

Spring 3-19-2013

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## Recommended Citation

Almuhairi, Khamis, "Dubai Police: Strategic Ontological Police Force Knowledge Management Framework (SOPFKMf)" (2013). *UK Academy for Information Systems Conference Proceedings 2013*. 41.  
<http://aisel.aisnet.org/ukais2013/41>

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# **Dubai Police: Strategic Ontological Police Force Knowledge Management Framework (SOPFKMf)**

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## **Abstract**

Knowledge management is the secret used by all the successful companies to obtain competitive advantage and improve work performance. This paper will discuss the relevance of developing Strategic Ontological Knowledge Management Framework within the Dubai Police in order to achieve optimal performance. Establishing knowledge management structure within an intricate operation, such as the Dubai Police, will not only place a large challenge to install best practice within the current operational framework. It is also a vital need in order to promote progression and competitive advantage within this industry.

To perfect the outcome of this framework, this paper will present the core issues that are faced within the force and evaluate the different concepts about knowledge, knowledge management, its types and the relevant ontology in order to comprehend the methods that can be helpful for the force in enhancing their strengths, achieving their goals and building a better understanding of knowledge.

**Keywords:** knowledge management, framework, competitive advantage, ontology.

## **1.0 Introduction**

It is extensively recognized that an effective knowledge management provides companies with competitive advantage and improved performance (*C. Small, C. and A. Sage, 2005, p.153-169*). Knowledge is defined to many organizations as “a set of organized statements of facts or ideas, presenting a reasoned judgment or an experimental result, which is transmitted to others through some communication medium in some systematic form” (*Bell, 1973, quoted in Thompson and Walsham, 2004, p.725*). The upper management in Dubai Police has concerns of how to manage and circulate vital information to the whole force and create a process that will be suitable for the organization. This paper will discuss the importance of producing Strategic Ontological Knowledge Management Framework within the force

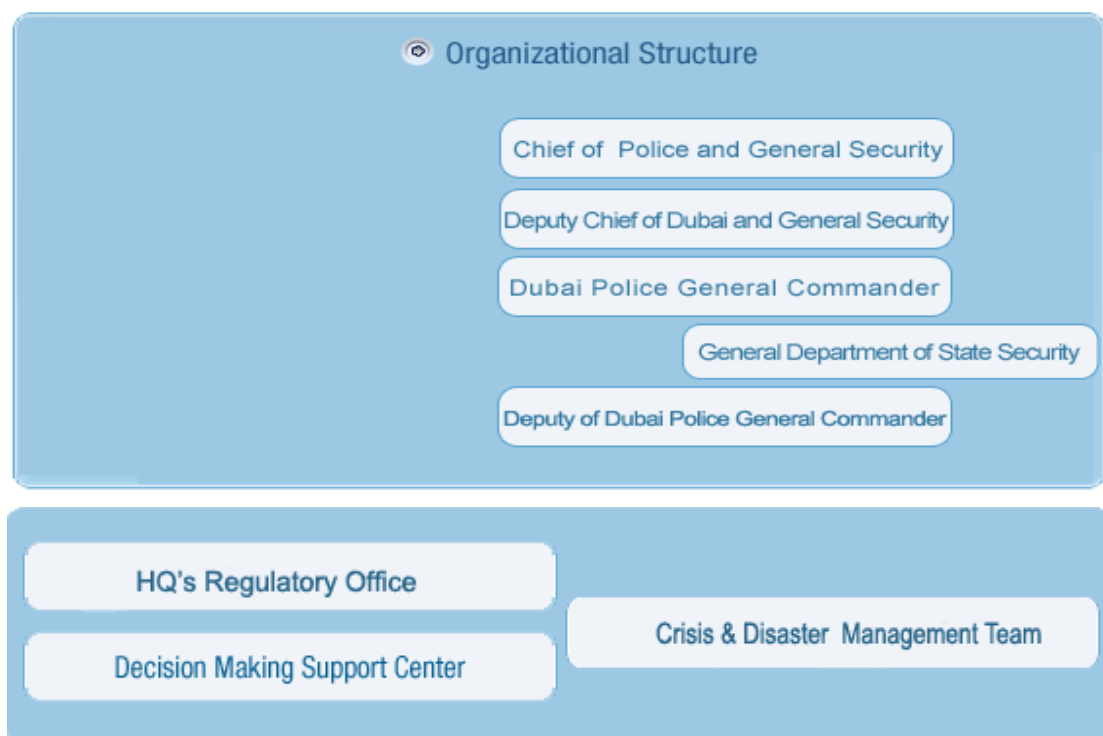
discussing how it will result in an effective understanding and management of the police force, while improving work performance.

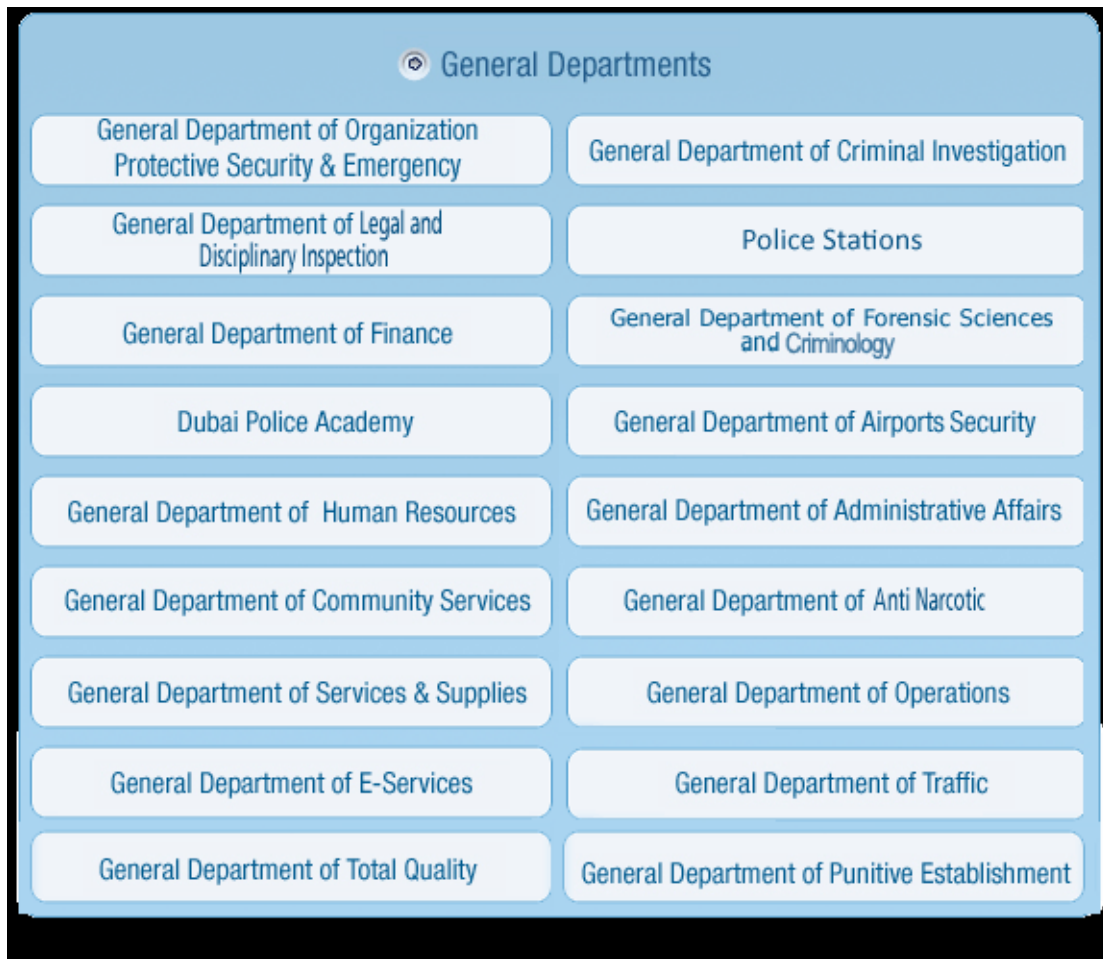
## 2.0 Dubai Police Background and Rationale

Before outlining the use of knowledge and knowledge management in any organization, it is essential to first understand the many issues and problems that need to be tackled and resolved in any organization.

### 2.1 Dubai Police Background and Organization Structure

Dubai Police Force is a complex organization that dates back to June 1956. Dubai Police covers only the city Dubai in the UAE. Dubai Police Force consists of 25,000 employees and has many departments as shown in (Figure 1 and 2). Having many separate departments is a way of defining roles; however, it presents a potential difficulty for sharing knowledge between the departments. Although they are currently circulating Knowledge Management through the intranet in an internal website that can be accessed by all the employees unfortunately, it lacks vital information that can be useful for all the officers.





**Figure 1 Dubai Police Organization Structure (Dubai Police )**

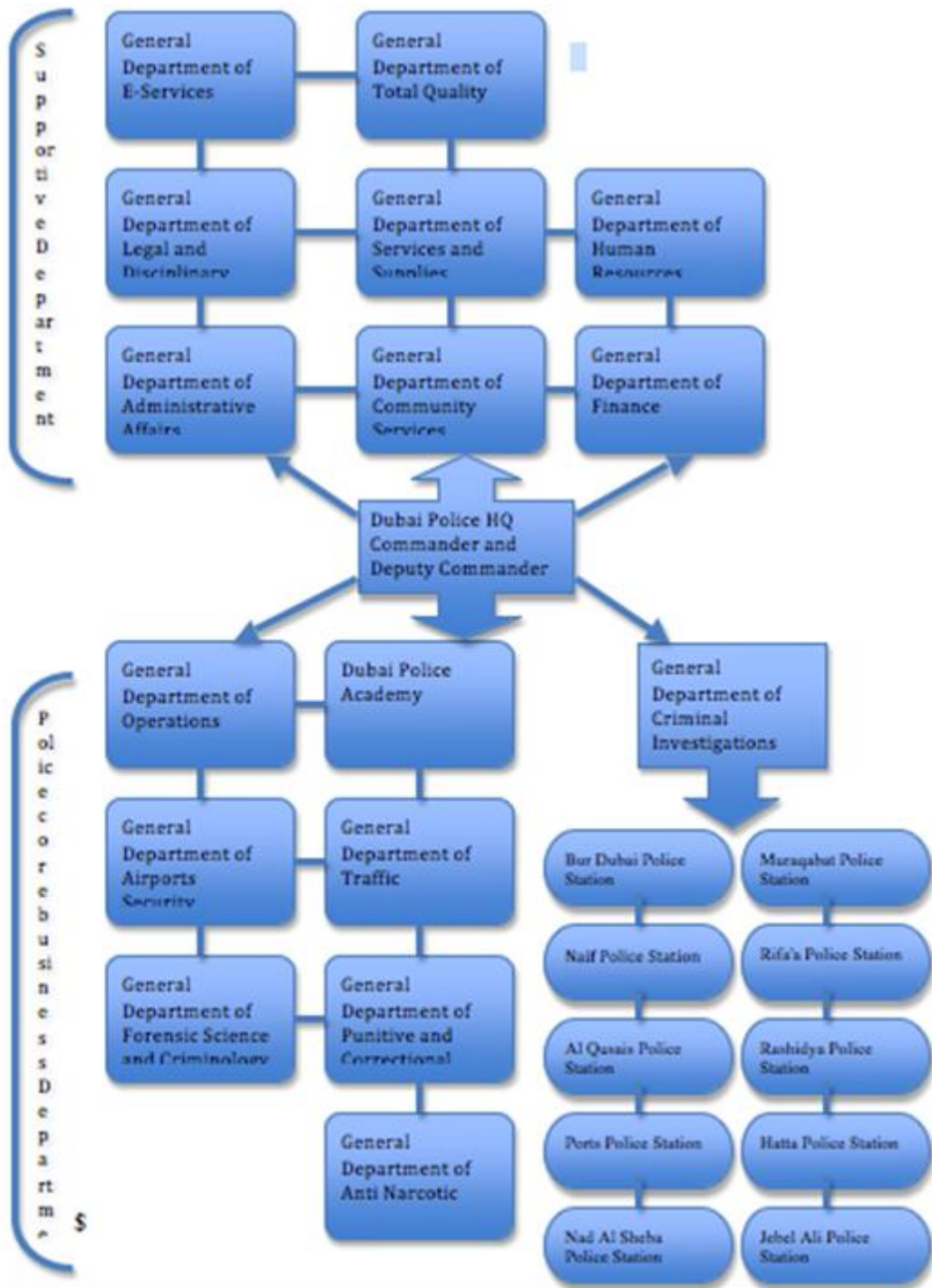


Figure 2 Supportive and core business Dubai police force structure

## 2.2 Rationale

As presented in (Figure 1 and 2) Dubai Police has many departments that work on their own responsibility resulting to the lack of sharing vital information between them. Košturiak also noted that most organizations concentrate on the physical activities being carried out neglecting how the flow knowledge throughout the organization (Košturiak, 2010, p.51-63). In the case of police activities, which focus on the

processing of individuals, questioning, investigate and analyzing criminal behavior after they have been arrested. Unfortunately they do not share the information they gained to other departments in the force, not knowing how useful it could be to the others. In every organization poses its own corporate governance, which installs the best practices for operational framework within the organization, which are to be installed managed and promoted by the Human Resource department. However, with regards to the police force the knowledge management structure and ethos needs to run much deeper and needs to be inherently linked to how the police force is providing the service that is required of it (*Paiva, 2002, p. 381-389*). It is a vital need to have a strong knowledge management structure in the Police Force allowing all officers to have access to it that will benefit the force and make their work more efficient.

### **3.0 Aims and Objectives of the Research**

In order to establish a comprehensive knowledge management framework in Dubai Police there must be an understanding of the needs and demands of the operational framework in the police force. The overall aim of this research paper is to take a strategic ontological approach in order to create a framework that works, is flexible, can adapt to change, and is within the current budget capabilities, while also adhering to the current standard of rules. (*Tynan, 1999, p. 8-61*)

#### **3.1 Knowledge definitions**

KM has many different meanings this was all revealed in the KM Literature review. Matthews defines “knowledge, as the postulation and practice of new relations and as an outcome of organizational processes, provides the greatest leverage for firms to survive, compete, and conquer greater heights in the world of business” (*Mathews, J. 2012, p.73*). Most discussions of knowledge and knowledge management make a difference between two types of knowledge: extrinsic/explicit and elicited/tacit. “Explicit knowledge is that form of knowledge which can be transferred through language and mathematical modeling. It is implicitly contained in all kinds of knowledge types: know-what, know-why, know-how, and know-who” (*Bratianu & Orzea, 2012, p.16*). McCall define the isolated attributes of explicit/extrinsic knowledge. In its extrinsic form knowledge indicate organizational knowledge that is codifiable and is routinely found in computer systems, databases, definitions,

enterprise repositories, policies, procedures and training course content (*McCall, 2008, p.77-101*). Intrinsic knowledge is often referred to as tacit knowledge. (*Srdoc,A. 2005, p.283*) Srdoc defines tacit knowledge as “personal knowledge embedded in individual experience”. From a philosophical perspective knowledge is very complex, Klein defined knowledge as: “Culture is the knowledge we practice, and it is characterized especially in the interpretation and judgment facets of knowledge, of which there are always three: information, interpretation, and judgment” (*Klein, D. 2012, p. 283*).

In order for the police force to have a better work performance they clearly need to use both types of knowledge that is mentioned above in their workflow and develop an efficient KM Framework that will help employees to share the knowledge they have with their colleagues. This will be very challenging when dealing with an organization that has numerous different roles within it when comes to employees’ embracing and accepting the change.

### **3.2 Social Ontologies**

Social ontology has a variety of definitions that exist. The basic definition is “ontology describes the result of a process of negotiation and reflects the reality in form of a formal model” (*I. Adamson 2005, pp. 987- 1000.*) In other words having a clear understanding that is relevant to the organization about the knowledge, and to smoothen the process with the help of ontologies combine them all together with the storage and retrieval of knowledge. The representation of knowledge in the form of formal models is the basic purpose served by ontologies (*Alazami & Zairi, 2003, p. 199-204*). Researchers suggest that before individuals within organizations gain a certain level of understanding related to the knowledge claims, they have to first agree on the ontological distinctions of the symbols containing and representing the knowledge claims (*Avison, 1999, p. 94-97*).

According to (*Martins, N. 2009, p.323-344*) the social ontology framework investigates social aspects of organizations and their properties. The basic reason organizations developing social ontological frameworks is to inquire KM within organizations and to observe the organizational behavior to gain a clear understanding about the social behavior of the people working within the boundaries of the organizations (*Bennett, R. & Garbriel,1999, p. 212-225*). Usually, social ontology theory is separated into two different groups – individualism and societism, where

both groups have been used to explain organizations. Individualists are resolute and constructed by individuals to maintain that social phenomena “All social matters ultimately consist in and are explained by facts about people — either individual people or groups thereof (*Schatzki, 2005, p.467*).

In conclusion the social ontological framework is particularly helpful because it facilitates open communication between individuals within organizations by providing them with common knowledge about a certain concept or domain as well as the permanent organizational structures, the network of collaborations and the interdependencies between organizations.

#### **4.0 Research Methodology**

To create the perfect framework it is necessary to gather the appropriate data that is required in order to create the framework using the right methodology from a theoretical and practical point of view.

Secondary and primary data collections both come from the practical point of view. The secondary research will be from an analysis of knowledge management theories and researching from all academic resources and database in the form of literature review. Using questionnaires and interviews as the primary research methodology to supplement the secondary research, however the answers may be bias from a personal point of view. For the primary research the purposes of conducting, the method referred to as the Delphi Model will be used, in an attempt to obtain the best possible picture of the thoughts and feelings of the individuals being questioned.

#### **5.0 Action Research and Case Study**

This section of the paper is about the primary research that has been carried out so far. Questionnaires (See Appendix) were constructed to provide preliminary findings. 36 questions were sent out to a large number of respondents, across the Dubai Police and a total of 131 were received back.

Based on these preliminary findings, a case study analysis will be undertaken considering the specific use that individuals make of the current knowledge management structures and the way in which their day-to-day lives would, potentially, be changed by a more suitable structure being put in place. This is



undertaken because the individuals' perceptions may be very different from the reality. These will then be analyzed to produce a foundation for how these findings can then be furthered to produce a new structure that will be suitable for the Dubai Police Force.

## 6.0 Developing a framework

To create the framework the first step will be is looking at the general culture and the way in which the organization works. Throughout both the secondary and primary research, it became apparent that there needs to be a general ethos of co-operation and support for a knowledge management system, if the actual infrastructure which is put in place is to be readily accepted (Hsieh, et al., 2002).

The chosen knowledge management framework is therefore as follows:



**Figure 3 KM Framework (HUI King-Chung, Ziggy 2001)**

This shows the need to consider people, culture, processes as well as the enabling technologies in order to create the strategy rather than simply creating a structure and expecting the workforce to fall in line. Based on this, a greater emphasis will be placed on changing the working approaches taken by individuals, within the police force; this will have to be driven from the top management team, including potentially changing the way in which these targets are set, so that individual members of staff are more encouraged to work for others, rather than merely gathering information that

is relevant to themselves and not just recording this information for the benefit of others, in the future (*Martinez, 1998*). Once these cultures have been put in place, it will then be possible to establish a computerized system that will support the newly found knowledge management structure, enabling knowledge to be centered on the computerized system and specific training will be necessary to ensure that all individuals are comfortable in the use of the new system (*Klobas, 1997*). Knowledge management is so much more than simply having a computerized program that allows the collection and dissemination of data. It requires a complete culture change and this will, therefore, be central to the ongoing agenda, within the Dubai Police Force (*Wild et al. 2002*).

In summary, looking at knowledge management, specifically in the context of commercial organizations and how they can use the knowledge within their company, which is the culmination of raw data and the experiences of the individuals, within the team, to achieve a competitive advantage over others. However, it became apparent that there was a culture issue in Dubai Police that needed to be addressed by the management team, before the infrastructure can be put in place.

Once this is undertaken, the knowledge management system that will be put in place will clearly centre on information technology, due to the practical difficulties of having several different departments, in several different locations. However, it has also become apparent that individuals wish to see other knowledge management processes which may be slightly less formal, such as cross departmental meetings taking place, and easily, both for management teams, in terms of bringing the departments together and ensuring ongoing acceptance of this new strategy.

## Appendix:

### The Questionnaires:

#### 1. Demographic data

Please provide the following information about yourself by marking one of the options for each question:

##### 1. Gender

- (a) Male (b) Female

##### 2. Age:

- (a) 18-25 (b) 26-35 (c) 36-45 More than 45

##### 3. Education:

- (a) High School (b) Vocational/Diploma (c) Bachelor (d) Masters (e) Doctorate

##### 4. Responsibility in the police force

- (a) Non managerial (b) Line manager (c) Middle management (d) senior management

#### 2. Knowledge Management data

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
5. Does police force relies on the past data patterns for future decisions and actions?	1	2	3	4	5
6. Does police force use past cases to solve new cases make new decisions and take action?					

7. How much past data is used and reused in new situations?

- a. 0% b. 25% c. 50% d. 75% e.100%

14. Dubai Police have the sufficient amount of technology to be able to manage the knowledge management.					
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Knowledge conversion: the process of rendering existing knowledge useful.

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
	1	2	3	4	5
15. Dubai police has in place different mechanisms and processes to filter knowledge					
16. Dubai police has in place different mechanisms and processes to transfer knowledge to the individuals					
17. Dubai police has in place different mechanisms and processes to absorb knowledge from individuals					
18. Dubai police has in place different mechanisms and processes to integrate different types of knowledge from different sources					
19. Dubai police has in place different mechanisms and processes to organize knowledge					
20. Dubai police has in place different mechanisms and processes to replace outdated knowledge					
21. Dubai police has in place different mechanisms and processes to convert knowledge into action					

. Knowledge application: the process of creating value from knowledge.

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
	1	2	3	4	5

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
8. Do you think that knowledge resides in the minds of the people are the most important knowledge?	1	2	3	4	5

9. In your opinion, what is the most important Knowledge Management process in Dubai Police?

- (a) Knowledge creation      (b) Knowledge capture      (c) Knowledge sharing  
 (d) Knowledge application      (e) All of the above

Knowledge Acquisition: This process of KM refers to the mechanisms involved in new knowledge creation and knowledge accumulation from existing knowledge.

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
	1	2	3	4	5
10. Dubai police has in place different mechanisms and processes to create new knowledge by using the previous knowledge					
11. Dubai police has in place different mechanisms and processes to distribute knowledge					
12. Dubai police has in place different mechanisms and processes to distribute knowledge within and across units and departments					
13. Dubai police has in place different mechanisms and processes to exchange knowledge within and across units and departments					

14. Dubai Police have the sufficient amount of technology to be able to manage the knowledge management.					
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Knowledge conversion: the process of rendering existing knowledge useful.

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
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19. Dubai police has in place different mechanisms and processes to organize knowledge					
20. Dubai police has in place different mechanisms and processes to replace outdated knowledge					
21. Dubai police has in place different mechanisms and processes to convert knowledge into action					

. Knowledge application: the process of creating value from knowledge.

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
	1	2	3	4	5

22. Dubai police has in place different mechanisms and processes to learn from mistakes					
23. Dubai police has in place different mechanisms and processes to learn from experience					
24. Dubai police has in place different mechanisms and processes of using knowledge for problem solving and creating new knowledge					
25. Dubai police has in place different mechanisms and processes to make knowledge easily accessible to all who need					

#### Knowledge Sharing

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
	1	2	3	4	5
26. We share knowledge through formal and informal meetings/ discussions within and across teams and department					
27. Seniors often share their work experiences with us					
28. Dubai police invites experts to share their experiences to make us knowledgeable and efficient					
29. In case of any issue, we share knowledge with other units and departments					

#### Culture of Dubai police

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
	1	2	3	4	5
30. Employees know the Value and importance of Knowledge Management.					



31. Dubai police offers a supportive, encouraging, and open culture that facilitates knowledge management					
32. The prevailing belief is that knowledge management is the task that cannot be designated to particular employees and experts					
33. Sharing Knowledge between individuals may lead to distrust amongst them					

Structure of Dubai police

	Strongly disagree	Mostly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree
	1	2	3	4	5
34. Dubai police has explicit work rules and policies with a good degree of autonomy					
35. The existing Structure of Dubai Police helps the efficiency and effectiveness of Knowledge Management					
36. Individuals have the liberty to find solutions of issues from all the available channels and sources					



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