

Measuring Intellectual Capital factors for Organisational Performance of Abu Dhabi Police in UAE

Ahmed Hmoud Alderei¹, Nlizwa Rashid.,¹ Saleh Ali Hussein

*Fakulti Pengurusan Teknologi Dan Teknousahawanan¹
Universiti Teknikal Malaysia Melaka (UTeM)
Centre of Technopreneurship Development (CTeD)
Corresponding E-mail address: nurulizwa@utem.edu.my*

Abstract

This study objective is to enhance intellectual capital for organisational performance within Abu Dhabi Police in UAE. This work follows quantitative method, a questionnaire utilised fundamentally for measuring all the major constructs that the study model done and was utilised for collecting data within the police department in Abu Dhabi. 392 cases formed the data that is valid for analysis. Utilising Structural Equation Modelling (SEM) was done for examining the study model, using of Smart PLS 3.0 software. The findings showed that all tested factors had positively put effects on the organisational performance in the UAE public sector. The outcomes of this study have sufficient potential to offer more understanding into organisational performance strategies. Therefore, as expected, organisations with higher levels of intellectual capital place a higher value on it in order to achieve significantly higher performance. For practical prospects, this study has contributed to practise in a variety of ways. Such as the evaluation of better sub-elements of intellectual capital, which assist managers in detecting, capturing, and assessing the various aspects of business resources that must be taken into account one by another in order to increase organisational performance, with the purpose of taking full advantage of their intangible assets.

Keywords: Intellectual capital (IC), Organisational performance (OP), UAE.

1. Introduction

Intellectual capital (IC), which is associated with producing value for organizations, may provide organisations in the knowledge economy with a competitive advantage and improved performance (Ahmed et al., 2019). IC are also thought to add value to physical and financial assets (Dzenopoljac et al., 2017). Intellectual capital captures flows and stocks of the total knowledge base of a company. The study suggests that the multidisciplinary character provided by intellectual capital perspective and a valuation and relevance challenge. In the face of fierce global competition, the importance of intellectual capital as a primary source of economic growth is widely acknowledged (Ahmed et al., 2019; Alshamsi et al., 2019).

The concept of intellectual capitals (IC) became quite popular in the late 1990s.

Therefore, the IC were envisaged as a combination of knowledge and abilities, which may clearly provide a firm with a long-term competitive advantage (Tarus, 2017). Alshamsi et al (2019) defined IC as the employees' key competencies comprising individual knowledge and skills. Smriti & das (2018) Identified IC as the stocks and information flows available within an organisation. Moreover, Li and Zhao (2018) noted that assessing IC may aid in the formulation of company strategies and the allocation of corporate resources. According to Meles et al. (2016), there are three interconnected groups of reasons in favour of IC measurement: The increasing significance of IC as a factor of corporate growing; only IC ensure long-term competitive advantage in the market; and IC provide a continual and endless innovation source.

United Arab Emirates (UAE) it has recently been listed among the world's fastest-developing economies (World Bank, 2016) in the Middle East, North Africa, and Gulf zone with the aim of ranking among the highest service-oriented economies (Ibrahim & Al Falasi, 2017). The economy of the UAE is highly diversified with more than 180 nationalities and involves tourism, development, logistics, banking and finance, diverse communities, faiths and ethnic backgrounds (Jabeen et al., 2015). In recent decades, research on organizational performance has demonstrated that there is a growing awareness among police services in the UAE and the UK alike that this would be reciprocally useful for any stakeholder if the police services focused on improving performance of the organization (Abu Dhabi Police, 2019). This is not to imply that the present level of police organisational performance is inadequate, but as social standards and expectations keep developing, current approaches to performance management must be reviewed in order to maintain the police force ready to face new problems (Abu Dhabi Police, 2019). Some police agencies in Abu Dhabi have adopted a service-led strategy as part of their future plan, however not all these efforts are at the same maturity level (Eterno et al., 2021). Because each police agency reflects a different geographical and socioeconomic demography, it is equally important to recognise that a "one-size-fits-all" approach to policing is neither legitimate nor practicable (Ahmed et al., 2019).

Similar to several writers and practitioners have noted that increasing performance through innovation is rarely simple in law enforcement. Change is typically met with opposition in these institutions, and police personnel frequently face difficulties in adopting new initiatives (Eterno et al., 2021). Surprisingly, there are little indications regarding the key characteristics of police performance linked with eight innovations, such as crime control efficacy and community satisfaction with services delivered (Alshamsi et al., 2019). However, it has been proven that police innovation may reduce crime and strengthen relationships with the communities they serve (Eterno et al., 2021).

Based on the economic vision 2021, the government focuses more on increasing the

share of the local workforce and improving their knowledge and innovation level, which is considered as the main key of improving the country economy (Livsey, 2019). In this regard, the government has neglected the integral role of other components of the intellectual capital, which works along with the human capital to improve the macro-performance. Alshamsi et al., (2019) stated that human capital and structural capital represent the essential components of the IC, which integrates with the capital employed of the organisation to achieve high performance. Development capital is viewed as a piece of scholarly capital and can be depicted as capital-related with inexhaustibility. Schumpeter (1964) expressed that development is a main factor for riches; thusly it ought to be viewed as a significant piece of the outside data. As a result, further study is needed to bridge this gap and investigate this link in this sector (Wang et al., 2019). As a result, the UAE was the focus of this investigation. The UAE's public sector, including the police force, is more mature and established than those of other Middle Eastern and Arab countries

2. Theoretical background and development of hypotheses

2.1 Organisational performance

Performance is seen as the most essential concept in the assessment of an organisation and a vital component in achieving effective management (Corvellec, 2018). Nevertheless, examining performance and how it is quantified is limited (Corvellec, 2018). A performance measurement system, as Wang et al., (2018) stated, is a list of indicators utilised to check the effectiveness of an organization's operations. The assessment system of performance aids in taking sensible decisions, effective plans, and monitoring and controlling all activities in organisations (Li & Zhao, 2018).

2.2 Intellectual capital

A lot of methods can be found for defining intellectual capital in previous research. Several of these have seen IC equal to that of intangible assets. This work sees IC as the whole stocks of the collective knowledge, technologies, information, experience, intellectual property rights, organization competence and learning, customer relations, team communication systems, and brands that have the ability to

generate values for a company. Intangible assets such as IC are used by many organizations to generate profit through their performance (Livsey, 2019). Intangible assets form the effective factor behind a firm's increased economic value. IC is a critical component of intangible assets that helps a company create new value. It is essential in assisting an organization in achieving its objectives in an unpredictable environment. It serves as a lever in attaining competitive benefits. It is also a feasible source which can be used from where performance can emerge (Ahmed et al., 2019). In relation to the study of (Kamukama et al., 2013), the IC aspects of human, structural, and relational capital could be employed for the objectives of this stud.

2.2.1 Human capital

Human capital is one of the most significant resources on which organisations depend since it allows them to adapt to environmental changes in novel ways (Kong, 2010). Furthermore, human capital is seen as critical since it influences organisational performance (Santos-Rodrigues et al., 2013). Furthermore, (Wang et al., 2018) said that the value of human capital is derived from its potential to increase the efficacy and efficiency of organisations, therefore gaining a competitive edge. As a result, human capital is regarded as the most significant intellectual capital component because the firm's existence is dependent on it (Kianto et al., 2010). Consequently, (Chen et al., 2012) recommended that organisations continually invest in their human.

2.2.2 Structural capital

Joshi et al. (2013) defined structural capital as knowledge generated and possessed by an organisation. In contrast to human capital, the company holds the structural capital (Livsey, 2019) and may thus be exchanged, duplicated, and shared within the enterprise (Zambon, 2012). As a result, SC is regarded as the side that enables IC to be assessed and developed in an organisation (Toth and Jonas, 2017). Structural capital is concerned with the procedures and structures of the organisation, which eventually impact organisational performance, making it an essential organisational resource (Ahmed et al., 2019). Furthermore, (Livsey, 2019) showed that structural capital is employed to keep organisational human capital. That is because

structural capital serves as a framework that supports HC a set, providing the required atmosphere for people to contribute their human capital and expertise (Wang et al, 2018).

2.2.3 Relational capital

Relational capital is based on the idea of linking internal intellectual resources with external stakeholders, therefore impacting an organization's potential to produce value (Wang et al., 2018). Relational capital (RC) is described by (Alshamsi et al, 2019) as "knowledge inherent in relationships with each stakeholder that influences the firm's life." According to (Dzenopoljac et al., (2017) relational capital helps both the organisation and its people because they both possess that. Moreover, Ahmed et al., (2019) stated that relational capital is critical in realising the wealth-creation potential of human and structural capital. As a result, Joshi et al. (2013) stated that building and maintaining relationship capital is critical for fruitful organisations. Companies in the service sector in particular believe that customers form the cornerstone of performance. Similarly, a research found that the relational capital of Taiwanese SMEs had positive effect on developing new products. Relational capital was shown to have a considerable impact on innovative ideas in both manufactured and non-manufactured products from all industries (Ameen et al., 2018).

2.4 Intellectual capital and organisational performance

Obeidat et al., (2018) argued that intellectual capital holds a substantial link with business performance irrespective to the industry in which an organisation works. Kujansivu and Lonnqvist (2018) carried out research to investigate the link between intellectual capital and company performance in relation to profitability and productivity. The findings revealed that intellectual capital holds a substantial link with productivity but not with profitability. Furthermore, Zeghal and Maaloul (2015) discovered a substantial positive link between intellectual capital and a firm's financial success in a research of 300 UK firms. Tseng (2010) discovered that intellectual capital leads to a substantial effect on organisational performance. Moreover, (Vishnu & Gupta, 2014) found that intellectual

capital had a Favourable impact on company performance. Nonetheless, human capital creates a strong negative association with business performance, according to (Firer & Stainbank, 2018). Furthermore, Obeidat et al., (2018) asserted that no link between intellectual capital and the performance of companies exists. Hence, this work proposes the first hypothesis to be tested:

H1. Intellectual Capital has a positive influence on organizational performance

Figure 1 shows the proposed conceptual framework based on the literature reviewed above. These practices were shortly discussed in the previous section. IC has the capacity of supporting the organizational performance level of the organization. This research emphasizes on the capability of IC in causing a positive effect on developing an organization and its performance. Based on the resource dependence theory, the study related all the IC and organizational performance of the organization.

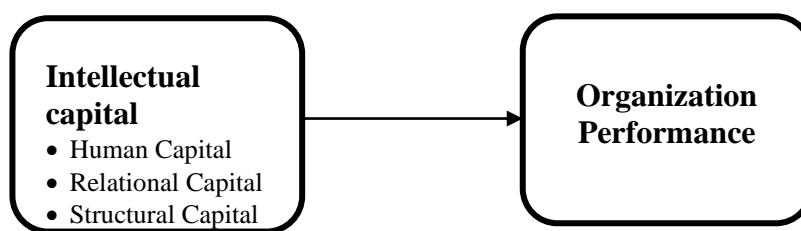


Figure 1. research framework

3. Research methodology

3.1 Instrumental development

A questionnaire was created for the purpose of evaluating the research model, and it was utilized to collect the data needed for this work. It included questions in Arabic that the UAE respondents can comprehend. It was divided into categorized: a) it measured four core points using a five-point Likert scale ranging from 1 to 5 (from strongly disagree to strongly agree), b) it covered the demographic profiles of the respondents and was evaluated by an ordinal or nominal scale.

3.2 Data collection

This work uses quantitative data, that is collected in accordance with the statistical survey guidelines. The respondents work in Abu Dhabi police. A personally administered questionnaire was used for collecting data from respondents within the sample population in this work. The number of questionnaires distributed must not be equal to the sample size since the responses rate will not reach a percentage of 100 to achieve the required size. The data was obtained in the context of this work by distributing, across the UAE during February 2021, a set of 500 questionnaires

(sample sizes). A total of 448 questionnaires were returned after Two month and 89.6 percent of the answer rate was there-fore determined. However, 56 were determined to be incomplete and include missing values or more out of 448 surveys of the 392 questionnaires, 23 were therefore eliminated and 369 were ultimately judged to be valid for analytical statistical data. For standard checks the completed data were not evaluated as the SmartPLS does not obligatorily consider the distribution of re-search data as a precondition for statistical testing (Hair et al., 2014).

3.3 Data analysis

The items were operationalized by utilising a 5-point Likert scale where 1 = strongly disagree and 5 = strongly agree. Smart PLS Version 2.0 was employed for conducting the analysis. SEM was selected as a method of statistics since it offers a side-by-side analysis resulting in proper estimation. Fac-to-face interaction with workers was done to complete the survey, which was employed for data collection with a randomly sampling technique. the gender test was divided into two categories: male and female. Male respondents made up 192 percent of the total, while female respondents made up 177 percent of the total. This test reveals that

most responses were men. The work position had five positions of work, which are employee, supervisor, manager, director/head/senior manager, and chief officer. The employee respondents were 161 with 43.6%. The supervisor respondents were 70 with 19%. The manager respondents were 54 with 14.6%. The director/head/senior manager respondents were 39 with 10.6%. and lastly the chief officer respondents were 45 with 12.2%.

This test confirms that most of the respondents were under the employee work position. the education levels were divided into four categories: diploma, bachelor, masters, and Doctor of philosophy. There were 73 respondents with a diploma, representing for 19.8 percent of the total. There were 104 bachelor's degree holders among the respondents, representing for 28.2 percent. The proportion of respondents who held a master's degree was 97 percent (26.3 percent). Finally, 95 percent of responders had a PhD, making for 25.7 percent of the total. The majority of responses appear to have bachelor's degree certifications. the working experience test had four experience ranges: 1-5 years, 6-10 years, 11-15 years, and more than 15 years. There were 77 responses with 1-5 years of experience,

accounting for 20.9 percent of the total. There were 160 responses with 6-10 years of experience, accounting for 43.4 percent of the total. The respondents with 11-15 years of experience made up 85 percent of the total, accounting for 23 percent of the total. Finally, there were 47 responders with more than 15 years of experience, accounting for 12.7 percent of the total. It indicates that the majority of responders had 6-10 years of experience.

4. Findings

4.1 Internal consistency

Alpha from Cronbach is the most frequent metric of internal consistency to evaluate the trustworthiness of the scale (Hair et al., 2014). The preliminary results of 0.8 or 0.9 show the internal consistency of a measurement model, whereas values below 0.6 suggest the lack of dependability. The greater CR score implies a higher consistency of the goods. For the research underway, both Cronbach alpha (CA) and the composite reliability values in Table 1 are larger than 0.8 and 0.9. These data showed a strong degree of dependability in the building and so demonstrated the high internal consistency of the objects utilised in the present research tool.

Table 1 internal consistency measures

Variables	Cronbach's Alpha (CA)	Composite Reliability (CR)
Human Capital (HC)	0.899	0.923
Relational Capital (RC)	0.895	0.934
Structural Capital (SC)	0.881	0.913
Organisational Performance (OP)	0.837	0.892

4.2 Convergent validity

Convergent validity (Hair et al., 2014) measures how much a measure is correlated with an alternate measure of the same structure. Thus, an item assesses its designed structure. Convergent validity. The validity of the convergent was evaluated by the average extracted value (AVE), as proposed in this study (Waddock & Graves, 1997). The

appropriate convergent validity was shown by a value of AVE 0.50 and above. The converging validity values for the structures utilised in the current investigation are presented in Table 2. Since the minimal threshold (0.50) of AVE was fulfilled by all values. It was demonstrated that the measuring model in the present investigation has adequate convergent validity.

Table 2 average variance extracted (AVE) values

Variables	Average Variance Extracted
Human Capital (HC)	0.666
Relational Capital (RC)	0.826

Structural Capital (SC)	0.677
Organisational Performance (OP)	0.674

4.3 Discriminant validity

The discrimination of validity (Urbach & Ahlemann, 2010) describes the difference between constructs. The discriminatory validity of the structures may be measured in two ways (Fornell & Larcker 1981) and the cross-loading of buildings can be measured. When a building's AVE square root is more than correlated with other structures, the value is derived with the first approach (Fornell and

Larcker 1981). In the second technique (Cross-Loading), the value shows that loads of objects are higher than in the other buildings. The discriminating validity of a measuring model is shown by these values. Discriminant validity values were achieved by executing the Smart PLS software algorithm function. The results of Table 3 revealed the values for the measurement of descriptive validity calculated using Fornell Larcker.

Table 3 Fornell-Larcker criterion

	HC	RC	SC	OP
HC	0.816			
RC	0.561	0.909		
SC	0.626	0.661	0.823	
OP	0.555	0.534	0.600	0.821

4.4 Hypotheses testing

The structural model was utilised for testing the hypothesis of this study based on PLS-SEM results. For the purpose of testing the hypothesis, values of path coefficients, t-values and p-values of 0.05 were examined. All hypotheses of the present investigation were accepted on the basis of these values. This study suggested one hypothesis to examine the connections direct. The following hypothesis are proposed by the present study:

H1: Intellectual capital positively impacts organisational performance. According to the findings, the path coefficient between intellectual capital and organisational performance is 0.254. The t-value of 5.304 was found to be significant because it was greater than the critical value of 1.96, and the p-value of 0.000 was also significant and less than the threshold value of 0.05. Therefore, the empirical evidence was sufficient for accepting

hypothesis H1, and this research reached a significant positive relationship between intellectual capital and organisational performance.

4.5 Coefficient of determination(R²)

The coefficient of determination (R²) value is employed to describe how much variance the independent variables caused in the dependent variable. The greater the R² values, the better the structural model's prediction abilities. However, the strength of R² values is affected by the complexity of the study model and the sort of discipline (Hair et al., 2014). R² values for endogenous latent variables, for example, are calculated as follows: 0.26 (significant), 0.13 (moderate), and 0.02 (weak) (Cohen, 1988). R² values, alternatively, need to be equal to or more than 0.10 to explain the variance of a certain endogenous component to be considered acceptable (Falk & Miller, 1992).

Table 4 Coefficient of determination

Variable	R Square	Result
Organisational performance	0.664	Substantial

According to the findings of the PLS algorithm analysis, as illustrated in Table 4, intellectual capital explained 66.4 percent of the variation in organisational performance. Overall, the results show that all (R^2) values above the cut-off value of 0.02. As a result, the model has appropriate predictive ability for organisational performance.

5. Discussion

The main objective is the enhancing intellectual capital for organisational performance within Abu Dhabi Police in UAE. The main objective of this research is investigating how IC and OP are connected in the UAE public sector, particularly, the police department in Abu Dhabi. The result of the analysis showed Intellectual capital positively influences organizational performance. The results demonstrated that path coefficient between Intellectual capital and organizational performance is 0.254. The t-value of 5.304 was seen significant as it is higher than the critical value of 1.96 and the p-value of 0.000 was also significant and less than the threshold value of 0.05. This outcome corroborated the belief that workers productivity is affected by their networking in organizations. Hence, the teamwork and communication between workers in the United Arab Emirates is essential. All the workers contribute to the organization's performance (Alshamsi et al., 2019).

Generally, using intellectual capital management strategy, all organizations including the police have to take action on the identification of the deficiencies in organizational knowledge, greater productivity of human capitals, employees' more effective learning, clients and staff's satisfaction, prevention the frequency of the mistakes, reduction of reinventing, saving time, infusing motivation for creativity and innovation in the personnel. Having all these in mind, it can be concluded that Intellectual Capital is increasingly linked with organizational performance and it is important for the military organizations to understand the guidelines usage for knowledge resources management and providing appropriate access facilities to this information in military background and

also to employ it in the appropriate backgrounds for job.

6. Implications for research

Based on the allocated duties, military organizations have to select, recruit and keep capable human resources. Naturally, their identification, measurement, and management are difficult and contemplative; on the other hand, every organization needs innovative ideas for its survival. Furthermore, UAE police force, which is the largest leading organizations providing security and order in the country, has to precede exploiting internal and external knowledge management and Intellectual Capital (Human) for organizational performance in its own organization.

It has generally helped Abu Dhabi police department managers and public sector to view IC as an acting catalyst for organizational performance. Abu Dhabi police should try to help employees retain positive relationship. Furthermore, for the purpose of improving the processes, the police department of Abu Dhabi should maintain a track of the knowledge obtained from a variety of sources. To enhancing this field of study, the study has taken an extension which is natural from the previous research related to IC due to its contribution.

7. Conclusion

This study aims at to enhancing intellectual capital for organisational performance within Abu Dhabi Police in UAE. Every hypothesis was accomplished by testing them empirically. The results show that relational capital holds the most significant effect in explaining the organizational performance in Abu Dhabi police department. Furthermore, in the importance performance map analysis also came first. Therefore, teamwork and communication between the workers in the UAE are important as their knowledge and skills. The employees contribute to the performance of the organization by their experience and communication. Structural capital is in the second place in explaining performance. Moreover, human capital has a rolls assisting organizations to enhance their performance and strive to keep existing. To sum up, intellectual capital was recognized a key

indicator of the performance in organizations. Enhancing the role of IC will add to the organizational performance.

8. Limitations and suggestions for future research

This work has examined the model of research in the police department of Abu Dhabi and other studies can focus on validating the model in other public sectors and other Arab countries. Furthermore, this research worked on the public sector without covering the private one. It has also evaluated the intellectual capital which appears as organizational performance in UAE. It recommends expanding the study to be conducted in the other places in the UAE that have not been focused on in this work.

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