

# Examining the Impact of Strategy Management and Information Technology on Organizational Performance of Sharjah Police

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## Abstract

The primary aim of this study is to investigate the effects of IT management and strategy management on the performance of organizations. Based on a solid theoretical basis and a thorough literature review, the author developed the study model, with the models adopted being the Resource-Based View of the Firm (RBV), Knowledge-Based View (KBV) and the Innovation theories. The study carried out an analysis of the effects of IT management and strategy management on the performance of organizations. For the purpose of this analysis, three hundred and forty-one (341) questionnaires were distributed to random selected Sharjah Police departments, in Sharjah, UAE. From the total questionnaires distributed, two hundred and forty-five (245) were returned, the data from which was analyzed using SPSS. The results of the analysis showed that IT management and strategy management had a positive and significant effect on organizational performance of Sharjah Police departments. The study recommends the effective implementation of IT management and strategy management for effective and successful performance of Sharjah police departments. The study confirmed the applicability of both the Resource-Based View and the Knowledge-Based View on examining organizational performance.

**Keywords:** strategy management, information technology, organizational performance, Sharjah Police

## 1. Introduction

The Sharjah Police was, at the onset, set up as the general security police force in Sharjah, UAE up until 1967. The decree of its establishment was issued by His Highness Sheikh Khalid Bin Mohammed Al-Qasimi as a local department, affiliated to the Sharjah ruler and under the oversight of the police station and the general security chief. The force was supervised and trained by Colonel Abdullah Juma Al-Saree and Mr. Burner (Oman British Coast), with the cooperation of Mr. Abdullah Juma Al-Saree. By 1971, a new federal system was set up by the UAE Ministry of Interior, His Highness Sheikh Dr. Sultan Bin Mohammed Al-Qasimi, a member of the Federal Supreme Council and the Sharjah ruler at that time. Accordingly, a degree was passed integrating the general security and Sharjah police departments to the Ministry of Interior. In the present time, the General Directorate of Sharjah Police is made up of different departments, representing different fields of security and police along with the region police directorate at the Emirates east coast (Korfakhan, Kalba & Al-Hisn).

Ultimately, the Cabinet provided its approval to the report of the Sharjah Police involving decision No.(3)(1995) that was geared towards enhancing Sharjah police and transforming a general director, having nine departments. By 1996, the Sharjah Police underwent restructuring and eventually named as the Sharjah Police Headquarters based on the ministerial decision No. (298) and this resulted in the qualitative transformation of the Sharjah police organization of the work style to a more contemporary style that is consistent to the responsibilities to maintain security and safety in the emirate. Moreover, the police are autonomous in their use of the current methods to conduct their responsibilities of eliminating the spread of modern crime.

## 2. Review of Related Literature

### 2.1 Organizational Performance

In the organizational research field, majority of the studies examined organizational performance owing to its significance to the organizations' development, obtaining competitive edge and effectiveness. For instance, in Combs, Crook, Shook, David and Ketchen (2005), organizational performance was evidenced to be one of the

major factors in management literature, specifically studies that focused on strategic management in organizations. Additionally, practitioner and academic circles laid stress on organizational processes and antecedents of improved outcomes when examining performance of organizations (Jing & Avery, 2008).

Other studies of the same caliber like Lloyd and Modlin (2012), job performance was deemed as employee behaviors that achieve organizational objectives, and they are categorized into productivity, efficiency and effectiveness. More specifically, efficiency evaluated job performance among employees, productivity calculated efficiency cost, and effectiveness reflected the former two's values.

Majority of studies dedicated to job performance reported inconclusive findings; to begin with Chambel and Castanheira (2007) reported a significant zero-order relationship between status and relationship, indicating higher level performance among temps in relation to the permanent employees. On the contrary, high self-rated job performance was displayed by permanent employees rather than temps in Kinnuen, Makikangas, Mauno, Siponen and Natti's (2011) study.

Added to the mentioned studies, Hart (1991) revealed that organizations with the requisite formal processes to address managerial succession are still lacking and the National Association of Corporate Directors (2008) noted that 42% of companies surveyed generated a successful plan dedicated to CEOs (Davis & Nosal, 2009).

Aside from the weak organizational performance, studies like Carroll (1984), Haveman (1993), Haveman and Khaire (2004) revealed that transition of management contributes to the survival of organizations, others like Virany et al. (1992) and Wiersema (1992) revealed its relationship to breach of organizational strategy while Grusky (1963) indicated its relationship with breach of organizational interpersonal connections. Lastly, negative effects were found from time spent by new management in establishing connections on the organization's short-time performance (O'Toole & Meier, 2003). In relation to this discussion, an interview guide is developed and proposed to create the transition process of COMTRAIN.

## *2.2 Organizational Performance Definition*

Generally speaking, the organizational performance system is full of complications that comprise of six performance conditions, which are effectiveness, efficiency, quality, innovation, productivity and profitability (Sink & Tuttle, 1989). The ability of the organization to manage and deliver value to stakeholders is referred to as organizational performance (Moullin, 2007) and the concept is a tool that measures, assesses and evaluates successful customer value development and delivery.

The current business environment urges for the measurement of organizational performance owing to its significance in examining successful strategy utilized by the organization (Neely, 1999) owing to the need for a universal measure that could determine enhancement.

## *2.3 Organizational Performance Measurement*

Moreover, the need to measure organizational performance stems from the need to achieve organizational management effectiveness (Demirbag, Tatoglu, Tekinkus & Zaim, 2006). Such measurement is significant for the construct of management (Pongatchat & Johnston (2008) and it plays a key role in advocating and maintaining the awareness of employees for the need to enhance the performance of the whole organization (Kanji & Sa, 2006).

Organizational performance is a primarily representation of the development of the organization towards the achievement of its objectives that involves the identification of opportunities, realization of the alignment between organizational goals, enhancement of accountability and appropriation of future resources, as well as promoting participation among employees in strategy implementation (Kanji & Sa, 2006). There are four performance measurement areas that are of significance and they are achievement of excellent processes, heightening the value of stakeholders, meeting customers' needs, and enhancing organizational learning. Deming (1986) contended that nothing is improvable without measuring and thus, organizational performance has to be effectively and accurately measures to identify its effectiveness in the use of what little resources they have to conduct the processes of business (Gadenne & Sharma, 2002; Madu, Kuei & Jacob, 1996).

The issue of measurement of performance stems from the fact that traditional performance measurements are confined to financial measurement indicators that have several weaknesses – in this regard, authors have turned to using financial and non-financial indicators combined (Demirbag, Koh, Tatoglu & Zaim, 2006).

In the subject of benchmarking of organizations, Dawkins, Feeny and Harris (2007) and Debnath and Shankar (2008) described it as a tool for enhancing the performance of organizations and thus, it has to be employed as such, otherwise an organization that refuses to do so will have dissatisfied workers and high level of turnover from them.

Moreover, in relation to the performance measurement, it is used to gauge the effectiveness and efficiency of actions in the form of metrics that assist in collecting, monitoring and examining the information regarding performance (Garengo & Bititci, 2007). Such information is invaluable to developing organizational activities including planning, management and control and other activities that are related to performance.

To reiterate, traditional performance indicators based on profit, debt, sales, turnover and ROI are insufficient to measure the nuances of the business environment and as such, non-financial indicators are needed as suggested by Johnson (1983) and Kaplan (1984), who pinpointed the traditional indicators weaknesses. In the same line of recommendation, Kristensen and Westlund (2004) advocated that non-financial indicators like stakeholders' development value have to be considered in performance prediction. In relation to this, in order to successfully gauge performance, combined indicators of performance (financial and non-financial) have to be implemented, necessitating the use of non-financial performance indicators.

### **3. Information Technology (IT) Management**

Training was included in IT graduate programs in public management by the Network of Schools of Public Policy, Affairs and Administration (NASPAA) in 1988. This decision was geared towards transforming mission and outcome-centered accreditation while promoting the IT training importance in the curriculum of public administration. In this regard, the IT effects on government have proliferated and as such, management has to learn about IS processes, preferences, rules and assumptions (Dawes, 2004, p.6). In addition, the change of pace in IS system demands that organizations use undergo restructuring and ongoing adaptation to the environment (Berce, Lanfranco & Vehovar, 2008). In fact, majority of public administration innovations have adopted ICT tools to provide public services and implement policies (Matei & Savulescu, 2014). In Kernaghan and Gunraj's (2004) study, the authors reported that public firms IT use is an indicator of their need to adapt constantly to environmental changes and to hire employees that have distinct skills, as well as to invest in IT infrastructure, when streamlined with information management, information sharing and dissemination, can contribute to organizational efficiency. Changes are brought about by such pre-dispositions based on factors including political, structural, managerial and cultural elements, so much so, that departments and agency have to collaborate, shift from departmental to non-departmental forms, and change their hierarchical control to one that is decentralized- all these would ultimately mitigate middle management among organizations.

Extending this argument, a technology invariant can be described as the increased in the capability of tackling complexity using layers of modular technology in the standardized software platform as evidenced by Dhar and Sundararajan (2007). This would urge public managers to determine such capabilities facilitation of organizational models to produce capabilities that could eradicate weaknesses.

In the E-learning context, education and learning is enhanced and different learning strategies are introduced, with applications for information exchange and skills acquisition (Candice, Sandra & John, 1998; Sife, Lwonga & Sanga, 2007). E-learning entails the incurrence of cost to bring about self-paced learning, consistent content that is updated, managed and controlled and provided to significant number of people to contribute to performance enhancement (Cantoni, Cellario & Ports, 2004). Academicians have promoted corporate training entities throughout the globe that use e-learning and learning management systems (LMS) to advance training strategies and methods with the help of virtual and mobile learning surroundings (Kumar & Suneja, 2011).

In particular, LMS comprises of a combination of processes and materials that include the administration of participants, lessons, courses, curricula and management of files and certifications, buildings report, recovery of solutions, exams, quizzes and assignment designs, evaluations, communication tools, monitoring progress and reports, authentication and enrollment methods, extension modules, integration of payment, tools of social network and notification of email authentication (Kuma & Suneja, 2011). LMS can be found in 91% of surveyed firms (American Society for Training and Development, 2009).

Despite the importance of technology integration in organizations, a universal definition of the term is still elusive. The topic is branched out in literature into three operational views and they are (Hew & Brush, 2007); the ways that ICT can be used in teaching, efficiency and quality assurance of ICT activities, and students' development of skills through it.

In the case of public organizations, managers have been pressured by the technology innovations spread to develop competence in using and managing IT and the sector has transformed considerably through the advancement of IT. Public services, according to Bowman, West and Beck (2014), IT, new media and cyber-security issues are modified and geared towards solving technical and ethical problems.

Despite the importance of IT use in teaching MPA programs in NASPAA, which led to the IT training integration

into the curriculum, the public sector still requires a conceptual understanding of the IT competence for management in general and IT management in particular. Authors who dedicated their work to this area lay emphasis on the necessity for core technical and management knowledge (Rocheleau, 1998), planning for strategic information resource (Brown & Brudney, 1998) and network operations and skills (Kim & Layne, 2001).

### *3.1 Competence and IT Competence for Public IT Managers*

Competence is a concept that first surfaced in the 1970s for psychological analysis to describe particular individual skills/qualities that are invaluable for optimum job-performance indicators as an alternative to standard intelligence tests. The competence focus led to the theoretical combination between moral philosophy and management development (Macaulay & Lawton, 2006) leading to the occupation competence implementation mandated by the U.S. State Department for Certificates of Competence, under the auspices of the Foreign Service Act 1980. Public entities are increasingly creating job-centered competencies for guiding, training, hiring and evaluating the performance among employees, including ethics representing virtue and morality (Bowman, West & Beck, 2014; Vitonen, 2000).

In this line of explanation, organizations' management possessing the right competencies can use technology to achieve optimum business outcomes (Smith, 1996, p.39), with explicit knowledge that composes of system development methods and practices, IT management and access to knowledge resources. Meanwhile, tacit knowledge is a type of knowledge that is comprised of experience in IT project and management and cognizance of IT vision and activities within the organization (Basselier et al., 2001). The two types of knowledge combined can lead to effective management of knowledge in terms of goals, major strategies, priorities, threats and challenges to sustain the development of IT solutions and information.

Compared to general managers, IT managers hold competencies of IT knowledge, skills and attributes that does not necessarily mean that distinctions are present among their IT duties. In certain cases, senior management constitutes varying functional departments. In the Seoul city of South Korea, the chief department managers regularly shift to a different department after every two years, enabling their learning of new processes and understanding of the way IT brings about process changes (Basselier et al., 2001; Layne & Lee, 2001).

However, a major competence difference between IT managers and general managers is discernible at the individual level with the requirement for technology present in the IT manager work responsibilities. Thus, such manager is expected to delve into professional IT knowledge that covers infrastructure, security of systems, architecture, application development (Dawes, 2008), while having knowledge on general technologies and applications.

On the whole, teaching strategies can be defined as a mixture of shapes, methods, technical methods and principal users in realizing the aims (Chis, 1992, p.9). Teaching strategies is a combination of planning methods ranging from the selection of organizational material to determination of task learning and conditions.

### *3.2 Advantages and Disadvantages of Technology*

In the American education system realm, the importance, advantages and disadvantages of computer assisted instruction was examined by Skinner (1984), who found that students learn twice more through computer technology learning, although the level of effort stays the same. Along a similar line of study, Papert (1972) studied the transition between intellectual development phases as time passes ranging from strict thinking operations to formal operations, only to suggest the use of computers in learning.

The use of computers in learning results in developing cognitive abilities with several peculiarities; early development of basic concepts such as formal proceedings, variables, function transformation, hypothetical-deductive rationale, and heuristic strategies use for solving problems in various fields.

Similarly, Gage and Berliner (1992) enumerated the pros of computer-assisted teaching and they are; data storage of individual/group results re-structured and statistically reflected throughout the lesson and at the end, software provision of teaching support for deserving students. Moreover, the software can store information on the learning speeds, non-verbal items presented as images, figures and simulations, and spelling texts and musical pieces provided through computers and audio boxes.

With regards to the cons of computer assisted teaching, they include the methods heterogeneity, teaching model that is unstable, discontinuous teaching-assimilation process, culmination in a cybernetic system behavior, and negative feedback, two reactionary circles control, and algorithmic thinking forms that bar the use of divergent thinking, transference of knowledge and its integration, and students being isolated from the interaction. However, the pros outweigh the cons.

### 3.3 Relationship between IT Management and Organizational Performance

Relevant literature were reviewed to develop and propose hypotheses of the relationship between strategy, IT management and organizational performance, with the main proposition being that organizational performance can be improved via the use of effective strategy of IT management. Studies of this caliber showed a positive and significant relationship among the three constructs.

The framework proposed by this study shows the effects of strategy and IT management on the performance of organizations (refer to Figure 1). In effect, this study proposes that;

*H1: IT management positively and significantly affects organizational performance.*

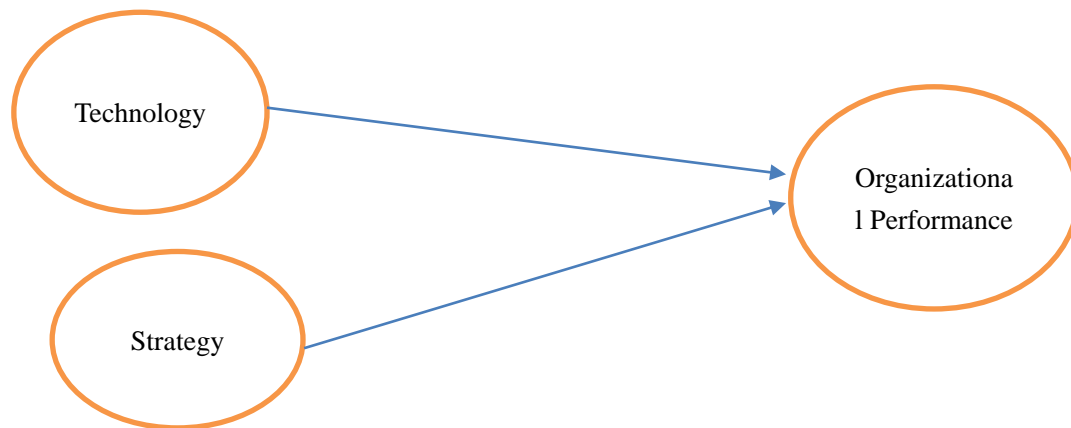


Figure 1. Postulated Research Framework

## 4. Strategy

### 4.1 Business Strategy, Strategy Definition and Strategy Concept

In the past ten years, there has been a shift of the business concept, which has resulted in changes in the management role in tackling challenges (Outram, 2013). Added to this, regardless of the adoption of market-aligned strategies among organizations, there is still a need to adapt to the new technology emergence (Christensen, 1997). In other words, the challenge with technology depends on the requirement to outsmart competitors in the fact of ongoing information usage (Koch, 2011).

For a sustainable business, it is a must for an organization to adopt an effective strategy, with the use of such strategy posing as a challenge (Berg & Pietersma, 2014). Based on this argument, Koch (2011) emphasized on the importance of providing a description of and setting up business strategies. Lastly, strategic concern is not limited to management and entrepreneurial niches at the top tier but it also covers middle managers that require the understanding of the adopted strategy and its nuances (Johnson, Whittington & Scholes, 2011). In a related line of study, total quality management (TQM) has also been addressed in literature in terms of its relationship with strategy; for example, the mediating role of TQM practices on the relationship between organizational strategy and organizational performance was investigated by Prajogo and Sohal (2006).

The word strategy can be traced to the Greek word, 'stratos', meaning a leader of the army (Matloff, 1996) in the 18<sup>th</sup> century. It establishes the word as a set of ideas used in the military to achieve its strategic objectives (Gartner, 1999). Strategy thus refers to the art of planning and directing military activities and operations during the way (Bruce & Langdon, 2000).

The diversity of the business world has led to various proposed definitions of strategy, using different frameworks (Kaplan & Norton, 2004). Porter (1980) narrowed down the concept to competitive strategy, which refers to the selection of different activities to achieve a distinct business value. Meanwhile, Lynch (2007), described strategy management as the tackling of significant initiatives employed by general managers for the owners, involving resources use to improve firm performance in the environment. Also, Johnson, Whittington and Scholes (2011) described it as the long-term organizational direction, and Grant and Jordan (2013) described it as a way of achieving objectives.

Furthermore, the viewpoint of the leaders' strategy creation in an ever-changing environment can be divided into

five forces, which are powerful suppliers, savvy customers, new entrants, substitutes and strong competitors (Porter, 2008). Porter (2008) stated that customers have dynamic demands and in constant search for major deals and this lowers prices and profitability.

With regards to the first force, Porter (2008) stated that suppliers affect strategy via profit-control and high prices. As for the entrant force, it directs business strategy and transforms new capacity and the requirement for market shares, whereas substitutes attract customers and influence strategy and competitors motivate intensive competition in terms of price and investments on products to be distinct from rivals and hence, they conduct strategy manipulation. Lastly, several additional factors exist on the basis of the environment surrounding the firm (Porter, 2008).

#### *4.2 Business Strategy Control System*

In the past decade, there has been a notable shift in business strategy and in management role, which is why extensive challenges in direct processes have arisen (Outram, 2013). In this regard organizations process operations to be consistent to markets but because of the development of new technology, these operations often fail (Christensen, 1997). It seems that present businesses call for expedient processes done the same way, particularly when it involves information and selectivity (Koch, 2011). According to Berg and Pietersma (2014), successful sustainable operations need effective strategies and the challenge lies in implementing such strategy. Moreover, the concern with strategies are present in all managerial tiers (top managers and middle managers) and thus, middle managers have to understand the strategy itself along with its different dimensions (Johnson, Whittington & Scholes, 2011). The main core features of a performance measurement model are translation of vision, strategic planning, communication and linking, and feedback and learning (Nielsen & Nielsen, 2015; Zikmund, 2003; Venturini & Benito, 2015).

#### *4.3 Self-Report Strategy*

Under self-report strategy, the State-Trait Anxiety Inventory (STAI) is used to measure anxiety used as a proxy of the situation stress measure. Specifically, STAI, form Y was adopted in the study (e.g., "I am tense"), measured on a scale that ranged from 1 (not at all) to 4 (very much so). In addition to self-reports, response time and data accuracy indicated imagistic strategies among males, whereas analytic strategies among females. When the genders' mental rotation speeds were compared, Heil and Jansen-Osmann (2008) revealed that female respondents' response time hinges on the faced complexity in the stimulus of mental rotation.

With regards to the collection of self-reported strategy use and knowledge, two questionnaires were used namely, Memory Toolbox (Troyer, 2001) and strategy subscale of the multifactorial meta-memory questionnaire (Troyer & Rich, 2002). They found training of permanent employees to result in mitigated temporary ones self-reported performance, specifically in Spain and this is opposite to the findings revealed by Kuvav and Dysvik (2009).

In addition, other studies evidenced a positive self-explanation instrument effect on meta-cognition and monitoring in the realm of teacher-led and computer-assisted instruction (e.g., Mc Namara & Magliano, 2009; Roediger & Karpicke, 2006). Meanwhile, in some other studies (Huff & Nietfield, 2009), teaching metacognitive monitoring skills were revealed to enhance the results of monitoring and learning. Consistent with this result, processing-oriented hypothesis, which proposes strategy instruction for the enhancement of performance, oversight and self-regulation, offers methods of processing and monitoring new information. The above assumption is supported by performance, confidence, and calibration accuracy in that they enhance strategy instruction results.

#### *4.4 Step-by-Step Strategies*

Bahlis and Tourville (2005) presented six different strategies for improving the effectiveness of training program in the front-end planning stage, with the former three strategies focused on the maximization of program advantages and value, while the latter three focused on mitigating training costs. The strategies are detailed under this section.

##### *1. Strategy 1 – Aligning Training with Mission Goals*

In order to determine and reap the benefits of training, provided training has to be consistent with goals in a way that that consistency can be set up using training needs analysis. Accordingly, the mission and objectives have to be identified in light of performance, and tasks have to be identified together with knowledge, skills and attitudes (KSAs) needed for effective actions performance. This involves defining and prioritizing the organization's mission and training unit and the performance objectives. It also involves determining the mission tasks, their appropriate to different groups and units and the required functions, the prioritization of KSAs, and the gaps among them, as well as the execution of procedures and issues, and final plan that prioritizes the required

activities (Bahlis&Tourville, 2005). Therefore, the mission-learning culture relationship within the organization offers benefits for it and its employees, which supports a positive learning, development, motivation relationship with organizational performance (Niazi, 2011).

### 2. *Strategy 2: Improving Employees' Performance*

The primary aim behind training is to improve the employees' performance through learning and taking action and thus, to determine the performance gap among employees, many organizations have resorted to training (Weldy, 2009). However, if the gap is not caused by lack of employee's skill/knowledge, then training may not be needed. In this line of argument, in order to achieve the optimum performance levels and carry out actions contributing to maximized return on investment (ROI) on training, realistic solutions have to be proposed with their issues of implementation, and direct costs and advantages of such solutions have to be computed to propose suggestions and establish a final action plan.

### 3. *Strategy 3: Reduce Time to Competency*

The primary aim of training should be to develop KSAs to tackle issues of performance, to ultimately create a training unit and achieve organizational objectives. The next listed steps determine the advantages of reducing time to competency and highlights the viable use of alternative delivery systems, and selection of the most suitable delivery option.

- a) Identify future advantages and list possible measurable advantages of reducing time to competency;
- b) Identify the potential advantages by calculating the expected least and top benefits for each employee daily in order to minimize time to competency;
- c) Gather information regarding the curricula employment, target audience, and environmental components to identify the most likely effective delivery option;
- d) Identify realistic delivery alternatives via analyzing the collected information in order to determine the effectiveness of the way the options can meet learning and learner needs in the organization;
- e) To approximate the time used to achieve competent solution and the required time to draw up, develop and deliver training program for every delivery option;
- f) Calculate the possible advantages to demonstrate the benefits of reducing time to competency that are acquired through time saved conversion into monetary value linked to the expenditure of the organization;
- g) Calculate and compare the realistic options costs with the net benefit of each delivery option acquired by subtracting expected costs from possible benefits;
- h) Obtain knowledge, skills, behaviors and attitudes through training that matches the job and maintained throughout time (Yamnil& Mc Lean, 2001). This approach importance was highlighted by a study that analyzed cross-training in the Radio Operators and Maritime Traffic Regulations in the context of the Canadian Coast Guard, after which the findings showed that with \$100,000 loaded annual salary provided to 200 employees a year, over \$20 million extra benefits were produced via cutting time to competency.

### 4. *Strategy 4: Choosing the Correct Combination of Delivery Options*

A step-wise selection process is present in literature that delves into the top priority factors and the way in which information can be collected for recommendations. First, the delivery options presently used in the training department of the organization is identified. Second, the information concerning training content, target audience and environmental factors are collected to select possible options for delivery. Third, the training programs are divided into modules, and fourth, the potential delivery options are identified. The fifth steps involves the comparison of the realistic delivery options cost and the sixth one involves considering a mixed-delivery strategy. Seventh, the potential issues of implementation are determined and lastly, recommendations are drawn to tackle such issues. In a related study, Bahlis and Tourville (2005) designed a training course for 390 officers of the Canadian Forces College and found selection of alternative combination delivery strategy to be capable of producing more than \$22 million savings in sunk investments for the new school facilities together with \$6 million annual repetitive costs.

This strategy appears viable as external training consultants are sometimes more cost effective compared to internal training consultants. Hence, when benefits and drawbacks are delineated in each training potential, it becomes a necessity to offer a definition of requirements, to analyze internal training staff experience and skills,

to calculate the available resources and potential benefits, compute time for competency achievement and potential advantages, and conduct a comparison between costs and provide suggestions (Bahlis&Tourville, 2005).

#### 5. *Strategy 5: Duplicate Effective Training Programs and Identify Issues*

The selection of effective training program strategy and computing the cost and required resources call for the comparison of different training programs in order to settle on what is suitable, being that issues have to be identified to mitigate duplication. For effective training programs duplication and detection of such issues, it is compulsory for organizations to furnish information on training program, suitable privileges to show employees that are authorized to access information, rate and evaluate information, note down priority recommendations and create an action plan to compare among the various levels in terms of their effectiveness (Bahlis&Tourville, 2005).

#### 4.4 *Relationship between Strategy Management and Organizational Performance*

After a review of literature, the hypotheses regarding the relationship between IT management and organizational performance were brought forward. Two independent variables are considered to contribute to performance of organizations. This study assumes that organizational performance can be improved through the implementation of effective strategy that is connected to IT management and training. Previous studies show a positive IT management-organizational performance relationship and hence, this study brings forth the following hypothesis;

*H2: Strategy management positively and significantly affects organizational performance.*

### 5. Methodology

This work delves into the factors affecting organizational performance and as such, the framework of the study contains training and strategy management and organizational performance of Sharjah police, in the UAE. In research methodology, there are several research designs that can be adopted – specifically there are four top research methods (Zikmund, 2003) for causal and descriptive studies and they are survey, experiment, secondary data and observation. The survey method entails the use of survey questionnaire/interview for collecting data through mail, telephone, internet or personal/self-administered questionnaires. In experimental research design, the effect of specific variables on the phenomenon under study is examined. On the other hand, a qualitative collection technique involves people and situations, descriptions of circumstances unlike the quantitative collection method's use of numerical description of the data collected (Cooper & Schindler, 2006).

In the Sharjah police, there are 5 departments namely, the General Commander department, Deputy Commander in Chief department, General Administration of Resources and Support Services department, General Directorate of Police Operations department, and General Directory of Central Operations department. Further sub-branches lead to 21 departments, with 86 head sections further extending the branches into 255. The branches are responsible for delivering daily work, each having a head section officer. The data were collected from these departments in December 2017.

This study conducted a pilot study using information gathered from 30 branches out of 311 branches of the Sharjah Police. The development of the sampling frame was according to the human resource department, systems and the online website of the Sharjah Police. The Likert scale was adopted, similar to Al-Marri et al. (2007), who examined the strategic planning and customer focus effects on the excellence of the organization. In this regard, the 5-point Likert scale is the most extensively used.

In implementing business strategy and mitigating the strategy development and implementation gap, Kaplan and Norton (1996) stated that the balanced scorecard (BSC) is an invaluable new management system. While performance is the ultimate goal of all organizations, this study considers it as the dependent variable and examines the effect of three independent variables on it. Performance is quantified through prior studies (Narver & Slater, 1990; Jaworski & Kohli, 1993) measurement, with items gauged with the help of 5-point Likert scale ranging from highly dissatisfied (1) to highly satisfied (5). The collected data were analyzed through SPSS statistical program and regression was the technique to test hypotheses.

### 6. Data Analysis

The author gathered data from Sharjah Police, after which the SPSS program was used for its analysis. This section contains the study results and their discussion.

The results of the descriptive analysis are contained in Table 1, and the table provides a description of the way strategy management and IT management influence the performance of Sharjah Police. The table presents the



values of mean, standard deviation and minimum and maximum. The entire constructs minimum value is 1.00, the maximum value is 5.00 (confirming the Likert scale use). With regards to strategy, the maximum value is 3.602 and the standard deviation value is 0.823, and these values show that the head section officers are concerned with strategy use when realizing the organization's goals and objectives.

With regards to IT management construct, the value of mean is 3.420, value of standard deviation is 1.002 and with regards to organizational performance, the value of mean is 3.493, with standard deviation of 0.885. These values confirm the importance of IT management in the perspective of Sharjah Police departments.

Table 1. Descriptive Statistics of the Constructs

Construct	N	Minimum	Maximum	Mean	Std. Deviation
Strategy Management	245	1	5	3.602	0.823
IT Management	245	1	5	3.420	1.002
Organizational Performance	245	1	5	3.493	0.885

In correlation analysis, the definitions of the strength and direction of the linear relationships between variables are provided (Pallant, 2001). The correlation level shows both strength and direction and for such correlation, a bivariate association is obtained using Pearson correlation coefficients that range from -1 to +1. The higher the value, the more robust the correlation between the variables, with the values +1 or -1, indicating a faultless relationship, where determining the value of one variable can accurately lead to the definition of another, while the value of 0 indicates a zero relationship. The strength of the two variables relationship is presented in Table 2.

The correlation analysis specifically obtains the correlation between two variables in that whether or not they are significant or insignificant. In this study, a significant relationship was found between variables at the significance level of 0.01. Specifically, the correlation value between strategy management and IT management is 0.806, which supports the presence of 81% relationship between the two (refer to Table 2). The correlation value between strategy management and IT management is 0.806, which supports the presence of 81% relationship between the two ( $r = .806$ , at  $P < 0.01$ ). Additionally, the organizational performance-IT management relationship was found to be significant at the significance level of 0.01 ( $r = .727$ , at  $P < 0.01$ ), and between strategy management and organizational performance is also significant ( $r = .830$ , at  $P < 0.01$ ).

Table 2. Correlation of variables

Construct		Strategy Management	IT Management	Organizational Performance
Strategy Management	Pearson Correlation	1		
IT Management	Pearson Correlation	.806**	1	
Organizational Performance	Pearson Correlation	.830**	.727**	1

\*\* Correlation is significant at the 0.01 level (2-tailed).

This study also ran the multiple regression analysis to determine the correlation between the dependent and independent variables, with several approaches to consider (e.g., standard regression, hierarchical and stepwise regression) (Pallant, 2001). Specifically, in standard multiple regression, the independent variables are included in the equation simultaneously (Pallant, 2001). The results from the analysis were used to provide answers to the research questions and results to the proposed hypotheses.

The direct hypothesis results are contained within Table 3, where with regards to the first hypothesis (H1), a significant relationship was found between strategy management and organizational performance at the 0.001 significance level ( $\beta = 0.770$ ;  $t = 10.063$ ;  $p < 0.001$ ), which supports the hypothesis. As for the second hypothesis (H2), a significant relationship was also found between IT management and organizational performance ( $\beta = 0.152$ ;  $t = 2.844$ ;  $p < 0.01$ ) (refer to Table 3).

Table 3. Regression Analysis of Direct Hypotheses

Hypothesis	Relationship	Path	SE	T-value	P-value	Decision
H2	Strategy Management -----> OP	0.77	0.077	10.063	0.000	Supported
H3	IT Management -----> OP	0.152	0.053	2.844	0.005	Supported

\*:  $p < 0.05$ ; \*\*:  $p < 0.01$ ; \*\*\*:  $p < 0.001$

## 7. Discussion and Conclusion

This study primarily aimed to determine the effect of strategy management and IT management on the performance of Sharjah Police departments. The garnered results of the analysis on the data collected supported the significant effect of IT management on organizational performance ( $\beta = 0.152$ ;  $t = 2.844$ ;  $p > 0.5$ ). This result is aligned with those reported by Cantoni, Cellario and Ports (2004) and Kumar and Sunej (2011). Similarly, a significant effect was also found from strategy management to organizational performance – a result that is consistent with those reported by Nilsson and Olve (2001), Thomas (2007), Bourne et al. (2000) and Kaplan and Norton (2007). The results indicate that the development and improvement of Sharjah Police departments is still a top priority when it comes to the development of the UAE, and as such, the departments are actively achieving the country's goals and objectives.

Past literature evidenced that strategy management and IT management have an invaluable role in the performance and competitiveness of organizations and on the basis of the findings obtained in the present study, both strategy management and IT management significantly affects organizational performance, pinpointing some issues in the Sharjah Police departments. This study is a pioneering study in the context of Middle Eastern countries in that it is the first of its kind to examine the joint effect of strategy management and IT management on the performance of a public organization. Finally, the obtained results culled from the Sharjah Police departments were based on data gathered from the top leaders as they are the most well-informed and experienced about the relationships among the constructs. This study recommends that future studies gather data from customers and other employees of the Sharjah Police department for extensive insight into the departments' performance.

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