**a** OPEN ACCESS

## International Journal of INNOVATION AND KNOWLEDGE MANAGEMENT IN MIDDLE EAST **AND NORTH AFRICA**

ISSN: 2045-5410 (Print) 2045-5429 (Online)

IJIKMMENA V10 N1 2024

DOI: 10 47556/J IJIKMMENA 10 1 2024 1

#### **RESEARCH PAPER**

## Requirements for the Application of Knowledge **Management in the Palestinian Foundation** for Lending and Development (FATEN) and **Mechanisms for Improvement**

#### **Dr Mohammed Omar Batwaih**

Senior Expert at the Arab Planning Institute in Kuwait Email: drbatwaih@gmail.com

## **ABSTRACT**

**PURPOSE:** Embarking from the perspective of employees, this study explores the requirements for the application of knowledge management in the Palestinian Foundation for Lending and Development (FATEN). A random sample of 249 employees of the foundation, aged between 21 and 61 years (mean = 31.5; SD = 6.2 years), was selected.

METHODOLOGY: A structured questionnaire was designed to assess the requirements for the application of knowledge management in the foundation, from the perspective of employees. Descriptive quantitative and qualitative analyses were carried out on the data.

FINDINGS: The results show that the institutional culture in the FATEN foundation is highly supportive of the process of knowledge management application, in all related evaluation indicators. Employees expressed positive views towards the organisation's structure and flexibility, as well as its perceived ability to keep pace with future changes and global developments. Moreover, the results indicate that the top management of FATEN supports the process of enhancing technological infrastructure and information systems to facilitate the application of knowledge management in the foundation. Overall, the results suggest that the prevailing organisational/institutional culture, and the top management orientation, are all supportive of the knowledge management application processes. Despite all these positive indicators, however, there remain some challenges that need to be addressed in order to be able to fully transform the FATEN foundation into a true knowledge-based organisation.

**KEYWORDS:** Knowledge Management; Palestine; Arab Countries; Empirical Evidence

CITATION: Batwaih, M.O. (2024): Requirements for the Application of Knowledge Management in the Palestinian Foundation for Lending and Development (FATEN) and Mechanisms for Improvement. International Journal of Innovation and Knowledge Management in Middle East and North Africa, Vol. 10, No. 1, pp. 1-22.

RECEIVED: 6 January 2023 / REVISED: 20 March 2023 / ACCEPTED: 24 March 2023 / PUBLISHED: 5 March 2024

COPYRIGHT: © 2024 by all the authors of the article above. The article is published as an open access article by WASD under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/4.0/).

## INTRODUCTION

Global institutions are currently experiencing a challenging phase characterised by extreme volatility and ambiguity, driven by the many developments the world is witnessing in the scientific, technical, informational and communication realms. Together, these rapid and diverse changes have culminated in the development of the Fourth Industrial Revolution. Consequently, this has led to an urgent need for institutions to adopt the concept of knowledge management as a new approach to studying and understanding corporate business management, and as a more efficient means for institutions to carry out their functions and activities to achieve their goals. Over the past two decades, there has been an increase in the number of global institutions that have adopted the concept of knowledge management in their various operations and activities, making them pioneers in their fields. Successful international experiences and worldwide applications of knowledge management illustrate how it has contributed to organisations being transformed from traditional institutions to knowledge-based institutions. This transformation has greatly benefited such organisations by enhancing their intellectual capital, knowledge asset resources, and their efficiency and productivity methods that enable the creation of increased knowledge value.

The recent orientation of many Palestinian ministries and organisations towards the development of a knowledge-based economy has significantly benefited Palestinian society. There now exists a greater opportunity for Palestinian institutions to achieve their vision and strategic objectives more efficiently. Therefore, this research aims to expand the culture of knowledge management and to enhance and spread its application in Palestinian institutions. In addition, this research presents a vision for transforming Palestinian institutions into knowledge-based ones by bringing to the fore the importance of human resources and the proper training and adequate qualification levels of staff. In addition to intellectual, institutional, and technological capital, there is also an urgent need to provide an appropriate and stimulating work environment based on knowledge assets. Moreover, this study pays heed to the significance of appointing and selecting creative administrative leaders, and adopting and developing methods and criteria for performance appraisal.

## LITERATURE REVIEW

## The Evolution of Knowledge

Discussions about knowledge are not new; human beings have developed an instinct to create and accumulate knowledge since the beginning of time. Today, knowledge management is one of the most prominent concerns of global institutions, born out of a need for effective data and information that enables the formulation of sound knowledge, based on which well informed and evidence-based decisions can be made. Peter Drucker, Tom Stewart, Robert Kaplan, and David Norton were pioneers in the area of knowledge management and have played a key role in its development. In 1994, a conference was held under the auspices of Ernst and Young, and was one of the first large-scale events to discuss knowledge management. However, the most important conference was held in 1995, run by Arthur Anderson and the American Center for Production and

Quality, in which 500 scientists and researchers participated. This conference became a turning point after which the experimentation, discovery, learning, and development of knowledge management was set into motion (Drucker, 2005). Knowledge management came to be defined as "the creation, extraction, transformation and storage of the correct knowledge and information in order to design better policy, modify action and deliver results" (Horwitch and Armacost, 2002). As such, in light of the global recognition of the importance of knowledge management following the 1995 conference, handling intangible intellectual assets came to be seen as the most important success factor for any institution. This was carried out through re-considering and criticising methods used in achieving profits, searching for competitive capabilities, and improving the production of or search for solutions, including decision-making processes that need to be tailored to suit different organisations.

The 21st century has been characterised by the emergence of the power of knowledge. Evidence shows that those who use it to improve their employment and adaptation are able to maintain their leadership in all domains, especially in the fields of economy and management. Therefore, a follower of scientific and technological developments is likely to appreciate the speed through which knowledge management, as one of the most important contemporary intellectual developments, has moved from a new framework and approach to studying and understanding institutional work, to an applied practice and a purposeful means to adapt to the requirements of the times. Technology has played a prominent role in economic transformation and growth in the knowledge era. Indeed, there has been a worldwide standardisation and digital transformation of knowledge into documents, databases, artificial intelligence programs, management support systems and information systems.

In light of the above, this study seeks to become a blueprint for institutions to prepare their own strategies for knowledge management, contributing to achieving their vision, mission and strategic objectives. This is particularly so in the Arab region where the COVID-19 pandemic exposed the fragility of knowledge systems in many public and private institutions. Moreover, we offer a model that enables these institutions to link their outputs to the requirements and needs of their internal and external environment, and thus supports them on their mission to achieve leadership, excellence and institutional innovation. Knowledge management and its practical application in an institutional setting is an effective and scientifically proven method that enables organisations to keep pace with the requirements and changes of a rapidly developing global world. To aid institutions in effectively applying knowledge management, this study discusses the relevant roles and responsibilities that need to be addressed, and reviews a number of challenges that institutions might face, while suggesting appropriate solutions to those challenges. Furthermore, the study presents a number of tools and methods that can contribute to the production, acquisition, preservation and dissemination of knowledge, as well as its assessment and evaluation. As such, this study proposes a comprehensive model that outlines a solid and effective knowledge management strategy that can be practically applied in organisations.

## **Knowledge Management: Benefits and Justifications for its Adoption**

Although "knowledge" is an ancient concept, its novelty comes in the extent of its impact on human growth in modern times, particularly in relation to economic and social development. There is no doubt that the tremendous progress in science, technology and information and communication technology that the present century is witnessing, has enabled man to impose more control, structure and meaning over all aspects of life. As such, the management of knowledge, or knowledge management, is a modern concept that has received widespread attention by researchers in most institutions of developed countries and East Asian countries, although it is still in its infancy in relation to Arab institutions.

One of the most important factors for the success of institutions is their ability to remain up-todate with the latest global changes, and to successfully compete and stay visible in the market. This is particularly true in the context of the global data revolution, which was born out of the Fourth Industrial Revolution. The massive accumulation of information, and the ease with which it is obtained, has led to an urgent need to organise and manage this information, while institutions are expected to make the most of this readily available information to achieve their strategic goals and support decision-making processes. Nevertheless, despite the increasing interest in knowledge management, there is no specific or unified definition of the concept, although it has been referred to as "the process of collecting and creating knowledge that facilitates participation in it, so that it can be effectively applied throughout the organisation" (Abu Fara, 2004). In general, despite the multiplicity of definitions of knowledge management, the most widely accepted interpretation sees knowledge management as being concerned with organising the knowledge assets in an organisation, with the aim of creating an added value and meeting strategic needs. It includes all the initiatives, processes, and systems that work to produce, acquire, categorise, store, disseminate, and use/reuse knowledge. More specifically, knowledge management comprises a set of interrelated processes:

- 1. Knowledge diagnosis: this refers to defining critical knowledge within the organisation in relation to customers, the market, or the product, and is the first step for knowledge management within the organisation (Abu Fara, 2004). Also, diagnosing knowledge is one of the most important steps in any knowledge management programme, and on the basis of a diagnosis, policies and programmes for other operations are developed. One of the key results of diagnostic processes is to know the type of knowledge available, and to compare it with what is required, thus enabling gaps in knowledge to be identified and addressed.
- 2. **Knowledge planning:** this relates to drawing up various plans related to knowledge management, general knowledge management objectives, individual activities, and an organisation's overall activities, seeking to provide the capabilities necessary for the efficient and effective conduct of business. This planning phase also provides specialised expertise and identifies the necessary technological infrastructure (Al-Thneibat, 2013).

- 3. **Knowledge generation:** this refers to acquiring knowledge from various sources, whether internal or external, and generating knowledge in the sense of creating or developing explicit and implicit knowledge and finding solutions to intractable problems facing the organisation (Al-Ali, 2006). Generating knowledge means capturing, purchasing, creating, discovering or absorbing, and all of these processes are part of the generation and acquisition of knowledge, although in a variety of different ways and using different sources. Cohen and Levinthal (1990) have established a comprehensive model for acquiring knowledge that is underpinned by three essential points:
  - i the generation of knowledge is a human effort;
  - ii the importance of implicit and explicit dimensions of knowledge in the generation processes;
  - the cumulative nature of knowledge generation. iii.

The importance of creating new knowledge must be emphasised, as when markets change, a successful organisation is constantly engaged in generating new knowledge. Nonaka and Takeuchi (1995) argued that the generation of knowledge leads to its expansion through two sets of dynamics. First is the transformation of tacit knowledge into explicit knowledge, and second is the transformation of knowledge from the individual level to the collective level.

- 4. **Knowledge storage:** this means storing the acquired knowledge in the organisation on software or files that are easily accessible when needed, and incorporates the third process of knowledge management outlined above, pertaining to acquisition and generation (Alyan, 2008). The process of storing knowledge indicates the importance of organisational memory, particularly so for institutions that face the risk of losing a lot of knowledge carried by individuals who leave them for one reason or another. In this context, the storage and retention of knowledge becomes very important, particularly if institutions suffer from high rates of employee turnover and use temporary contractors and consultants. As employees exiting the organisation may take their undocumented tacit knowledge with them when they leave, properly documented knowledge will remain stored indefinitely, and thus will always be available to the organisation (Ismail, 2009).
- 5. **Knowledge distribution:** knowledge as an asset expands with use, and with the exchange of ideas, experiences and skills among people, it continues to grow, and organisations therefore tend to encourage participation. The distribution of knowledge includes the following processes: dissemination, sharing, flow, transmission, and movement. Badarko (1993) identified four conditions for the successful transfer of knowledge:
  - i. there must be a means of transferring knowledge, and this means may be a person or it may be a technology;
  - this medium must be capable of comprehending the nature of this knowledge and its ii. content, and be able to transfer it;

- iii. the medium must have the incentive to do so:
- iv. there should be no obstacles to this transfer of knowledge.

Knowledge can be distributed in several ways, including project teams who are cognitively diverse and thus facilitate internal distribution, the intranet, training by older experienced colleagues, knowledge agents, internal communities via documents, and experienced teams, knowledge and learning circles (Heisig and Vorbeck, 2001).

6. The application of knowledge: this refers to the implementation of knowledge, with the application of knowledge management being the ultimate goal (Abu Al-Ela, 2012). The purpose of knowledge management is to apply the knowledge available to the institution, and this application is the most prominent of its operations. This process refers to use, reuse, benefit and application. Successful knowledge management uses the available knowledge at the right time, without losing the opportunity to achieve an advantage or solve an existing problem. To apply appropriate knowledge, methods and techniques, Burk (1999) indicated that institutions seeking good application of knowledge must appoint a Knowledge Manager who has the duty to encourage good application, and acts as a specialist dedicated to knowledge sharing applications and implementation auditing. Furthermore, Burk (1999) emphasised that use and reuse includes informal communications and access to reports, good practices, success stories and other formats, including presentations and training sessions. Modern technology, especially the internet, has provided more opportunities to use knowledge and reuse it in places far from where it was generated.

The application of knowledge allows for new individual and collective learning processes that leads to the creation of new knowledge, hence the name 'closed-loop' knowledge management processes. Several methods have been used to apply knowledge, including teams with multiple internal experiences, work initiatives, internal expert proposals, adoption of measures to control knowledge, and training of teams by experienced experts. The knowledge must be aimed at achieving broad goals and objectives that lead to growth and adaptation; therefore, there needs to be an alignment of the knowledge management strategy with the overall strategy of the organisation as a whole.

7. Organising knowledge: researchers in the field of knowledge management have dealt with the issue of organisation in relation to processes that aim to classify, index or tabulate knowledge. Many researchers have stressed the importance of organising and categorising knowledge as there are severe repercussions to unstructured knowledge; this may function as a barrier stopping employees from contributing to the creative capabilities of the organisation. Working individuals need to know how to complete the classification and organisation of knowledge, and need to be able to analyse and use it. Classification should be intuitive to those who will use it, because it enables people to move around in the knowledge landscape, find familiar landmarks, and use standard methods to access important knowledge.

8. Retrieving knowledge: researchers in the field of knowledge management have explored processes that involve searching for and easily accessing information in the shortest time, with the intent of applying it to solve work problems, and using it to change or improve business function. The extent of one's ability to benefit from knowledge, which is the essence of knowledge management, is based on the skill of retrieving what is known and what has been learned, and using it to form a solid knowledge base.

The retrieval of knowledge is a process that is not easy and not always readily available, as it depends on the effectiveness of the institution in organising and classifying that knowledge. The true value of knowledge is diminished if it is not simplified to become available to potential beneficiaries, such as being presented in the form of maps, graphs and tables. Without this, knowledge becomes inaccessible, and searching for it can be costly and often futile. In addition, knowledge that cannot be retrieved with the intention of use soon becomes obsolete, as use re-enriches and renews it. Access to knowledge is the primary key to success, and most organisations have means and structural foundations in place that are important to support the knowledge management process, such as automatic text search machines. In addition, the retrieval and use of knowledge ensures best practice in decision support, problem solving and work automation, while the essence of knowledge management lies in seeking to put the knowledge assets of the organisation at the disposal of the employee. The retrieval process is achieved through various methods such as the use of artificial intelligence and statistical analyses, including the method of clusters that arranges data in ways that appeal to users.

Perpetuating knowledge: researchers in the field of knowledge management have dealt with 9. this issue in relation to the processes of refinement, growth and feedback, all of which improve the readiness of knowledge at all times. Many researchers have pointed out that knowledge needs to be constantly reviewed and maintained. Refinement refers to those operations that are performed on knowledge with the intent of making it ready for use; these operations include removing some redundant parts that are inconsistent with the general direction and purpose of that knowledge. The important question here is, to what extent is that knowledge retained? Indeed, an important decision of the organisation's management is to determine what knowledge to retain. Duffy (2000) suggested setting appropriate time frames to move knowledge to different categories, including active knowledge, passive knowledge, and archival knowledge. Since knowledge is subject to cloning by competitors, institutions should work on the growth of their knowledge, and raise their value continuously, ensuring that their growth rate is outperforming that of their competitors. Knowledge needs time, validity and updating, and, as such, the knowledge management system must include the means of updating, adding, modifying and re-correcting knowledge, as well as a firm belief that knowledge is consistently capable of growth and renewal. What is important here is to think about how to define the relationship between the old and the new forms of knowledge. Preserving knowledge is important, especially in organisations that rely on employment or use of the temporary contract

system or external consultancy, as these employees take their tacit, undocumented knowledge with them when they leave (Batwaih and Bannaga, 2018). Furthermore, the added value to the organisation is how to benefit from the knowledge in relation to the components presented in Figure 1 that can be classified into the following three groups:

- i. human capital: includes employees' skills, talents, and knowledge;
- ii. information capital: includes databases, information systems, and information technology infrastructure;
- iii. institutional capital: includes corporate culture, leadership, teamwork, and commitment to achieving strategic goals.

Bringing all the elements of the above discussion together, Figure 1 presents the main justifications for adopting knowledge management in organisations. These include a change in the work method, raising work efficiency, continuous improvement in the quality of outputs, in addition to the spontaneity of development, and keeping pace with the increasing role of knowledge in institutional success

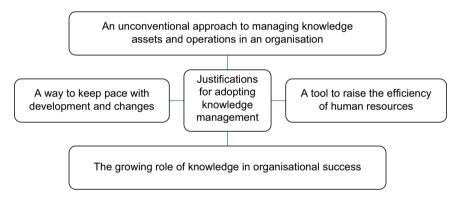


Figure 1: The Main Justifications for Adopting Knowledge Management in Institutions Source: Batwaih and Bannaga, 2018

# The Outcomes of Implementing Knowledge Management Strategies in Institutions

Knowledge management aims to:

- 1. **Improve the quality of administrative decisions:** knowledge management works to make knowledge, information and data available, safe, and well documented during the service life cycle, leading to an improvement in the quality of decisions taken.
- 2. **Increase efficiency** by improving the quality of the service provided and making it more adequate. This becomes possible by enabling service or product providers to be better able to achieve

- customer satisfaction, and to reduce costs by removing the need to re-discover knowledge. Moreover, efficiency means the minimum amount of time and effort is required to successfully accomplish a particular goal according to widely acknowledged and accepted practices.
- Ensure that employees have clear expectations and a solid understanding of what needs to be achieved. Through knowledge management, it is guaranteed that employees have a precise and common understanding of the value of services to clients and customers, and what benefits are to be gained from these services.
- **Provide information** by maintaining a comprehensive and accurate resource of knowledge that is available at any time. This is done through information collection, analysis, storage, and the ability to share, use and maintain that information.
- Develop the strategic position of an organisation: knowledge management works on improving the strategic position of an institution through the development of distinctive knowledge. This allows stakeholders to benefit from this knowledge, and to reflect on it in relation to innovation in the products and services provided, while increasing the competitiveness of the institution and ensuring its continuity. The improvement of an organisation's strategic position is also achieved by providing flexibility in work, creating an attractive work environment, and ensuring the organisation is able to achieve knowledge independence that is distinct from the knowledge that employees possess.
- **Increasing effectiveness:** this refers to the ability to achieve goals and solve problems. Ultimately, the primary goal of effectiveness is to fulfil objectives by taking the right action.

## The Current Situation of Development Performance in Palestine

The Palestinian economy can be described as a small developing economy with a population of about 5.35 million citizens; 2.72 million of whom are male and 2.63 million female (Palestinian Central Bureau of Statistics, 2022). As seen in Figure 2, which outlines some key features of the Palestinian economy, the gross domestic product (GDP) was approximately US\$15 billion dollars in 2021.

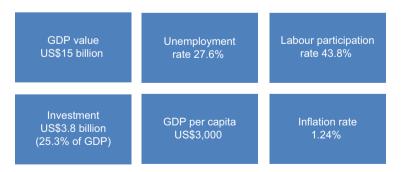


Figure 2: The Palestinian Economy in 2021 Source: Palestinian Central Bureau of Statistics. 2022

The performance of the Palestinian economy in 2021 also shows imbalances and challenges caused by the imperfect structure of the economy and weak productive capabilities, at both volume and quality of output. A high unemployment rate is the most prominent feature of the Palestinian labour market, indicative of the obstacles and significant predicaments facing the country. Figure 2 indicates that the unemployment rate in 2021 reached approximately 27.6% of the total labour force, reflecting the inability of the Palestinian economy to absorb the increasing numbers of new entrants into the labour market.

Figure 3 presents the performance of the State of Palestine in the Human Development Index (HDI) during the period 2004-2021. According to this figure, the HDI for the State of Palestine was 0.715 in 2021, placing the country in the category of the high human development level, ranking it 106 out of 191 countries and territories. Moreover, between 2004 and 2021, the Palestinian State HDI value increased from 0.651 to 0.715, a 9.8% improvement. Several factors have worked in tandem to enhance performance of this indicator, including high levels of education and productivity amongst Palestinian citizens, a culture of openness towards, and desire to learn from, global models and experiences, the close relationship between the Palestinian population and international organisations that offer financial support, and an increase in education and training opportunities that raise the level of competence and knowledge in Palestine.

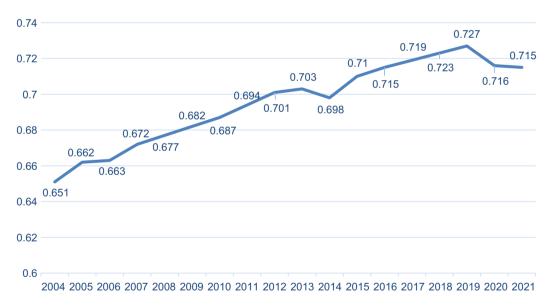


Figure 3: The Palestinian State's Human Development Index score (2004-2021) Source: UNDP. 2022

The Palestinian State has achieved much success in the field of human development. Enrolment in educational institutions for both males and females, for example, has been expanding, and the literacy rate has increased to 97.5%. Despite these improvements, however, the Palestinian economy is still facing many challenges that need to be overcome, such as improving the quality of primary and secondary education, and aligning higher and vocational education outcomes with labour market needs

## A BRIEF OVERVIEW OF THE FATEN FOUNDATION

The Palestinian Foundation for Lending and Development (FATEN) was established in 1999 as a private non-profit company registered with the Palestinian Ministry of Economy, and has been licensed by the Palestinian Monetary Authority (PMA) since May 2014. It provides loans to micro, small and medium projects, and other economic sectors. FATEN is one of the largest national institutions in Palestine, with more than 37 branches spread throughout the country, and includes 282 employees and more than 39,713 borrowers. The FATEN foundation has received local, regional and international awards for excellence in providing financial and non-financial services, including the "Leadership Award" in the Arab world. Even more so, its clients have won many awards, including the "Queen Sabika of Bahrain" and "Planet Finance" awards. The foundation works hard to keep up-to-date with advances in information technology in the field of finance to align with international best practices, and to meet the requirements of good governance, accuracy and transparency. Adopting knowledge management is considered an important mechanism through which FATEN can achieve its organisational goals.

Human and organisational structures of the foundation have maintained good progress since its establishment. The foundation provides its employees with a safe and encouraging work environment to motivate them to complete their tasks efficiently and creatively. The FATEN foundation can be distinguished from other public institutions by the presence of several advantages for its employees, including the existence of saving funds, health insurance, life insurance, having a fixed dollar exchange rate, monthly incentives and additional salary benefits, an employee appreciation system, visits by distinguished guests, gifts for employees about to get married, additional vacations for employees, and continuous investment in employees' professional development through annual training and growth plans.

#### RESEARCH QUESTIONS

This study attempts to address the following questions:

- According to employees, to what extent is the FATEN foundation's organisational culture suitable for the application of knowledge management?
- Does the level of institutional/organisational structure required for the application of knowledge management exist in the FATEN foundation, from employees' point of view?

- 3. Are the leadership characteristics (of middle and senior management) supportive of the application of knowledge management in the FATEN foundation, from the perspective of its employees?
- 4. Are the existing information technology structures fulfilling the necessary requirements for the application of knowledge management in the FATEN foundation, according to its employees?

#### **METHODOLOGY**

## **Participants**

This study was conducted with a random sample of 249 employees from FATEN, aged between 21 and 61 years old (M = 31.5 years, SD = 6.2 years). Table 1 presents the demographic characteristics of the respondents in terms of their gender, place of work, educational level, and career level. The table reflects the diverse backgrounds of the participants. The average length of these employees' professional experience is 5.5 years (with an SD of 3.8 years).

**Table 1: General Demographic Details of the Respondents (N = 357)** 

Variable	F	%
Gender		
Male	164	65.9
Female	85	34.1
Workplace		
Headquarters	59	23.7
Sub headquarters	190	76.3
Educational level		
Less than preparatory	-	-
Preparatory	_	_
Secondary	4	5.6
Technical diploma	_	_
Bachelor's degree	203	81.5
Postgraduate	32	12.9
Career level		
Sector Manager	24	9.6
Branch Manager	15	6
Head of Department	17	6.8
Assistant Branch Manager	1	0.4
Technical employee	192	77
Management employee	-	-

Source: Author's own fieldwork

## **Design and Study Procedure**

This study adopted a descriptive design to address the research questions, while both quantitative and qualitative techniques were used in relation to collecting information about the variables, measuring them, and analysing and interpreting the results. At the start of the study, a questionnaire about the requirements for the application of knowledge management in FATEN was presented to the employees to extrapolate their opinions regarding the four research questions. Results were entered into the SPSS statistical software package, and appropriate statistical methods were employed for each question.

## Measures

A questionnaire on the requirements for the application of knowledge management in FATEN (ORAKP) was developed by the author to determine the requirements for the application of knowledge management in the foundation. It consisted of 49 items, in the form of a Likert scale, that centred around the following four dimensions:

- employee evaluation of the organisational/institutional *culture* and its role in the application of knowledge management in the FATEN foundation (16 items);
- employee evaluation of the organisational structure and the process of applying knowledge management in the FATEN foundation (12 items);
- employee evaluation of key leadership characteristics and whether they support the application of knowledge management in the FATEN foundation (11 items); and
- employee evaluation of the information technology infrastructure in place and its impact on the implementation of knowledge management in the FATEN foundation (10 items).

To ensure content validity, the author asked a group of eight professors with specialty in this area to review the questionnaire. Their opinions were used to rephrase and slightly modify some items; the rate of satisfaction with the questionnaire ranged from 75% to 100% for all items.

The reliability of questionnaire dimensions was measured, and the author reported the split-half coefficient ranging from 0.87-0.89, Cronbach's alpha ranging from 0.88-0.90, Spearman-Brown coefficient ranging from 0.88-0.91, and Guttman split-half coefficient ranging from 0.87-0.88. Furthermore, the internal consistency of each dimension of the questionnaire was measured by finding correlations between the score of each item and the total score of the dimension. The correlation coefficients ranged from 0.76 to 0.80, and the results were significant (p < 0.001).

## **Data Analysis**

This study analysed the data obtained from participants based on the descriptive approach. More specifically, the data were classified and converted into frequencies by entering participant responses into the IBM SPSS software. Each response was numerically coded and then subjected to a descriptive analysis in order to determine the arithmetic mean of responses against the variable.

## **RESULTS AND DISCUSSION**

## **Research Question 1**

What are the indicators of a successful organisational or institutional culture, and to what extent are the necessary conditions in place to support the process of applying knowledge management in the FATEN foundation, from the point of view of its employees (Table 2)?

Table 2: Results of Employees' Evaluation of the Organisational/Institutional Culture and its Role in the Application of Knowledge Management in the FATEN Foundation. **Presented in Descending Order** 

N	Organisational/Institutional Culture	M
1	The foundation is interested in traditions and organising events that help learning and gaining knowledge.	
2	The foundation uses knowledge management to facilitate customers' access to its services and products.	4.09
3	The foundation motivates employees to develop their skills and translate them into reality.	4.04
4	The foundation encourages employees to generate innovative ideas.	3.98
5	The foundation contributes to promoting the values that encourage employees to launch their individual and collective initiatives.	3.97
6	The foundation is concerned with building intellectual capital through functional knowledge management practices.	3.95
7	The foundation encourages employees to use the knowledge of others to solve their own problems.	3.94
8	The foundation adopts the standard of sharing knowledge as one of the pillars through which distinguished employees are selected.	3.93
9	The foundation recognises errors, discovers them, corrects them, and considers them as a source of learning.	3.92
10	The foundation promotes traditions and practices that advance their ideas and experiences.	3.89
11	The foundation is underpinned by common standards and assumptions that motivate workers to exchange and share knowledge.	3.88
12	The foundation provides an organisational environment that helps and supports the needs of the individual.	3.87
13	The foundation provides time for workers to share and apply knowledge.	3.83
14	The foundation promotes the philosophy of teamwork to exchange ideas and experiences among employees.	3.78
15	The foundation is working to include the proposals of its clients in the knowledge management system.	3.77
16	The foundation takes incentive measures to extract tacit knowledge from employees.	3.72
	Overall mean	3.92

Notes: The mean was calculated according to the five-point Likert scale of agreement (1: strongly disagree,

2: disagree, 3: neutral, 4: agree and 5: strongly agree)

Source: Author's own fieldwork

As can be seen from Table 2, the general average of all indicators was 3.92. Therefore, as the average value was above three in all indicators, it reinforces the fact that the institutional culture is supportive of the process of applying knowledge management from the workers' point of view. This reflects the positive view of the employees in the organisation regarding the prevailing organisational or institutional culture in FATEN.

Looking at the items in Table 2 that have an average value above 4, it is clear that there is a solid agreement among the employees that the institution focuses on traditions and organising events that help learning and acquiring knowledge. It also uses knowledge management to facilitate customers' access to its services and products, and is keen to motivate employees to develop their skills. This translates into a reality that sufficiently serves customers and improves operational efficiency.

In addition to the above, a large percentage of employees indicated that the institution encourages them to generate innovative ideas, and contributes to strengthening the values that motivate them to launch their individual and collective initiatives. FATEN is also keen to build intellectual capital through functional knowledge management practices, while also enticing employees to use the knowledge of others. Moreover, FATEN adopts the criterion of sharing knowledge as one of the pillars through which it selects distinguished employees. On the other hand, a large percentage of employees in the organisation believe that the organisation's management should pay more attention to promoting the philosophy of teamwork and exchanging ideas and experiences among employees. This involves incorporating customer proposals into the knowledge management system, and taking incentive measures to extract tacit knowledge from employees (the average value is relatively low compared to other items contained in the table).

Overall, the results of Table 2 are in line with the specific economic, social and cultural characteristics of Palestine. This includes a high Human Development Index that leads to a raised awareness of the importance of adopting knowledge management. Furthermore, high levels of unemployment, and consequently a lack of sufficient job opportunities, lead to a rise in competitiveness in getting jobs, and a move towards excellence in task achievement and higher work efficiency, with a strong desire for employees to improve their level of income.

## **Research Question 2**

What are the indicators of a successful organisational structure and to what extent is it suitability prepared for the application of knowledge management in the FATEN foundation, from the point of view of its employees (Table 3)?

Table 3: Results of Employees' Evaluation of the Organisational Structure of the FATEN Foundation and the Process of Applying Knowledge Management. **Presented in Descending Order** 

N	Organisational Structure	M
1	Attention to the beneficiaries (internal and external) of the institution's services and asking for their opinions.	
2	The existence of high standards and the assumption of a relationship between superiors and subordinates based on cooperation and trust.	4.08
3	The diversity of experiences and the comprehensiveness of jobs provide an opportunity to share knowledge among employees.	4.02
4	Reducing hierarchical or supervisory levels to allow the convergence of organisational levels.	3.98
5	The shift from individual work patterns to group work patterns in self-working teams.	3.93
6	In the structure of the institution there is a department responsible for knowledge related to administrative organisation.	3.92
7	There is a flexible organisational structure that allows for internal and external environmental variables to be accommodated.	3.89
8	The organisational structure achieves integration, coordination and interaction between knowledge assets.	3.89
9	Achieving a balance between the powers and responsibilities granted to the individual.	3.88
10	The organisational structure allows the flow of knowledge and information in all directions (horizontal and vertical).	3.87
11	Periodic review of organisational structures according to the variables of the effective organisational structure.	3.84
12	The current organisational structure facilitates the job rotation of employees, which contributes to the transfer of knowledge.	3.74
	Overall mean	3.94

Notes: The mean was calculated according to the five-point Likert scale of agreement (1: strongly disagree,

2: disagree, 3: neutral, 4: agree and 5: strongly agree)

Source: Author's own fieldwork

According to Table 3, the average value is higher than 3 across all the indicators. This reflects a positive view amongst employees regarding FATEN's organisational structure and the level of flexibility it is able to maintain in keeping pace with changes and developments. The overall average for all indicators was 3.94, and this reflects that, from the point of view of FATEN's employees, the organisational structure is generally supportive of the process of applying knowledge management.

Looking at the items in Table 3 that have an average value above 4, it is clear that the employees mostly agree that the institution is keen to pay attention to the (internal and external) beneficiaries of the institution's services and take their views into consideration. There is also a consensus that there is a relationship between bosses and subordinates based on co-operation and trust in a way that serves the workflow and raises operational efficiency. The institution's employees also see that the diversity of experiences and the comprehensiveness of jobs provide an opportunity to share knowledge among employees, and this in turn helps in the application of knowledge management. Moreover, employees in the organisation believe that reducing hierarchical or supervisory levels allows convergence between organisational levels, and that the organisational structure supports the shift from individual work patterns to teamwork in self-working teams.

In addition to the above, employees at FATEN confirm that the institution includes a department responsible for knowledge related to the administrative organisation, and that the organisational structure is flexible and allows for the absorption of internal and external environmental variables. This, they believe, is able to achieve integration, co-ordination and interaction between knowledge assets, and ensures a balance between the powers and responsibilities granted to the individual. The organisational structure also allows the flow of knowledge and information in all directions, both horizontal and vertical.

## **Research Question 3**

What are the key leadership qualities that enable the successful application of knowledge management in the FATEN foundation (Table 4)?

Table 4: Results of Employees' Evaluation of the Leadership Qualities in the FATEN Foundation and its Role in the Application of Knowledge Management. **Presented in Descending Order** 

N	Leadership Characteristics	M
1	Empowering employees and allowing them to practice their work in their own way to achieve the desired results.	
2	Acquiring information and controlling its distribution in relation to future plans.	3.98
3	Ability to influence subordinates.	3.97
4	Providing continuous learning and development opportunities for employees.	3.94
5	Participation in local and international scientific conferences, which contributes to acquisition of new knowledge.	3.91
6	Reliance on leadership methods that empower employees.	3.91
7	Encouraging employees to present their ideas and suggestions.	3.73
8	Equality in the provision of incentives and rewards among employees.	3.71
9	Raising the level of administrative interaction between leaders and workers.	3.67
10	Allowing workers to participate in decision-making at all organisational levels.	3.58
11	Focusing on task completion, teamwork, and team spirit.	3.46
	Overall mean	3.82

Notes: The mean was calculated according to the five-point Likert scale of agreement (1: strongly disagree, 2: disagree, 3: neutral, 4: agree and 5: strongly agree)

Source: Author's own fieldwork

According to Table 4, the average across all indicators was approximately 3.82, reflecting the fact that that the institution's management is supportive of the process of applying knowledge management from the point of view of its employees. Furthermore, as the average value is higher than 3 in all indicators, this confirms an overall positive viewpoint regarding the management of FATEN and the methods it employs in dealing with the issue of applying knowledge management.

The majority of employees in the organisation agree that the institutional management is keen on empowering employees, adequately training and qualifying them, and creating an appropriate environment for them to carry out their work efficiently. A large percentage of employees indicated that the organisation possesses the information and data necessary to implement future plans, and that it has the ability to influence subordinates and direct them towards knowledge management. FATEN is also keen to provide opportunities for continuous learning and development for its employees and to participate in local and international scientific conferences, which contributes to acquiring new knowledge. It also adopts leadership methods based on equality and granting powers to employees.

The items with the lowest averages in Table 4 indicate that workers believe there is more space to enhance and improve: FATEN's management raising the level of administrative interaction between leaders and workers, supporting the need for workers to participate in decision-making at all organisational levels, and encouraging employees to accomplish tasks and work in a team spirit.

## **Research Question 4**

What are the IT resources and technical capabilities required for applying knowledge management in the FATEN foundation from the point of view of its employees (Table 5)?

Table 5: Results of Employees' Evaluation of FATEN's Information Technology Infrastructure and its Role in Supporting Knowledge Management. Presented in Descending Order

N	Information Technology and Knowledge Management	M
1	The foundation owns a website that is open and accessible to all employees, catering to their different needs.	4.02
2	The foundation provides adequate database systems.	3.98
3	Internet access is available to all employees at all levels.	3.97
4	The organisation provides the necessary computer programs to acquire and share knowledge.	3.96
5	The foundation provides specialised electronic forums that contribute to documenting and exchanging knowledge.	3.90
6	An electronic link is made available for each department through which employees can document their achievements, objectives and tasks.	3.90
7	The foundation provides electronic platforms through which to host meetings and transmit experiences online.	3.90
8	The organisation provides a digital library for all employees.	3.86
9	The foundation provides an internal information network through which to access data (computers, archiving systems).	3.84
10	The foundation provides employees with the most relevant and updated information/knowledge by giving them access to international databases.	3.83
	Overall mean	3.91

Notes: The mean was calculated according to the five-point Likert scale of agreement (1: strongly disagree,

2: disagree, 3: neutral, 4: agree and 5: strongly agree)

Source: Author's own fieldwork

The average of all the indicators in Table 5 is 3.91, reflecting that FATEN's management supports the process of enhancing the technological infrastructure from the point of view of its employees. As the average value is higher than 3 across all indicators, this reflects a positive view amongst employees regarding the efficiency of the technological infrastructure and information systems for the application of knowledge management.

The majority of employees in the sample agree that the leadership is very interested in supplying appropriate and supportive technology for the process of applying knowledge management, as it works to provide a special website accessible to all employees. Furthermore, the management at FATEN provides database systems and computer programs necessary for acquiring and sharing knowledge, ensuring the existence of an electronic link for each department through which employees can document their achievements, objectives and tasks, and provides electronic platforms through which to host meetings and for employees to exchange and discuss their personal experiences.

The majority of the institution's employees stressed the importance of providing a digital library that grants them an internal information network (computers and archiving systems) with access to data, and supplies them with the necessary information and knowledge through participation in international databases

## CONCLUSIONS

Among the most prominent results of the research is that despite the many challenges facing the FATEN foundation, the organisation is able to adopt the knowledge management approach in the various activities and services it provides to the public. This research highlights several contextual factors that are important to enhancing the mechanisms for developing the knowledge management strategy at the FATEN foundation, including a high level of education and productivity of Palestinian individuals, a culture of openness and desire to learn from global models and experiences, the close relationship between the Palestinian population and international organisations that offer financial support, enhanced education and training opportunities that raise the level of competence and knowledge in Palestine, and the high level of human capital.

Importantly, assessing the requirements for the application of knowledge management from the viewpoint of the workforce offers an accurate reflection of the reality of the knowledge environment in FATEN. As such, we invite the organisation's management to review the results related to the elements of the knowledge process (generation, development, storage and organisation, transfer and exchange, and application of knowledge) from the point of view of their employees, in order to capitalise on their strengths and achievements and to further win the satisfaction, support and commitment of their workforce. Most importantly, however, there is an urgent need to focus on the challenges and the shortcomings they face as an organisation, and to work to address them. We also encourage the management to review the results of evaluating the opinions of employees for each item of the questionnaire related to the four dimensions (organisational/institutional culture, organisational structure, leadership, and information technology infrastructure) in order to build the necessary foundations to establish a comprehensive knowledge management strategy at the FATEN Foundation

The most important recommendations that can be drawn from the research are summarised as follows:

- 1 Strengthening the organisational and institutional culture by encouraging employees to generate innovative ideas, and promoting values that encourage them to launch their individual and collective initiatives.
- 2 Working on building human capacity by participating in training programmes and other similar events, and encouraging employees to use the knowledge of others to solve their problems.
- 3. The management of the organisation should pay more attention to promoting the philosophy of teamwork, exchanging ideas and experiences among employees, incorporating the proposals of its clients in the knowledge management system, and taking incentive measures to extract tacit knowledge from employees.
- Ensuring that employees are empowered, trained and rehabilitated, and that the appropriate environment is created for them so that they are able to carry out their work with high efficiency.
- 5. Benefiting from databases and information owned by the institution that contribute to the implementation of future plans and programmes that lead to raising the efficiency of performance in the institution.
- 6. Giving more attention to providing opportunities for continuous learning and development for employees, allowing them to participate in local and international scientific conferences. This will greatly contribute to the process of acquiring new knowledge.
- 7. Delegating more powers to the executive bodies and enabling the leadership to devote more time to strategic thinking in developing the organisation.
- 8. Raising the level of administrative interaction between leaders and workers, and encouraging workers to participate in decision-making processes at all organisational levels, while focusing on the need to adopt a team spirit.
- 9. Recognising the importance of establishing a digital library for the benefit of employees, and supplying an internal information network with access to data that provides an abundance of information and knowledge through participation in international databases.
- 10. Strengthening the infrastructure of information and communication technology and making it accessible to all administrative levels. There is a need to ensure that databases and information are available across the institution, catering to the different specialisations of the employees.

## **DECLARATION OF CONFLICTING INTERESTS**

The authors have no conflicts of interest to declare.

## REFERENCES

- Abu Al-Ela, L.M.H. (2012): The Degree of Practicing Knowledge Management Operations in the College of Education at Taif University from the point of view of faculty members, College of Education, Taif University (original in Arabic). Specialized International Educational Journal, Vol. 1, No. 4, pp.106-126. Available at: https://search.mandumah.com.
- Abu Fara, Y. (2004): The Relationship Between the Use of Knowledge Management and Performance. In Fourth Annual International Scientific Conference, Knowledge Management and the Arab World, 26-28 April 2004, Al-Zaytoonah University, Amman, Jordan.
- Al-Ali, A. (2006): Introduction to Knowledge Management (original in Arabic). Amman, Dar Al Masirah for Publishing and Distribution for Printing.
- Al-Thneibat, M.Y. (2013): Testing a Proposed Model for the Successful Application of Knowledge Management in Saudi Universities: Towards an Effective Strategy for Knowledge Management (original in Arabic). Studies and Research, Vol. 5, No. 12, pp.190-216. Available at: https://www-asjp-cerist-dz. translate.goog/en/article/3463? x tr sl=ar& x tr tl=en& x tr hl=en& x tr pto=sc.
- Alyan, R. (2008): Knowledge Management (original in Arabic). Amman, Dar Safaa for Publishing and Distribution.
- Badarko, J. (1993): The Circle of Knowledge: How Companies Compete through Strategic Alliances (original in Arabic). Cairo, The Arab Scientific Media Corporation (SHUAA). Available at: www.edara.com.
- Batwaih, M. and Bannaga, A. (2018): Developing Arab Institutions from the Perspective of the Knowledge Economy. Development Studies, Kuwait, Arab Planning Institute.
- Burk, M. (1999): Knowledge Management: Everyone Benefits by Sharing Information. Public Roads, Vol. 63, No. 3, pp.26-29.
- Cohen, W.M. and Levinthal, D.A. (1990): Absorptive Capacity: A New Perspective on Learning and Innovation. Administrative Science Quarterly, Vol. 35, No. 1, Special Issue: Technology, Organizations, and Innovation, pp.128-152.
- Drucker, P. (2005): Knowledge Management. Beirut, Library of Lebanon.
- Duffy, J. (2000): Knowledge Management: To Be or Not to Be. Information Management Journal, Vol. 34, No. 1, p.64.
- Heisig, P. and Vorbeck, J. (2001): Benchmarking Survey Results. In: Mertins, I.K., Heisig, D.S.P. and Vorbeck, D.P.J. (Eds): Knowledge Management: Best Practices in Europe (pp.97-123), Berlin, Heidelberyk, Springer Verlag.
- Horwitch, M. and Armacost, R. (2002): Helping Knowledge Management Be All it Can Be. Journal of Business Strategy, Vol. 23, No. 3, pp.26-31.
- Ismail, M.A. (2009): The Concept of Knowledge Management in the Modern Times, Arab Forum for Human Resources. Available at: https://hrdiscussion.com/hr4521.html.
- Nonaka, I. and Takeuchi, H. (1995): The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation. New York, Oxford University Press.

Palestinian Central Bureau of Statistics (2022): Available at: https://www.pcbs.gov.ps/default.aspx. Accessed on 14 December 2022.

UNDP (2022): Human Development Index (HDI). Available at: https://hdr.undp.org/data-center. Accessed on 4 October 2022.

## **BIOGRAPHY**



**Dr Mohammed Omar Batwaih** is a senior expert at the Arab Planning Institute in Kuwait (a regional development organisation). He earned a PhD in Development Economics and an MSc in Industrial Planning. He has extensive experience in economic consultancy and training in areas such as local development, knowledge economy,

SMEs, economic integration, education, and labour market policies. He has worked as an economic expert in several Arab countries and has published his research in international journals. He has taught Economics in several universities across the Arab world, including Yemen, Saudi Arabia, and Kuwait.

