The response rate is 91.3%.

#### 6 Data Analysis and Results

#### 6.1 Testing the hypotheses of the study

It was ascertained that the conditions necessary for testing the hypotheses of the study were achieved as follows:

HO: There isn't any impact for knowledge management dimensions jointly (knowledge acquisition, knowledge storage, application of knowledge, knowledge sharing) at the significance level of  $(\alpha \leq 0.05)$  on the performance dimensions jointly (completion of task, quality of work, a quantity of work) in Safeway Group"

Multiple regression analysis was performed to test this hypothesis. The results are listed below:

Table (1): (Model Summary)

Model	Sum of Square	Df	Mean Square	F	Sig.	
1	<b>Regression</b>	19.323	4	4.831	67.5	.00
	<b>Residual</b>	10.874	152	.072		
	<b>Total</b>	30.197	156			

Table 1 shows that the value of F was (67.5) and that the statistical significance level reached (0.00), it is less than (0.05). Thus, the null hypothesis was rejected and the alternative hypothesis is accepted. There is an impact for knowledge management dimensions (knowledge acquisition, knowledge storage, application of knowledge, knowledge sharing) at the significance level of  $(\alpha \leq 0.05)$  on the performance dimensions (completion of task, quality of work, a quantity of work) in Safeway Group.

Table (2): Coefficient

Dimension	B	Error	Beta	T	Sig.	Tolerance	VIF
knowledge acquisition	.246	.057	.418	4.280	.000	.248	.000
knowledge storage	-.008	.058	-.015	-.145	.885	.238	4.208
knowledge sharing	-.084	.057	-.102	-1.468	.144	.495	2.022
application of knowledge	.603	.054	.641	11.10	.000	.710	.000

Table (2) shows that (knowledge acquisition, application of knowledge) have a statistically significant impact (0.00), which is less than (0.05) on the performance dimensions of Safeway group. The other elements don't have a statistically significant effect at (0.05).

### 6.2 The results of testing the first sub-hypothesis:

This hypothesis states the following:

Ho1-1: There isn't any impact for knowledge management dimensions (knowledge acquisition, knowledge storage, application of knowledge, knowledge sharing) -at the significance level of ( $\alpha \leq 0.05$ )- on the completion of task in Safeway Group.

Multiple regression analysis was conducted to test this hypothesis. The result are presented below:

**Table (3): (Model Summary)**

Model		Sum of Square	Df	Mean Square	F	Sig.
1	<b>Regression</b>	23.459	4	5.865	49.938	.000 <sup>a</sup>
	<b>Residual</b>	17.851	152	.117		
	<b>Total</b>	41.310	156			

Table 3 shows that the value of F is (49.938). It shows that the statistical significance level is (0.00) which is less than (0.05). Thus, the null hypothesis is rejected and the alternative hypothesis is accepted. There is an impact for knowledge management dimensions (knowledge acquisition, knowledge storage, application of knowledge, knowledge sharing) -at the significance level of ( $\alpha \leq 0.05$ ) – on the completion of task in Safeway Group.

**Table (4): Coefficient**

Dimension	B	Error	Beta	T	Sig.
knowledge acquisition	.100	.074	.145	1.354	.178
knowledge storage	.017	.074	.025	.230	.819
knowledge sharing	-.013	.073	-.013	-.173	.863
application of knowledge	.756	.070	.688	10.869	.000

Table (4) shows that the elements (application of knowledge) have a statistically significant effect (0.00),

which is less than (0.05) on the completion of task. The other elements don't have any statistically significant effect at (0.05).

### 6.3 The results of the Second Sub-hypothesis test

Ho1-2: There isn't any impact for knowledge management dimensions (knowledge acquisition, knowledge storage, application of knowledge, knowledge sharing) -at the significance level of ( $\alpha \leq 0.05$ )- on the quality of work in Safeway Group.

Multiple regressions were performed to test this hypothesis and the result was as follows:

**Table (5): (Model Summary)**

Model		Sum of Square	Df	Mean Square	F	Sig.
1	<b>Regression</b>	15.064	4	3.766	26.741	.000 <sup>a</sup>
	<b>Residual</b>	21.407	152	.141		
	<b>Total</b>	36.471	156			

Table 5 shows that the F value is (26.741). It shows that the statistical significance level is (0.00) which is less than (0.05). Thus, the null hypothesis is rejected and the alternative hypothesis is accepted. There is an impact for knowledge management dimensions (knowledge acquisition, knowledge storage, application of knowledge, knowledge sharing) -at the significance level of ( $\alpha \leq 0.05$ )- on the quality of work in Safeway Group.

**Table (6): The Values of the Coefficient**

Dimension	B	Error	Beta	T	Sig.
knowledge acquisition	.041	.081	.064	.513	.609
knowledge storage	.058	.081	.090	.707	.481
knowledge sharing	-.059	.080	-.065	-.733	.465
application of knowledge	.633	.076	.613	8.307	.000

Table (6) shows that (application of knowledge) has a statistically significant impact (0.00), which is less than (0.05) on the quality of work. The other elements don't have any statistically significant effect at (0.05).

### 6.4 The results of the Third Sub-hypothesis test

Ho1-3: There isn't any impact for knowledge management dimensions (knowledge acquisition, knowledge storage, application of knowledge, knowledge sharing) -at the significance level of ( $\alpha \leq 0.05$ )- on the quantity of work in Safeway Group.

Multiple regressions were conducted to test this hypothesis. The results are presented below:

**Table (7): (Model Summary)**

Model		Sum of Square	Df	Mean Square	F	Sig.
1	<b>Regression</b>	28.085	4	7.021	53.450	.000 <sup>a</sup>
	<b>Residual</b>	19.967	152	.131		
	<b>Total</b>	48.052	156			

Table 7 shows that the F value is (53.450). It shows that the statistical significance value is (0.00) which is less than (0.05). Thus, the null hypothesis is rejected and the alternative hypothesis is accepted. There is an impact for knowledge management dimensions (knowledge acquisition, knowledge storage, application of knowledge, knowledge sharing) -at the significance level of ( $\alpha \leq 0.05$ )- on the quantity of work in Safeway Group.

**Table (8): Coefficient values**

Dimension	B	Error	Beta	T	Sig.
knowledge acquisition	.597	.078	.805	7.665	.000
knowledge storage	-.100	.079	-.136	-1.271	.206
knowledge sharing	-.181	.078	-.173	-2.327	.021
application of knowledge	.419	.074	.354	5.700	.000

Table (8) shows that (knowledge acquisition, application of knowledge, knowledge sharing) have a statistically significant impact -which is less than (0.05)- on the quantity of work. The knowledge storage doesn't have any statistically significant impact at (0.05).

### 6.5 Result

1- There is a significant impact for knowledge management dimensions (knowledge acquisition, knowledge storage, application of knowledge, knowledge sharing) -at the significance level of ( $\alpha \leq 0.05$ )- on the performance dimensions (completion of task, quality of work, a quantity of work) in Safeway Group.

2- (Knowledge acquisition, application of knowledge) have a statistically significant impact (0.00) -which is less than (0.05)- on the performance of Safeway group in all its dimensions. The other elements don't have any statistically significant impact at (0.05).

3- There is an impact for knowledge management dimensions (knowledge acquisition, knowledge storage, application of knowledge, knowledge sharing) -at the significance level of ( $\alpha \leq 0.05$ ) - on the completion of task in Safeway Group.

4- (Application of knowledge) has a statistically significant impact (0.00) which is less than (0.05) on the completion of task. The other elements don't have any statistically significant impact at (0.05).

5- There is an impact for knowledge management dimensions (knowledge acquisition, knowledge storage, application of knowledge, knowledge sharing) -at the significance level of ( $\alpha \leq 0.05$ ) - on the quality of work in Safeway Group.

6- The elements (application of knowledge) have a statistically significant effect (0.00), which is less than (0.05) on the quality of work. The other elements don't have any statistically significant impact at (0.05).

7- There is an impact for knowledge management dimensions (knowledge acquisition, knowledge storage, application of knowledge, knowledge sharing) -at the significance level of ( $\alpha \leq 0.05$ ) - on the quantity of work in Safeway Group.

8- (Knowledge acquisition, application of knowledge, knowledge sharing) have a statistically significant impact which is less than (0.05) on the quantity of work. The knowledge storage doesn't have any statistically significant effect at (0.05).

### 7 Recommendations

The researcher recommends:

1- Promoting awareness among senior managers in Safeway Group about the importance of knowledge management. KM is important for suppliers and customers because they are responsible for providing the latter group with resources that enable the organization to achieve excellence and a sustainable competitive advantage.

2 -Motivating leaders in Safeway group to study and understand the characteristics and dimensions of the effective growth. That shall enable the group of achieve development and growth.

3. Developing flexible strategies that are adapted to the external environment. In These strategies must be consistent with the internal activities of the group. The researcher recommends developing alternative plans and programs

4 - Exerting effort to develop the leadership. That can be done through acquiring people who possess much expertise in their field. That shall improve the position and competitiveness of Safeway Group.

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