# IMPACT OF INNOVATION CAPACITY AND TECHNOLOGY USAGE ON INNOVATIVE SERVICES IN DUBAI POLICE - MODERATION OF GOVERNMENT INTERVENTION

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## **ABSTRACT**

The study aims to examine the impact of the five different transformational leadership factors on the employees' commitment to the UAE banking industry. The conceptual framework includes five factors of transformational leadership theory, emotional intelligence, and employees' commitment. The study population includes any employees from operational management, supervisors, operational managers, departmental managers of commercial banks in UAE. The technique used for selecting samples is quota sampling, and the dataset used for analysis has a size of 388 samples. Four factors of transformational leadership can explain 68.7% of the employee commitment variance. The precedence rank of it is, idolized influence (0.279), individualized consideration (0.227), intellectual stimulation (0.218), inspirational motivation (0.196), and attributed charisma have no effect. Emotional intelligence. For the influence of the five different transformational leadership factors on emotional intelligence, three factors positively impact the overall explanation power of 24.9% of the emotional intelligence variance.

**Keywords:** Employee Commitment, Transformational Leadership, Emotional Intelligence, UAE, Banking Industry

# INTRODUCTION

The advent of technology advancement has not only had an effect on the logistics, education, engineering, medical, and overall production industry only (Bello et al., 2020), it has had an effect among the service sector such as counseling, consultancy, and even policing and crime prevention (Yar & Drew, 2019). Thus, technological advancement has brought about new ways of getting things done efficiently and effectively (Mokyr, 2018). According to the several innovativeness happening around the globe, it is geared towards innovativeness in policing services to combat crimes as well as fast response to emergency calls (Pomerleau & Lowery, 2020). It is acknowledged that there are oceans of studies pertaining to innovativeness in the police service (Delle et al., 2018) as well as that the Gallouj, et al., (2018) argue that the innovation emerges from the interplay and interaction of preferences and competencies between several actors such as users or citizens, and policymakers.

Police service emerges from several calls from the community for law and order, a safer environment, society, lives, and properties led to the process of having security personnel who were tasked to safeguard the community (Scott et al., 2017). Also, the overtime metamorphosed into organized security personnel and later the police force (Silver

et al., 2017). Thus, over the years, there have been drastic and incremental; change to the policing services (Thaler et al., 2020). Furthermore, in the police service, there are indications that criminals, offenders are daily getting more sophisticated in their criminal activities; thus, leading the police department globally to devise strategies that can curb any potential or existing threats that might or threatening the community peace and stability (Leese, 2020). The examples of innovation in police service over the years include horse patrol, body cam, patrol van, closed-circuit camera, informants, and roadblock at crime-prone areas, stop and search in policing service (Natasha, 2007).

The use of other advanced technologies includes the use of weakening the strength of aggressive offenders (Boutwell & Wright, 2018). Moreover, since high profiled criminals or offenders can go to the extreme to use a high-powered firearm against the police officers, innovations such as advanced bulletproof vest and shield, back up police helicopter as well had been innovated (Mahaffey, 2017). Furthermore, to enhance the performance of police personnel in delivering efficient and effective services, these officers had been rigorously trained to be sniper, mask men, and investigators so as to eliminate or cripple offenders who can be threats to the lives of the policemen and community (Williams & Mercer, 2018). This innovativeness in policing services has yielded several positive reactions from the public as a result of efficient and effective service rendered (Camacho et al., 2015).

Despite that, there are indications that police have been abusing these innovative services to harass innocent citizens (Robinson, 2020). In addition of these are not limited to the use of firearms on innocent citizens and minor crime offender (Arévalo, 2019). Thus, raising public concern about 'negative innovativeness' if true, police functions are to protect the public are in jeopardy (Akinlabi, 2017). Meanwhile, in Dubai, innovativeness has been ascribed to Dubai ever since the small country came into the limelight (Federal Authority for Identity and Citizenship' FAIC', 2015). This is because the country heavily invested in capacity building, which was in line with the country's ruler's fundamental philosophy that is to make Dubai be among the best in the world (Saxena & Kumar, 2020). Hence the innovativeness ideology has been extended to Dubai Police Service to the extent that several innovativeness activities have been witnessed (Alblooshi, 2017). Some examples include the use of smart gadgets to deliver the policing service *via* Artificial Intelligence (AI) to collect and manage and respond to community calls (Chi et al., 2020). This, the Dubai police use to build an extensive Knowledge Management Database (KMD), helps them respond to emergencies and reach crime scenes on time (Busanad, 2016).

This drive-through also allows the citizen to access 60 different police services pay the police to summon without any intervention of human beings (Shrouk, 2017). In a similar view, the Dubai police force has unveiled a new police logo, a lunch smartphone app, and a new website interface as signs of commitment to new rebranding (Ryan, 2019). According to the (National News, 2018), the philosophy underlying the Dubai police force's innovativeness is based on enhancing the country's security, communication, and innovation. According to Dubai's police website, there are indications that the innovativeness of using canines to solve crime cases yielded a positive outcome (Miklian, 2019).

The aim of the study is to examine the impact of the innovation capacity and technology used on the innovative services of the Dubai Police, besides the interaction of the government intervention.

#### LITERATURE REVIEW

# **Organizational Innovation Theory**

According to (Mkalama et al., 2020), the early pioneer of this theory, the organization innovation model consists of three faces: the antecedents of or reasons for the need for innovativeness, stages of innovativeness, and the consequences of the innovation process.

These three faces of organization in this theory correspond to the objectives of this research. Although, in this research, attention was given to the second and the third face or stages of organization innovation among the police agency in Dubai. These are the stages synonymous with several innovative approaches, which in this study include technology usage, community collaboration, and communication, which is targeted to achieve the third face, namely the consequences of innovation, which implies effective police service delivery.

According to (Heyden et al., 2018), it is giving attention to the antecedents of organization innovation aids to identify workable innovation process and the anticipated consequences required in managing both intended and unintended outcome of the innovation process. Organization innovation erupts from two distinctive but interrelated and complementary factors, namely internal and external factors, also known as internal and external stimulus (Amado & Ambrose, 2018; Laumann & Knoke, 1987; Wang, Arnett & Hou, 2016). The antecedents of organizational change are also being referred to as organization stimulus. These are the needs for an organization to alter or change its operational model to deliver services with superior value and enhance customers' satisfaction. Thus, this theory captures this research concept and is deemed fit to serve as a philosophical underpinning theory.

Despite the fact that organizational innovations have been found to be important for organizations' long-term competitive advantages, the creation and diffusion of organizational innovations have been subject to less research focus than technical innovations (Crossan & Apaydin, 2010). Further, the question of how to sustain an organizational innovation once implemented has received even less research attention, so that there is currently no established research tradition in this area (Frambach & Schillewaert, 2002). In order to better understand how organizational innovations are created, diffused, and sustained, this literature review consists of three main parts (Steiber, 2012); first, the concept of organizational innovation will be defined and explored; second, previous research on how organizational innovations are created and diffused will be presented, third, previous research on how organizational innovations are sustained will be presented.

Organizational innovation can be defined as a new organizational method in business practices, workplace organization, or external relations (Morales et al., 2006). Organizational innovations can be intended to increase an organization's performance by reducing administrative costs or transaction costs, improving workplace satisfaction (and thus labor productivity), gaining access to non-tradable concept of "business practices," we include organizational elements such as leadership, management processes (e.g., reporting and budget processes), culture, human resource management, mechanisms for learning, and external and internal corporate communication (Post et al., 2002).

Further, organizational innovations can vary in complexity; some affect a certain business process (such as re-engineering the purchasing process), while others affect every single part of an organization (Hobday, 1998). According to (Martinsons, 1995), and organizational innovation creates long-term competitive advantages if it meets one or more of three conditions: The innovation is based on a novel principle that challenges management orthodoxy; it is systematic, encompassing a range of processes and methods; and it is part of an on-going program of the invention, where progress compounds over time. These are the institutional perspective where institutional conditions influence the creation and diffusion of organizational innovations, the fashion perspective where fashion setters assets (such as noncodified external knowledge), or reducing costs of supplies (Gallego et al., 2013). The above can serve as a general definition of organizational innovation. Within the continuously redefine both their and fashion followers' collective beliefs about which management techniques lead to rational management progress; the cultural perspective where the organization's culture influences the creation and diffusion of organizational innovations, and the rational perspective where managers take on a role in creating and implementing organizational innovations (Steiber, 2012).

# **Innovative Policing Service**

Over the years, police services had metamorphosed from what it used to be to what it is today; this is because, they are devising ways to deliver effective and efficient services to the community they serve (Jefferson, 2020). Some of the notable changes are not limited to the enhanced policing system *via* technologies, Intel gathering from the community to help identify and neutralize potential terror or threat, and integrate citizen participation into the policy policies and activities (Pasha, 2019). Moreover, the factors such as the organization of agencies of agencies for delivering public services had been reported to influence police service delivery (Chen et al., 2020). The innovativeness in the police service is like 'a 2-edged-sword', which has been widely debated in society (Goins, 2019).

However, from the police viewpoint, all their innovative actions have enhanced their service delivery and community satisfaction (Dubois & Kaiser, 2019). Considering this, Shrouk (2017) argues that the innovativeness in the policing service has increased their chance of solving mysterious crimes that might be left unsolved if such innovativeness (technology adoption) does not exist in the policing service. With this, (Abbas, 2019) concludes that the Dubai policing service's innovativeness earns them the most innovative police service in the world. As a matter of fact, the new immigration trend is responsible for the innovativeness in policing service (Vrăbiescu, 2020). This is because people with several behaviors converge in the neighborhood; thus, they need to comply with ethical standards and conduct (Van Brown, 2020). Hooghe & De Vroome (2016) pointed out that leadership and effective use of technology are among the vital factors responsible for innovativeness in police servicing.

Nevertheless, the policing service's innovativeness enhances police response time in saving larger communities using fewer resources (Nix et al., 2020). The several conceptual pieces of evidence that innovativeness in the police service had yielded significant effect to prevent, control, and potentially curb crimes, therefore making the community safe (Xie & Baumer, 2019). Yet, this evidence is noted to emerge from other contexts and not from the context of investigations; thus, there is a need for empirical investigation (Davis, 2017). In addition to the police force in Dubai, similar to other policing services worldwide, it had embarked on several innovative approaches to delivering effective police services (Elnaghi et al., 2019). Moreover, the fundamental reason why the Dubai police embark on innovation is specifically to detect, prevent and investigate international crime (INTERPOL, 2018). While, according to the police department, security is more elaborated, namely, emotional, social, personal, political, and social security (Bloch & Meyer, 2019). This is because the government of Dubai believed that security is among the integral rights of everybody in Dubai (Dubai Police, 2018).

To achieve these, Dubai police teams were reported to be on the constant watch out on ways to deliver effective and satisfactory policing service to the community they serve (Aplin, 2019). According to the commander in chief of the Dubai police force, the innovation among the police agencies revolved around three spheres, namely: security, communication, and innovation (Shrouk, 2017). The evidence gathers from Dubai's police website; much emphasis is laid on technological innovation to the extent that the Dubai police force is awarded the best technologically innovative agency (Nam & Chathoth, 2017).

The technological innovation experience in the Dubai police force uses information gathered from the society *via* artificial intelligence to offer effective services, examples of which include the fight of regional crime, national crime, and cybercrime (INTERPOL, 2018). Thus, some of the Dubai police's innovativeness includes rearranging the police headquarters' studio for multipurpose use, the use of futuristic vehicles, robbers, smart police stations, drive-through police services, and artificial intelligence (Shrouk, 2017). Theoretically, scholars had argued the significance importance of the degree of policy innovation in the Dubai policing agency (Khalil & Dill, 2018). The study of (Elnaghi et al.,

2019) argues that Dubai's police personnel were committed to information and knowledge sharing because of the types and level of innovativeness witnessed in the agency. While the study of (Trespalacios et al., 2020) argues that with the use of technologies to monitor reckless drivers, the police department has been able to reduce road accidents, and it helps improve driving performance. In Dubai, innovativeness has been ascribed to Dubai ever since the small country came into the limelight (Federal Authority for Identity and Citizenship' FAIC', 2015). This is because the country heavily invests in capacity building, which was in line with the country's ruler's fundamental philosophy that is to make Dubai be among the best in the world (Wang, 2020). Hence the innovativeness ideology has been extended to Dubai Police Service to the extent that several innovativeness activities have been witnessed (Robins, 2014).

# **Innovation Capacity**

The several innovation capacities that have occurred in the police servicing have direct or indirect effects on community objective and subjective perception of service delivery which can be quantified as community satisfaction (Alosani et al., 2020), as well as the innovation capacity in the policing service, includes adding more personnel to joining the workforce—according to the (Eck & Corsaro, 2016), examining that the size of policing force and crime prevention running through the year of 1968 to 2013 argues that the size of the police force has a small negative insignificant effect in crime reduction rate. However, (Lee et al., 2016) argue that instead of adding more personnel to the police force, the force should rather consider changes in policing strategies. The policing service's innovation capacity had been widely debated, such as; there are indications that the innovativeness in the police service creates more problems than it solves (Gangjee, 2020). According to (Barrick, & Johnson, 2018), kick against the idea of community policing as an effective, innovative approach to argue that the combat crimes in the neighborhood.

In the study of (Le & Lei, 2019), the innovation capacity was divided into two, namely supportive and inhibiting factors. However, the organizational capacity factors, such as of which are not limited to human capital, such as staff, committed personnel, and the available financial support, are fundamentally responsible factors enhancing innovativeness (Waheed et al., 2019). The competing responsibilities are among the fundamental factors that inhibit organizational performance; the authors conclude agency or firm size and complex nature of the program predicts innovative process (Jugend et al., 2018).

On the other hand, the earlier investigation of the innovation capacity all supports the notion that innovativeness in the policing service had significant positive effects in dishing out the functions of police about keeping the community safe and community adhering to ethical conducts (Shelley, 2017). In the face of these several factors contributing of the innovation capacity to the effective innovativeness in the policing services, attention is geared towards empirically investigating the significant perceived effectiveness of technological usage, community collaboration, and community communication as well as the influence of government intervention in delivering effective, innovative policing service (Alosani et al., 2020). The innovation capacity in policing service has been regarded as an important move to fulfill the policing service's major objectives, which is to secure lives and properties (Omilusi & Isaac, 2020). The police aside from protecting lives and properties, they serve as a social worker in the community by instilling moral, ethics and values to the adolescent and young adult in the community (Shalabi, 2020).

The innovation capacity experienced in the police force within a short space of historical time in the twentieth century was argued to be some of the most rapid innovativeness ever experienced in the history of the police force (Maguire, 2014). Moreover, the deliberating on the reasons why innovation is an important factor in the police service, the innovation, as perceived by most people, is not the result of a passive action; likewise, it is

the implementation (action) of the minds' thought (vision) (Aitchison & Mermutluoğlu, 2020). That is, envisaging what is likely to happen in the future, thus, planning and taking action to make it a reality, and innovativeness, the emergence of innovation capacity from the view of the change in the political environment (Szpak, 2020).

Mulgan (2019) argues that the police innovate their services because the fundamentals of policing operations create the best chance to defeat austerity, and with innovativeness, issues and problems can be solved before they happen. Therefore, Bennett 2020 argues that the policing service's innovation capacity has generated some promising strategies capable of improving police ability in preventing and combating crime at the same time, improving their relationship with the society they served. According to the opinion that the innovation capacity in the policing service is s complex process, through experiments, idea generations, public opinions, and the vision of the nation's leading police executives, the policing services have enhanced and improved (Floyd, 2020). The innovativeness was deemed needed after the police force reconsider its operating strategies, fundamental mission, as well as their character and their relationship with the community they served (Weisburd & Braga, 2019).

According to these scholars, the innovation in policing services is not obscured by the public, but they are made known by publishing it in several media such as newspaper cover pages and social media platforms (Harvard, 2020). The innovation capacity does not conform to the five innovation types suggested by several innovation theories of organizational innovation (Svensson et al., 2019). Pertaining to this, (Engels et al., 2019) argue scholars explicitly define and conceptualize innovativeness before testing several forms of innovativeness across several police agencies. Meanwhile, to achieve the desired innovative result, (Braga & Davis, 2014) suggest rigorous training and program evaluation techniques should be carried out serially so as to determine the effectiveness of the innovation made.

# **Technological Usage**

In Dubai, innovativeness has been ascribed to Dubai ever since the small country came into the limelight this is because the country heavily invests in capacity building, which was in line with the fundamental philosophy of the country's ruler that is to make Dubai be among the best in the world (Lohaus, 2019). Hence the technological usage has been extended to Dubai Police Service to the extent that several innovativeness activities have been witnessed (Elnaghi et al., 2019). Moreover, smart gadgets are used to deliver the policing service *via* Artificial Intelligence (AI) to collect and manage and respond to community calls (Chi et al., 2020). However, the Dubai police use to build an extensive Knowledge Management Database (KMD) that helps them respond to emergencies and reach crime scenes on time (Busanad, 2016).

Using smart gadgets and AI, the police force develops police; this drive-through also allows the citizen to access 60 different police services pay the police to summon without any intervention of human being (Sesay, 2018). In a similar view, the Dubai police force has unveiled a new police logo, lunch smartphone app, and a new website interface as signs of commitment to new rebranding (Khan et al., 2017). According to the (National News, 2018), the philosophy underlying the Dubai police force's innovativeness is based on enhancing the country's security, communication, and innovation (Alosani et al., 2020). More innovation observed in the police servicing in Dubai is the use of Canines to solve a tangled crime (Ratliff, 2019). According to the police of Dubai, at least two cases have been positively solved. These contradict the innovation was mentioned by (Dinnen & Peake, 2015). Despite the innovativeness among the Dubai Police force to make the street of Dubai safe as much as they can, it was observed that the streets are not free from crime (Gericke, 2019).

As such, crimes such as petty theft, pickpocketing, and shoplift ting are rampant. Innovation in police service is highly important specifically when it pertains to community security or community policing because it has been argued that the service offered by the

police to curb security issues seldom works out how it supposes to be but, innovating servicing with the community does accomplish a lot about security issues (Dos Santos et al., 2015). Moreover, technological innovativeness in policing services had been argued by earlier scholars to have contributed significant breakthroughs to effective police service (Alosani et al., 2020). This ranges from low technological innovation to more advanced, complex, and scientific innovativeness, such as the use of DNA in detecting crime perpetrators (Ekblom, 2017). The introduction of telephone service to the police network made it easier for the police to establish a swift communication channel that significantly enhances the policing functions (Cole, 2020).

Similarly, the innovativeness had helped in solving the complex biological and criminal crime that technology innovativeness in the policing service due to the intended and unintended outcomes as well as coercive and non-coercive, also the technological implementation between private and public sector in crime policing and prevention (Den Heyer, 2020). The interplay between technological innovation and managerial practices is significant in achieving innovative effectiveness (Azar & Ciabuschi, 2017). The policing service's technological adoption had been recorded to have enhanced the policing service *via* enhanced communication, collaboration, and increased networking between the police and the community they serve (Wright & Headley, 2020). Further changes observed in the policing service include an improved ethical code of conduct and integrity (Wagner et al., 2020). Conferring to recent studies such as (Li, 2019), the adoption of technology, to be precise, the use of artificial intelligence has enhanced the effectiveness of policing services in combating and neutralizing from petty crime to international terrorism activities across the globe.

Shrouk (2017) notes that the adoption of technology had helped solve several crime cases that might be termed 'mysterious' if technologies are not available. Considering the study of (Verma & Dombrowski, 2018), the effectiveness of innovativeness of technology into the policing service lies not only in its adoption but its utilization as well. Furthermore, (Otieno, 2019) argues that the involvement of a cosmopolitan network, experienced police personnel, and the available human capital contributes significantly to effective police servicing *via* technology adoption. On the contrary, there are indications from earlier studies that the adoption of technologies to enhance the effectiveness of policing service delivery is not as what it is presented to be specific, without the community collaborations and contributions as innovative methods in enhancing the police service delivery (Pasha, 2019).

#### **Government Intervention**

Despite the evidence of customers', employees', and expert's involvement in the service innovation process, (De Fuentes et al., 2019) argue that the government, through innovative policy, can support the service businesses to achieve their intended outcome and its quality. Considering the study conducted by (Morikawa, 2019), government's role in enhancing service innovativeness through intellectual properties, patents, and trade secret rights is echoed. Similarly, (Png, 2017) pointed out that the environment with high legal protection against copyright infringement enjoys a high innovation rate. Further findings from the study of (Svensson et al., 2019) argue that innovativeness between agencies and communities can be between manage if there is a legal foundation for such.

Besides, the study of (Kim et al., 2016) concludes government support programs enhance the innovative process; therefore, the authors conclude a significant positive influence of government intervention on the relationship between innovation factors and the effects of innovative actions. Similarly, an earlier study by (Clò et al., 2020) argues that they affirm the significant importance of government intervention in establishing a strong and favorable market structure, help diffuse innovation, and delivers it in a wider forum. The pieces of evidence gathered, there are indications that despite the significant relationship

between the identified factors that enhance the effectiveness of police service delivery, the intervention of the government *via* political agenda, policy and resources support plays a crucial role in achieving the effectiveness of innovation in delivering effective police services (Engel et al., 2020).

The government intervention also has wider responsibilities for the delivery of crime reduction, criminal justice, and community safety; more broadly, they are set to become extremely powerful political actors within the new landscape of police and crime governance (Stokes & Gill, 2020). As such, their role will inevitably require them to take an active role in shaping public perceptions of crime, policing, and community safety (Altamirano et al., 2020). Therefore, a key empirical of government intervention is whether they will seek to interfere in the delivery of local policing to try to secure on-going public support at the ballot box (Khadka, 2020).

Although the government intervention has steadfastly declared that the introduction of police will not undermine the broad principle of 'constabulary independence,' those contradictions, constraints, and ambiguities within the new 'democratic' framework of police governance may generate pressures on police that lead them to seek to interfere in what Chief Constables do (Lister, 2013). The key constituents within the new governance arrangements and contextualizing the emergence of police (Jones & Lister, 2019). It then proceeds to explore some of the tensions that may emerge between police and chief constables from the division of their functional responsibilities, as plotted by recent legal instruments and the structure of the new governance framework (Johnson, 2019).

Although the introduction of police continues the long-term project of marginalizing local government in the framework of police institutional accountability, it remains something of a puzzle that the policy emanated from the right-wing of the political spectrum (Jones & Lister, 2019; Pournara, 2020). Although police authorities' failure to use their full powers to hold Chief Constables to account led some commentators to describe them as architects of their own downfall, they also rendered increasingly impotent in this task by centralizing pressures (Crawford, 2016). This governmental project was intensified, which gave the Home Secretary the authority inter alia to intervene directly in those forces deemed to be failing as well as to instruct Police Authorities to suspend or fire the Chief Constable (Bainbridge, 2020).

# **Conceptual Framework**

Figure 1 shows the proposed conceptual framework of this study, in which there are two direct relationship and two moderation effects relationships as the following.

- Hypothesis 1: Innovation capacity has a significant relationship to the innovative service delivery in Dubai police.
- Hypothesis 2: Technology usage a significant relationship to the innovative service delivery in Dubai police
- Hypothesis 3: Government intervention significantly moderates the relationship between innovation capacity and the innovative service delivery in Dubai police/
- Hypothesis 6: Government intervention significantly moderates the relationship between technology usage and innovative service delivery in Dubai police.

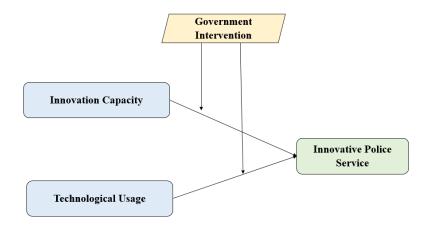


FIGURE 1 CONCEPTUAL FRAMEWORK

## **METHODOLOGY**

This study's research design is marked as positivism philosophy, deductive approach, empirical-survey strategy, quantitative method, and cross-sectional time horizon. The study is positivism because it assumed that innovative police service could be quantified and measured beside the assumption of its prediction based on other quantifiable variables. The study is deductive because the relationship between innovation capacity, technology usage, government intervention, and innovative services can be hypothesized, and the aim of the study is to evaluate those hypotheses. The study is empirical because it relies on actual data collection based on a well-structured survey. The data is represented and analyzed in statistical techniques; therefore, the study is a quantitative method.

The study population equates to the total number of civil servants except those in police or security agencies that knew much about Dubai's security developments. The philosophy behind this is to investigate the unbiased. This study's actual sample size is 344, which is collected in face-to-face collection technique by using a printed copy. The samples are collected from a different locations to have the best diversity in locations and duty among the population.

The items measuring service quality were adopted in this research because they had been widely adopted in social science researches and confirmed to be reliable and valid (Cronin & Taylor, 1992; Gronroos, 1988; Lien, Cao & Zhou, 2017; Napitupulu et al., 2018; Santos, 2003). Considering this, the researcher thus adapts the same measuring items to measure the perceived effectiveness in police service delivery. Moreover, it should be noted that the original service quality items are made up of 22 items; however, in this research, eight of those relevant to this research were chosen. To measure the innovation capacity, the arguments present the opinion of several critical findings pertaining to innovativeness in the police service. Considering this, the items used were adapted from the studies of (Mulgan 2019; Morabito, 2008; Weisburd & Braga, 2019). For technology usage, the items used were adapted from the studies of (Delle et al., 2018; Moore, 2003; Pasha, 2019; Weiss, 1997). Items used for government intervention were adapted from the studies (Gayadeen & Phillips, 2014; Nasidin et al., 2020; De Fuentes et al., 2019; Cheurprakobkit & Puthpongsiriporn, 2005).

The survey was organized to ask questions in Likert-5 format. Likert 5 questionnaire style has been used in social science studies for a long time and proved to be a suitable style for measuring human perceptions. Structural Equation Modeling (SEM) techniques are used

for statistical data analysis *via* the SmartPLS software package, which is used in management and social science studies such as (Salem & Alanadoly, 2020; Salem & Salem, 2018).

## **FINDINGS**

# Validity and Reliability of Constructs

Several measures have been conducted, such as composite reliability, outer loading, convergent validity, and discriminant validity, to ensure reliability and validity of the measurement model (Hair, Hult, Ringle & Sarstedt, 2016; Sekaran & Bougie, 2016). As shown in Table 1, composite reliability is measured by Cronbach's Alpha, and all values are above the cut-off value of 0.70. Therefore, the reliability of the measurement model is achieved. The outer loading for all the items is above 0.708 with no cross-loading; therefore, indicator reliability is achieved. The Average Variance Extracted (AVE) values are above 0.5; therefore, convergent validity is achieved. Finally, Table 3 shows the Fornell-Larcker criterion matrix, which indicates that no discrimination validity issues are. Some items were eliminated based on the rule of thumb for outer loading and cross-loading. This roadmap for examining the validity and reliability is applied in social science studies such as (Salem & Alanadoly, 2020; Salem & Salem, 2018).

Table 1 CONSTRUCT RELIABILITY AND VALIDITY					
Construct	Item	Loading	AVE	Cronbach's alpha	
	IC2	0.885			
	IC3	0.816		0.829	
Innovation Capacity (IC)	IC4	0.772	0.54		
innovation Capacity (IC)	IC5	0.794	0.54	0.829	
	IC6	0.759			
	IC7	0.724			
	TU1	0.881			
	TU2	0.858			
Technology Usage (TU)	TU3	0.842	0.72	0.903	
	TU4	0.774			
	TU5	0.885			
	GI1	0.725			
	GI2	0.742			
	GI3	0.79			
	GI4	0.763			
Government Intervention (GI)	GI5	0.891	0.57	0.856	
(01)	GI6	0.717			
	GI7	0.758			
	GI8	0.779			
	GI9	0.725			
	IPS1	0.738	0.61		
Innovative Police	IPS2	0.714		0.906	
Service (IPS)	IPS3	0.708	0.01	0.900	
	IPS4	0.795			

I	IPS5	0.797
I	IPS6	0.801
I	IPS7	0.844
Ī	IPS8	0.819

Table 2 DISCRIMINANT VALIDITY – FORNELL-LARCKER CRITERION							
	GI	IC	IPS	TU			
GI	0.788						
IC	0.175	0.736					
IPS	0.374	0.487	0.778				
TU	0.167	0.204	0.489	0.849			

### **Structural Model**

The model of innovative police services can explain 47.5% of its variance based on the prediction of innovation capacity and technology usage. The purpose of assessing the power of the model construct is to devalue the success of the model based on predictive power R<sup>2</sup> (Hair et al., 2016). The results of the hypothesized relationships are also tabulated in Table 3. The table shows that two direct relationships are accepted. The threshold for accepting or rejecting any hypothesis is the p-value value, which is supposed to be less than 0.05 (significance at 5% level). Technology usage has the highest impact, with a path coefficient score of 0.293 and an effect size of 0.176. Innovation capacity has the second impact with a path coefficient score of 0.284 and an effect size of 0.176.

Table 3 STRUCTURAL RELATIONSHIPS AND HYPOTHESIS TESTING							
	Path Coefficient	Standard Error	T Statistics	P-Value	Effective Size f2	Relationship	
Innovation Capacity→ Innovative Police Services	0.284	0.033	8.543	0.000	0.166	Significant	
Technology Usage → Innovative Police Services	0.293	0.038	7.690	0.000	0.179	Significant	

For the moderation effect, Table 4 shows the moderation of government innovation in the two relationships. Government intervention interacts in the relationship between innovation capacity, and innovative police services are significant. P-value=0.003 and path coefficient of 0.566. However, government intervention in the relationship between technology usage and innovative police services is not significant because the P-value=0.697. The results are logical, especially with the historic adoption of the technology in the Dubai police.

Table 4 MODERATION ASSESSMENT OF GOVERNMENT INTERVENTION (GI)						
	Path Coefficient	Standard Deviation	T Statistics	P-Value (one-tailed)	Status	
IC * GI ->IPS	0.566	0.191	2.963	0.003	Significant	

TU * GI ->IPS	0.084	0.216	0.390	0.697	Non- Significant
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## **DISCUSSIONS AND CONCLUSIONS**

The aim of the study is to examine the impact of the innovation capacity and technology used on the innovative services of the Dubai Police, besides the interaction of the government intervention. The results show that the proposed model is successful because it can explain 47.5% of the innovative police services. The two variables, innovation capacity, and technology usage are both good predictors and have significant relationships with the innovative police services. For government intervention, it seems that the more interactive, the stronger relationship between innovation capacity and innovative police services but not technology usage.

The study contributes to the knowledge of the prediction of the innovative police services in Dubai. The proposed combination of variables and the inclusion of government intervention as a moderator contributes to academic research.

This study is limited to the empirical examination of Dubai Police, and the replication of the same conceptual model in different countries or even in other organizations will be beneficial to the generalization of the relationships in the model. In addition, the model can explain 47.5% of the variance, but by adding more variables, the explanation for sure will be better. The rejection of government intervention interaction in the relationship from technology use is rational but needs more investigation.

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