An exploration of intelligence management opportunities for organizations in the UAE: Possible challenges for culture

استشراف فرص إدارة الذكاء المؤسسي في دولة الإمارات العربية المتحدة: تحديات جديدة للثقافة السائدة

by

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Abstract

The aim of this paper was to explore the intelligence management opportunities available to Organizations operating within the UAE market, and the likely impact of the UAE culture on Such businesses. Business intelligence is a crucial component of a firm's intelligence Management process. It also influences the competitive intelligence process. The study adopted a Constructivist qualitative approach to understand the challenges faced by organizations in the UAE market in implementing intelligence management processes. A deductive research Approach was deemed ideal in understanding the concept of intelligence management as it affects Businesses in the UAE. A descriptive research design aided in obtaining in-depth knowledge on The application of intelligence management by businesses in the UAE. Data collection was Accomplished. Via the use of an online survey administered to business managers in the UAE. Study findings revealed that technology, emotional intelligence and consumer preferences all Influence business intelligence. Consequently, these factors act as an opportunity for firms in the UAE to exploit, thereby enabling them to easily integrate these with their business intelligence Management systems. The findings further show that integrating efficiency and flexibility enable Businesses to apply business intelligence and thus equip them with a competitive advantage in The UAE market. Moreover, study findings revealed that cultural diversity has a positive impact On the implementation of business intelligence, as does cohesive culture. The study identified Business intelligence as vital component in enhancing emotional intelligence, promoting social Cohesion, increasing understanding of customer preferences, and promoting business Technological capabilities. The use of business intelligence in data collection promotes Competitiveness and knowledge acquisition, while proper management of business intelligence Enables a firm to keep a close eye on the competition. Effective national culture is positively Linked to business intelligence. Besides, business intelligence enables organizations in the UAE To gain useful insights on consumer behavior. Such information aids in the development of Products and services that match consumer preferences.

<u>الخلاصة:</u>

الهدف من هذه الاطروحة هو استشراف فرص إدارة الذكاء المؤسسي في دولة الإمارات العربية المتحدة، تحديات جديدة للثقافة السائدة.

ان تحليل هذه المعلومات المتعلقة بالأعمال في المؤسسات هي عنصر حاسم في عملية إدارتها، وتحليل معلوماتها التنافسية.

هذه الاطروحة قد بنيت على النهج النوعي لفهم التحديات التي تواجهها المؤسسات بدولة الإمارات العربية المتحدة في تنفيذ إدارة تحليل المعلومات، كذلك يعتبر نهجها الاستنتاجي مثالياً في توضيح مفهوم إدارة تحليل المعلومات، لكونه يؤثر على اعمالها.

ساعد تصميم البحث المؤصف في الحصول على معرفة متعمقة حول تطبيق إدارة الذكاء المؤسسي من قبل المؤسسات في الدولة، وقد تم جمع البيانات من خلال استطلاع عبر الإنترنت موجه إلى مدراء عدد من المؤسسات في دولة الإمارات العربية المتحدة. وقد كشفت نتائج هذه الدراسة بأن التكنولوجيا والعاطفة واختيارات المستهلكين مجتمعين، تؤثر على تحليل المعلومات المتعلقة بالأعمال، لهذا فإن هذه العوامل تشكل فرصة للمؤسسات في الدولة لاستغلالها، وبالتالي تمكنهم من دمجها بسهولة مع نظم إدارة تحليل المعلومات المتعلقة بالأعمال الخاصة بهم.

تظهر هذه النتائج بأن دمج الكفاءة والمرونة يتيح للمؤسسات تطبيق تحليل المعلومات المتعلقة بالأعمال وبالتالي تزودها بميزة تنافسية في سوق الدولة. إضافة إلى أنها قد كشفت بأن التنوع الثقافي له تأثير إيجابي على تنفيذ تحليل المعلومات المتعلقة بالأعمال، كما هو الحال في المجتمع المتناغم.

كشفت الدراسة بأن تحليل المعلومات المتعلقة بالأعمال هو عنصر حيوي في تعزيز تحليل المعلومات المتعلقة بالعاطفة وتعزيز التماسك الاجتماعي، وزيادة فهم اختيارات العملاء، وترويج القدرات التكنولوجية التجارية.

ولتشجيع تنافسية جمع البيانات واكساب المعرفة يفضل استخدام منظومة إدارة الذكاء المؤسسي، في حين أن الإدارة السليمة لعملية تحليل المعلومات المتعلقة بالأعمال تمكن المؤسسة من مراقبة المنافس عن كثب. حيث ان الثقافة الوطنية الفعالة ترتبط ارتباطا إيجابيا بها كذلك. بالإضافة إلى ذلك، تمكن المؤسسات من الوصول الى المعلومات التجارية في دولة الإمارات العربية المتحدة، للحصول على رؤى مفيدة حول سلوك المستهلك. حيث انها تساعد في تطوير المنتجات والخدمات التي تطابق اختيارات المستهلك.

Contents

Chapter 1: Introduction

1.0 Introduction

The study explores and elucidates the ***intelligence management opportunities for organizations in the United Arab Emirates (UAE): Possible challenges for culture***. In the first chapter of this research, the researcher discusses the economy and business environment of UAE. After demonstrating and analyzing the case, the researcher states the problem statement and the reason for conducting this particular study. Along with that, the prime purpose of this research would be given at the end of this chapter. Moreover, some research questions are formed in order to fulfill those objectives. In the first chapter, the researcher demonstrates a research map that helps to understand the structure of the entire study.

1.1 Overview of the UAE

As Juaidi et al. (2016) explain, the United Arab Emirates has experienced a boom in economic growth and its population. Key macroeconomic indicators show that the country has experienced a positive trend and will able to continue on its growth track. The United Arab federation is made up with 7 emirates of this country that includes Dubai, Abu Dhabi, Ras Al Khaimah, Um Al Quwain, Ajman, Sharjah, and Fujairah (Toledo 2013). Throughout the federation, the nation has been experiencing a continuous growth and development in the three sectors consist health care, industry, and education. Additionally, the country is one of the largest oil manufacturers as well as exporters. Besides, it is a member of the organization of Petroleum Exporting Countries and the Gas Exporting Countries Forum (Juaidi et al. 2016). Uprising growth and development made the country famous for its global occasions and contemporary infrastructure.

1.2 Overview of UAE Economy based on reality

The GDP (Gross Domestic Rate) growth rate and population growth of United Arab Emirates in the past 5 years is demonstrated in the below table:

	2011	2012	2013	2014	2015
Population Growth	8.5M	8.8M	9.0M	9.3M	9.6M
GDP Growth	5.2%	6.9%	4.3%	4.6%	3.1%

Table 1: GDP and Population Growth in the United Arab Emirates

(Source: tradingeconomics.com 2016) The above table shows that the population of this country has been increasing continuously since 2011, whereas the GDP growth has been slowing down. It has been mentioned that the country has experienced continuous growth but in the present scenario, it faces a decline in its GDP. The table shows that it had a positive growth trend till the year 2012. In 2013, the GDP growth has been declined from 6.9% to 4.3% and afterward, it has been decreasing till 2015. It indicates that the sectors that lead the country towards positive growth track are confronting some difficulties in the present situation. As the population has been rising, it indicates that somehow the sectors fail to utilize its increasing human resource. It is expected that the UAE economy will grow 3.5% in the present year (tradingeconomics.com 2016). As per the Trading Economics global macro models and analysts expectations, the UAE economy is expecting to obtain 2.5% growth at the end of the second quarter of 2016 (tradingeconomics.com 2016). Furthermore, as per their econometric models for long-term planning, the UAE economy

is projected that the GDP growth rate will increase 4.3% in 2020. This is same as the rate of 2013 when they first slowed down.

Presently, the UAE economy tries to increase the growth level through sound economic methodologies and prudent financial policies (Juaidi et al. 2016). The energy sector has maintained its position as the most significant contributor to UAE GDP growth. Among the seven emirates, Abu Dhabi is continuing a good performance in non-oil sectors. As determined by Abu Dhabi Statistics Centre, the GDP growth rate of Abu Dhabi was 5.5% at the end of quarter 3 of 2015, in comparison to the same period of last year (tradingeconomics.com 2016). The non-oil contributors of UAE economy include Finance and insurance; Transport, storage, and communication; Real Estate, business services; Trade, construction, and government (Khan 2014). Furthermore, new and renewable initiatives are taken in the energy sector to attract foreign capital in the United Arab Emirates.

As opined by Ahrens (2013), most of the percentages of UAE growth are acquired from trade and export. Apart from the export destination, India is also the import source of several goods. Regarding import source, Japan, Germany, U.S., and China are the other leading partners. On the other way, Kuwait, Canada, Saudi Arabia, and Switzerland are the top export markets of the country (Mitra and Kwan-Tan 2012).

1.3 Overview of UAE business environment

Since its establishment in 1971, the United Arab Emirates has been considered as one of the fastest developing nations in the Middle East and North Africa region (Elanain 2010). The United Arab Emirates business environment consist foreign trade, tourism, huge infrastructure, and other business activities. The UAE economy acts as the hub of trading activities because of its

abundance resource of oil and gas. McAdam et al. (2013) add that the trade of UAE economy is restricted to few numbers of countries. Therefore, presently they have found the need for further trade policy reforms to attract FDI (Foreign Direct Investment). Through establishing more foreign trade partnerships, the organizations of UAE would able to achieve growth at a faster rate. Recently, a joint venture was made between Dubai International Exchange and New York Mercantile Exchange.

The UAE economy is considered one of the world's most competitive economies (Ahmad and Daghfous 2010). All the sectors and the organizations deliver strong competition to one another and confront major challenges from others too. As stated by Ibrahim and Falasi (2014), the use of modern technology is increasing growing in all the sectors of the economy. In both the private and public sectors, the data security strategies are developed to ensure the safety of the data and information. The UAE government pays more heed on the new technology to increase the security of the unique resources in the public businesses (Suliman and Kathairi 2012).

1.3.1 Main business in the UAE. As mentioned by Suliman and Kathairi (2012), the United Arab Emirates has an open economy that defines that the country involves economic activities and business operations between the domestic community and international community. Besides the energy sector, some other industries are there that play an important role in the UAE economy. The textile industry, food processing industry, construction materials production and water distillation generates a significant portion of UAE's GDP.

According to Mitra and Kwan-Tan 2012), the manufacturing capability has been expanded due to massive growth in the construction sector that helps the economy to pursue more diversification. The export sector is expected to exceed the contribution of the petroleum sectors

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within the next century (Saudelli 2012). Furthermore, the import sector of UAE economy tends to increase its size through importing manufactured goods, transportation equipment, and other machinery products (Hussain et al. 2015).

1.3.2 Main business challenges in the UAE. According to Ratcliffe, Strang, and Taylor (2014), some of the economic challenges faced by businesses in the UAE include: fluctuation in price oil, government debt and balance of trade are the most important factors that have an impact on the UAE economy. Others are changes in interest rate, unemployment rate, and inflation rate also affects the overall economy of the country. These factors are main reason that the organizations confront several challenges in the UAE economy. The country is facing a continuous slump in the price oil which is the biggest challenge that affects the entire economy. Herschel and Jones (2005) note that the economy and organizations in it confront growth deposit challenges because of growing market of real estate. The Economic boom in rental and property market results is rising population in the Emirates and attract investors across the world. Hence, it would be profitable to the real estate investors, but it creates a challenge for the banks and the government to manage the economy.

Organizations in the UAE also have to contend with the problem of managing the increasingly competitive environment and monitoring the direction of strategy planning (Gilad 2011). As the market competition in increasing, the risk profile of the individual firms also changes. Thus, the firms face constraints in dealing with the uncertainty situations.

1.3.3 Business competition in the UAE. The UAE economy is one of the world's most competitive economies (Madichie and Blythe 2011). Through promoting innovation and new management policies, the organizations improve the country's business environment (Pattinson

and Preece 2014). Kahraman, Kaya and Evikcan (2011) state that both the large and small industries of the UAE economy need to reinforce the information management and intelligent management system in their business. In the growing competition, all the individual firms need to have a plan for strategic change and pay more heed on the intelligent management process (Maguire, Ojiako and Robson 2009).

1.4 The need for intelligent management

1.4.1 Intelligent management system in the business. The key functions of intelligent management system include increase business awareness, formulate new strategies, and identify organizational changes as well as requirements of engineering, implementation, and quality management (Herschel and Jones, 2005). In the first phase, it is important to increase the business awareness among the stakeholders to know the need changing environment. Further, it helps to engage the stakeholder in formulating new strategies and doing new projects, in addition to identifying the organizational changes and requirements that they need for enhancing their business. Baars and Kemper (2008) opine that the intelligent management system helps the organizations to implement the strategies in an effective manner.

1.4.2 Know your business and operational environment. In the 21st century, the nature of the business environment and business operations are completely changed in UAE economy. Through intelligent management system, the organizations try to enhance their ability to compete in both international and global market (Behery 2009). The strategic intelligence should be formulated in such a way that they can attain competitive advantages over the competitors and place in a sustainable position.

1.4.3 The context and nature of organizational intelligence. As discussed by Al-Awadi and Saidani (2010), the nature of organizational intelligence depends on the business environment in which the business situated. The intelligent management system has a large impact on the organizational performances. The process and key functions of intelligent management system have been mentioned before in this study. It helps to understand that the process increases employee cooperation, enhance employability skill and thus it increases the revenue as well as profit of the organizations. Furthermore, as the organizational intelligence increases, the decision makers can access the organizational operations more quickly.

1.5 Intelligence

According to Herschel and Jones 2005), intelligence can be defined as the ability to gather information about the materials, resources, production, and business operations and analyze them carefully so that further strategies can be formulated. In this section, the study elucidates the business intelligence, competitive intelligence, and intelligence management process to provide the idea of the main variable of the research.

1.5.1 Business Intelligence. As per the viewpoint of Ojiako et al. (2015), the business intelligence is important strategic tools and techniques used in intelligence management to transform the raw data and information into meaningful ones for the organizational purposes. It has been mentioned before that the UAE economy faces change in the business environment. In this context, the business intelligence helps the decision makers to manage and purify the gathered information to make a decision that is more precious.

1.5.2 Competitive intelligence. Baars and Kemper (2008) opine that competitive intelligence can be defined as the tools used for collecting information about the competitors and

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utilize them in the strategic business decision. In the growing competitive market, it is necessary to obtain competitive advantages over the rival companies to stay in the market. Adequate and relevant information are gathered to make use of them in the right time. In UAE economy, the organizations somehow fail to properly manage the competitive intelligence in the largest and fastest growing competitive market.

1.5.3 Intelligence management. According to Herschel and Jones (2005), intelligence management is the process that includes both the business intelligence and the competitive intelligence. It allows the decision makers to prioritize certain actions and make strategic options. The organizations of UAE economy are pursuing several intelligence management processes to deal with the challenges they face from the changing economy. The intelligence management process of each firm depends on their organizational environment.

1.6 Culture and intelligence

1.6.1 What is culture. As opined by AlMazrouei and Pech (2014), culture can be defined as a set of collective values, beliefs, attitudes and the key component of business that affect the strategic decision of the organizations. Further, an influential factor has an impact on the business operations as well as on the management system. Khan et al. (2010) added that the organizational culture of particular industries expresses its self-image, current experiences, and future expectations. In the context of the present study, the culture of UAE economy is the ways how the organizations treat their employees, clients and the wider community based on their beliefs and customs.

1.6.2 What is national culture. Forstenlechner (2010) stated that the national culture is the set of behavior, attitudes, customs, beliefs, and norms that present in the population and society

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of an economy. The international firms establish their management strategy and business planning as per the national culture in which they operate their business.

1.6.3 How does national culture impact upon business intelligence. As described by Neal (2010), the business involved in global market faces organizational challenges because of having diverse cultures. A Huge number of teams is engaged in one organization along with different beliefs, norms, and attitudes. In the context of business intelligence, employees of one organization interact with one other that might affect the business positively or negatively. The positive impact will be possible when the employees are willing to embrace the culture of other society and cooperate with each other. Organizations should consider both the national and organizational culture to align the cultures and improve their business intelligence procedure.

1.6.4 How does national culture impact upon intelligence management?

The prime objective of the intelligence management process is to acquire sustainable competitive advantages and make a sustainable position in the domestic or global market (Herschel and Jones (2005). The strategies are made in such a way so that it can support the national culture where the business operates. National culture aids in the acquisition and maintenance of good market position.

1.7 The problem statement

After analyzing the gathered data and information, the researcher here discusses the problem regarding the research topic. It helps to understand the reason behind choosing this particular research study. As stated by Baars and Kemper (2008), the intelligence management is a modern concept for surviving in the growing competitive market. The drastic change in the information technology hugely affects the process business operations and the culture of the

organizations in UAE economy. The organizations confront more constraints and uncertainty in the current period, and thus they fail to make long-term growth policies. Further, they fail to identify the opportunities they have in the present scenario.

1.8 Research Aim

The researcher aims to investigate intelligence management opportunities that the organizations have in the UAE economy along with the impact of culture on the businesses.

1.9 Objective of the study

The prime objective of this particular study is to analyze the UAE economy in the present scenario along with the business operates in the country. The researcher has been found that the businesses confront some challenges due to increasing competition and information technology. Also, the researcher also analyzes the role of cultures in the intelligence management to determine how it can affect the business. Hence, the objective of the present study is to bring out the intelligence management opportunities that the UAE organizations have. The research objective formed below:

- To analyze the intelligent management opportunities that the organizations have in UAE economy

- To determine how the intelligence management influences the business in the growing competitive market of UAE

- To analyze the effect of national culture on the implementation of intelligence management system of UAE

1.10 The research questions

In this chapter, the researcher has formed some question that would help to fulfill the research objectives. The research questions are as below:

- What are the intelligent management opportunities that the organizations have in UAE economy?

- How does the intelligence management influence the business in the growing competitive market of UAE?

- What are the effects of national culture on the implementation of intelligence management system of the UAE

1.11 The research map

The research map is demonstrated in the below table:

Chapter 1: Introduction	In this chapter, the researcher introduces the research topic along with research aim and objectives.
Chapter 2: Literature Review	This chapter provides a broader view of the research topic.
Chapter 3: Research Methodology	Here, the methods and techniques used in this research will be demonstrated.
Chapter 4: Data Analysis	The researcher discusses the data and information gathered during the investigation and analyzes them properly.

Chapter 5: Recommendation and Conclusion	At the last chapter, some suggestions would be delivered against the research problems. The researcher here concludes the entire study.

Table 1: Research Map

Chapter 2: Literature Review

2.1 Introduction

In this particular chapter of the study, the researcher expatriates and represents the literature review which explains the research topic in a depth manner. After explaining the basic concept of the research variables in chapter one, the researcher here enhances the concept of the intelligence management opportunities for the organizations in the United Arab Emirates. The study also explores possible challenges of a culture that the organizations confront in this nation. The second chapter will cover the research questions mentioned in a prior chapter to attain the research objectives. The study explains the organizational intelligence management and its opportunities for the firms located in the UAE market. The researcher introduces the concept of knowledge management along with competitive intelligence.

2.2 Approach to Organizational intelligence management

Anandarajan, Anandarajan, and Srinivasan (2012) underscore the need to measure the intellectual capacity of the entire business to understand the ability of the organizations in acquiring or maintaining growth. The intellectual capacity of the individuals employed in a company is the base of the entire capability of the organization (Akhgar and Yates 2013). The companies' overall performance is determined by the capability of the employees in responding to

the change and complexity (Ojiako et al. 2012). However, a major portion of the success and failure of a business is attributed to dynamic factors such as an environmental condition in the workplace, strategies, and leadership (Akhgar and Yates 2013). These are the factors that help the employees to perform in an effective manner and pursue a right path to achieve their ultimate goal successfully. Individuals are the key people in any business. Thus their knowledge and skill is the most important factor in enhancing the business intelligence (Ojiako et al. 2012). The unfavorable environment in the workplace divorces them from their individual goals and overall purpose of the business. The strength and weakness of the business rely on the techniques and methods that the leaders adopted and the responses of the employees against the changing environment (Shah 2015).

In the present study, the spotlight is on the intelligence management of the organizations of the nation United Arab Emirates. Following the viewpoint of Smith and Lindsay (2012), the intelligence management for organization defines their capability to conclude knowledge and identify strength as well as a weakness they have in the present situation. Through the intelligence management, the organizations can deal with the organizational changes and complexities as well. Intellectual assets, knowledge management, and organizational learning are being utilized to evaluate the strategies and practices (Akhgar and Yates 2013). Leaders play their prime role in relating the performances with the strategies and identifying the effective practices to improve the business performances. Along with that, in the present emerging development period, the leaders incorporate several tactics to enhance the knowledge through implementing updated information technology. Bolon et al. (2012) argued that the enhancement in the information technology has a negative impact on the businesses as employees find it difficult to operate the new technology and

monitor the business operation effectively. Revolution in the information technology has been the central strength in the organization intelligence management.

Brodie and Mylopoulos (2012) opined that organization intelligence is an effective tool or system to measure the methods of analyzing the role of corporate performances. Through utilizing tacit forms of intuitive knowledge, the organizations are involved in a learning process that helps the leaders to make sensible decisions.

Ten Phase of strategic approach to organizational intelligence management

As discussed by Smith and Lindsay (2012), ten phases of organizational intelligence management are as follows:

- Verification of pressure for change.

- Quantification of the stakeholders' objectives.

- Dedicate resources.

- Determine the most salient metrics.

- Identification of data sources.

- Selection of key tools.

- Clean the data.

- Phased approach.

- Measurement and refine.

- Raise the growth bar.

To elaborate the above points, it is stated that the successful organizational intelligence deployments are led by pressure to make changes (Anandarajan, Anandarajan and Srinivasan 2012). This is because, when a business finds that it has better opportunities and for that, they can take better decisions, they adapt changing procedures. Besides, it is essential to define as well as identify the objectives that the stakeholders have (Ojiako et al. 2012). However, it is more important to define the stakeholders to determine their objectives. Furthermore, the organizational intelligence solution needs to be configured, tailored and exercised with the involvement of information technology (Wu, Chen and Olson 2014). This helps them to concentrate on the business requirements so that they can deliver as per their needs.

According to Wilensky (2015), determining the most salient metrics calls for the identification of the KPIs (Key performance Indicators). Through determining this factor, the organizations can understand how the organizational activities can be aligned with the objectives (Kent 2015). This particular approach helps the organizations to concentrate on the scope from where they can enhance their potentiality (Wilensky 2015). However, in order to increase the organizational intelligence, the firms clean all the data that are not required for further operations. As stated by (Kent 2015), the phased approach defines the phase where the leaders handle multiple projects in order to shape the future roll outs. This approach of organizational intelligence enhances the ability of the businesses and increase the growth bar as well (Wilensky 2015).

Seven dimensions of intelligent organization

As stated by Ishikawa and Nakagawa (2013), the organizational intelligence management can be defined in a more specific way through elaborating it in seven dimensions. Each of the

dimensions has several antecedents or casual factors which include core values, policies, clear goals, competent, coherent mission, sensible organization structures, etc. The seven dimensions of organizational intelligence management are discussed below.

Strategic Vision: According to Smith and Lindsay (2012), the strategic vision of the organizations defines the ability to create, evolve and express the prime objectives of the enterprise. This particular dimension or trait further defines that the leaders need to articulate and evolve strategic concept in the organizational vision.

Shared Fate: The trait of shared fate defines that all the members engaged in business know what exactly their mission is. Along with the employees, all the associated stakeholders are involved that include business partners and key suppliers as well. The sense of common purpose leads all the members to act synergistically to obtain the vision of the enterprise (Ojiako et al. 2012).

Appetite for Change: Following the viewpoint of Wright and Schutte (2014), changes in the business environment have both positive and negative impact on the organizational operations. Wu, Chen, and Olson (2014) argued in this context that the organizational change creates new challenges where the employees have the opportunity to learn and experience something new. In order to reinvent the business model, they embrace and stimulate the changes and challenges.

Heart: Apart from the shared fate the trait heart defines the willingness of the members to give more importance than the standards (Wilensky 2015). In most of the organizations, the employees contribute only to earn money. On contrast, some of the employees relate their individual success with the success of the enterprise and contribute more than the expected effort.

Alignment and Congruence: According to Wilensky (2015), a group of people starts bumping into each other when the set of rules is not addressed effectively. Sometimes, the unvoiced policies, values, norms lead the members towards the achievements or away from the goal. The leaders and designers of the enterprises have the responsibility to eliminate the structural contradictions and promote the alignment of the individuals' contribution.

Knowledge Deployment: Based on the acquired information, judgment, knowledge, and shared sense, most of the businesses achieve or fail attain their ultimate objectives. Ishikawa and Nakagawa (2013) stated that the knowledge deployment enhances the capacity to utilize their intellectual and information resources. This particular dimension of intelligence management defines that free flow of knowledge is required in the organizational culture (Anandarajan, Anandarajan and Srinivasan 2012).

Performance Pressure: As discussed by Wu, Chen, and Olson (2014), the employees of the intelligent organizations own performance proposition where all the members have the sense of what they have to achieve. In the context of organizational intelligence management, the leaders have the responsibility to support and promote the subordinates with the sense of performance pressure. Thus, all the members are able to attain the objectives through shared sense of success.

2.3 Intelligence management opportunities for the organizations of UAE

The organizations of United Arab Emirates have several intelligence management opportunities in the present market situation. Besides the health care, education, and industry sectors, they can enhance their business in the other sectors of UAE market.

Four key enablers of organizational intelligence:
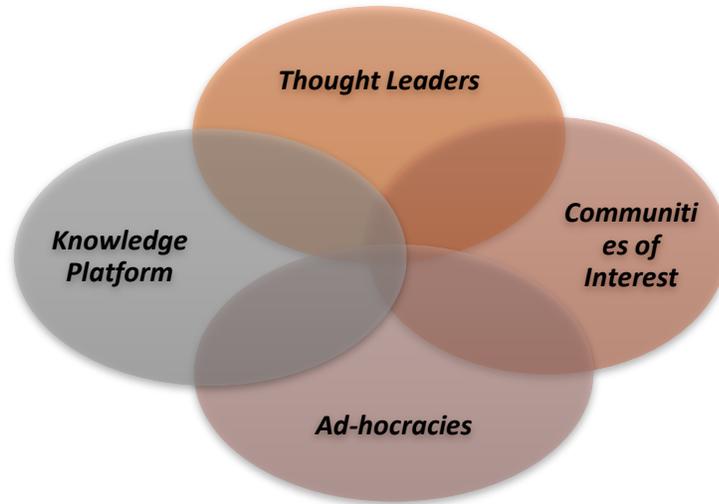
Figure 1: Key enablers of organizational intelligence

Thought Leaders: Following the statement by Wilensky (2015), some organizations manage to successfully enhance their business operations in the emerging complex business environment. This happens due to the strategic thinking of the leaders beyond their roles and responsibilities. The ability of the individual leaders in achieving the paradigm through the arguments and their conceptual skills help the organizations to enhance their business in the competitive market. Through developing and deploying the potential changes, the organizations can be benefitted.

Communities of Interest: Wright and Schutte (2014) discussed that the community of interest is one of the highly effective elements in organizational change and evolution. However, the teams engaged in monitoring and operating the changing business environment tends to fade due to inadequate promotion and leadership. Effective leadership technique is required to make all the team members clearly focus on the common purpose. The influential methods of the leaders lead the subordinates in contributing more effort to the changing environment.

Adhocracies: As per the statement of Ojiako et al. (2012), the intractable issues of the organizations are required strategic approaches to be eliminated or resolved. Adhocracies defines the transitory and specialized team, advocacy groups, task forces and committees who are engaged in dealing with such complexities and difficulties

Knowledge Platform: Ishikawa and Nakagawa (2013) discussed that most of the organizations incorporate information technology infrastructure in order to support the process of knowledge deployment. Every organization needs to create their knowledge platforms that would enhance the knowledge as well the experience of the members (Gero and Maher 2013).

2.4 Competitive Intelligence and Knowledge Management

In this twenty-first century, the competitive pressure in the world market has been increasing tremendously. In this context, Bench-Capon (2014) stated that the competition is increasing especially in the knowledge-based economy. This is the reason behind investing a huge amount of capital in incorporating competitive intelligence activities as well as knowledge management system. These tools help the leaders to manage the knowledge and the information in the organizational operation in order to be competitive in both the domestic and global business market (Kent 2015). The knowledge and experience for each of the firms need to highly specific so that they can deliver strong competition to its competitors (Dalkir 2013).

As discussed by Göranzon and Josefson (2012), knowledge management defines the process gathering, analyzing and developing the organizational knowledge. Brodie and Mylopoulos (2012) added that the knowledge management process helps in the competitive intelligence where raw information is transformed to support the leader in making effective decisions. The competitive intelligence includes profit-loss analysis, war gaming, network

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analysis, competitor assessments, background checks, benchmarking, etc. (Göranzon and Josefson 2012). In the emerging knowledge economy, it is the most vital part as it helps to anticipate market development through analyzing the present market competition (du Toit 2015).

Furthermore, Hoffart et al. (2013) mentioned that the knowledge intelligence has numerous benefits when it is utilized to the fullest extent. Organizational effectiveness is increased due to proper management of knowledge intelligence and competitive intelligence. As the organizational effectiveness increases, the expenditure for business operation declines and hence it indirectly helps to increase the revenue and profit as well (Tong & Sriram 2012). This way, they successfully identify their present as well as future threats that come from rival firms and business markets (Akanbi, Adagunodo and David 2015).

2.5 Business Intelligence in context of intelligence management

Chen, Chiang, and Storey (2012) explained that the business intelligence process is one of the most useful systems where a large amount of data are gathered in order to analyze them and make a high-level set of financial reports. Howson and Hammond (2014) represented a different viewpoint that problems arise when the business leaders consider the business intelligence in several ways. In support of the statement, an example can be provided. The data warehousing experts of an organization consider this particular process as a supplementary system. Sharda, Delen, and Turban (2013) added in this context that the leaders are able to make well-informed business decisions by incorporating business intelligence that helps in attaining competitive advantages over their competitors. Through managing the system, the organizations can extrapolate information from the external environment and make the decision to pursue future trends of the economic condition.

2.6 Impact of national culture on business and its intelligence management

It has been found that the nation culture has a huge impact on the intelligence management of the organizations located in that country (Kent 2015). De Jesus-Rivas, Conlon and Burns (2016) stated that failing in identifying the cultural differences among the nations, the leaders develop strain relationships and drag down the overall performances of the business. Today's growing global diversity increases the national culture conflicts in the international business transaction. According to Dong (2012), the intelligence management along with the knowledge management, business, and competitive management needs to include effective communication strategies to run the business successfully. Diversity in national culture negatively affects the business and its operations.

2.7 Cultural homogeneity and diversity in organizations

Following the statement of Dong (2012), globalization has resulted in more interaction between the people from different cultures and background in the workplace. Due to belonging from a different background, their beliefs and attitudes differ from each other. Managing the workplace diversity becomes one of the major challenges that the leaders confront in establishing common beliefs about the organizational operations and goal as well. More specifically, the nations that have been experiencing an increase in the population rate confront more cultural diversity in the workplaces. Thus, they need to create strategic approaches which would help them to manage the cultural issues in the business environment.

De Jesus-Rivas, Conlon and Burns (2016) represented a different viewpoint that the increasing population brings out the opportunity of enhancing the business as the human resources of the nation's increases. Besides, a large number of employees from a different background is

engaged which provides different beliefs as well as ideas. This develops a positive point of enhancing the business in today's emerging market. Ineffective people management, the managing and valuing the cultural diversity is the core component. Dong (2012) argued that unmanaged diversity provides reverse effect on the workplace and its intelligence management.

In this context, De Jesus-Rivas, Conlon and Burns (2016) added that cultural diversity could be defined through primary and secondary dimension. The primary dimension defines the primary influences on the identities of the labors that include physical abilities, characteristics, mental capacity, age, sexual orientation, gender, ethnicity, etc. This particular dimension shapes the self-image along with the organizational image in order to improve the fundamental view of the organization in the world business market. In contrast, the secondary dimension act invisibly in the workplace and the society. The secondary dimension includes education background, income strategies, communication styles, organizational role and responsibility, work experience, military experience, performance style, geographic location, family status, first language, religion, etc. This particular dimension exerts more factors of personal identity which add value to the primary dimension of diversity.

Dong (2012) stated that globalization leads the organizations to experience increasing cultural diversity. Through analyzing different culture, the leaders establish a homogenizing culture in their working environment in order to make all the stakeholders to pursue the common process. The most uniformity springs from cultural imperialism help to make the business more sustainable in both the domestic and global market.

2.8 Conceptual Framework

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                              ┌─────────────────────┐
                              │ Cultural Homogeneity│
                              │    and Diversity    │
                              └─────────────────────┘
                                        │
                                        ▼
┌─────────────────────────┐   ┌─────────────────────┐
│ Competitive Intelligence,│   │  Impact of National │
│  Knowledge Management,   │   │       Culture       │
│   Business Intelligence  │   └─────────────────────┘
└─────────────────────────┘

              ┌────────────────────┐
              │   Organizational   │
              │    Intelligence    │
              └────────────────────┘
                        │
                        ▼
              ┌────────────────────┐
              │     Intelligence   │
              │     Management     │
              └────────────────────┘
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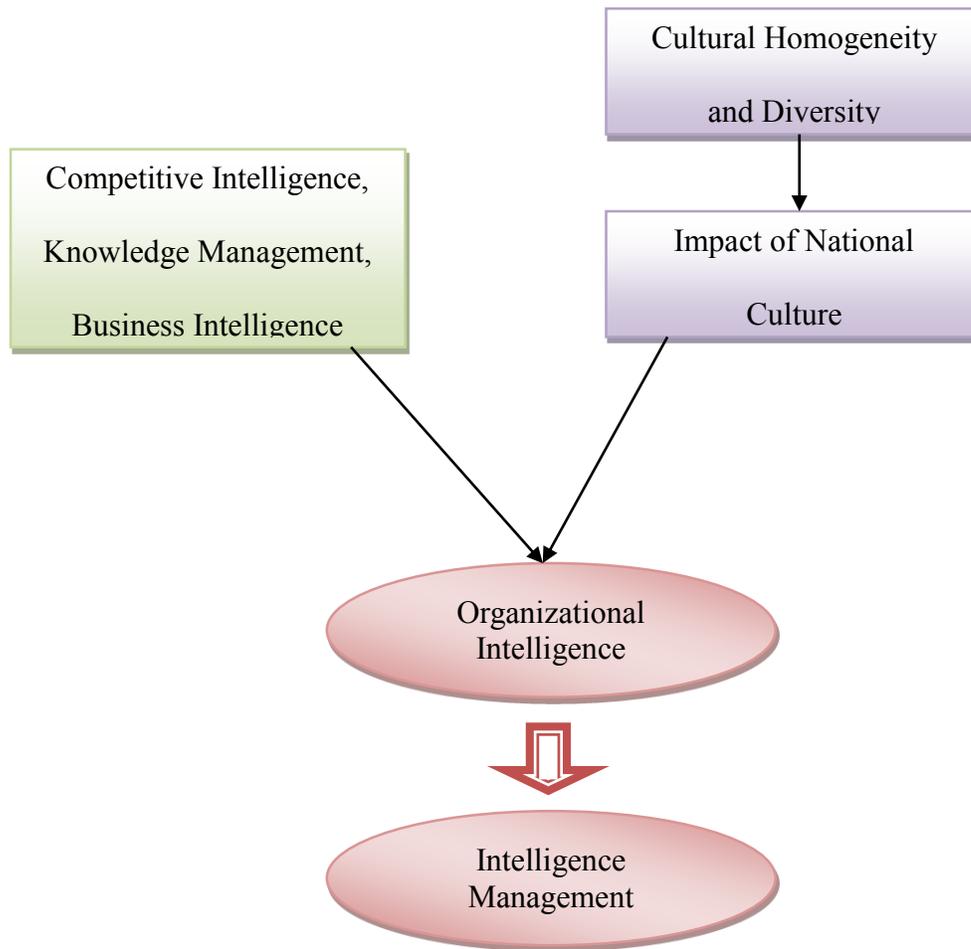
Figure 1: Conceptual Framework Figure 1: Conceptual Framework

The above diagram demonstrates that the cultural homogeneity and diversity depend on the national culture from where the workforce belongs. The national culture of the individuals and the groups affect the working culture of the organizations. Further, it affects the organizational intelligence management system. In order to enhance the organizational intelligence management system, the organizations identify the intelligence management opportunities. Through addressing the opportunities and scope of improving the procedures, the firms can increase their growth scale.

Apart from this, the competitive intelligence, knowledge management, and business intelligence are the strongly related to the organizational intelligence management system.

2.9 Summary

The second chapter of dissertation concentrates on the research variables more that help to understand the brief concept behind the case study. In this particular chapter, the intelligence management is manifested in a broader view. Along with that, the importance of knowledge management, business intelligence, and competitive management are also elucidated well. Furthermore, the study here discusses the impact of cultural diversity on the intelligence management system. At the end of this chapter, the conceptual framework helps to establish the relation between the research variables.

Chapter 3: Theoretical Framework

3.0 Introduction

In the literature review section, the researcher has manifested about the research topic and elaborated all the related variables. It helps to obtain a clear understanding of the base of the research topic. Afterward, the researcher is going to pay heed to the prime variables in this particular section. Here, the researcher elaborates the concept of intelligence management more. Along with that, the multidimensional concept of business intelligence is demonstrated here. Also, the researcher discusses some other concepts related to business intelligence. At the beginning of the study, the researcher mentioned about the research problems. The study also highlights the importance and role of competitive intelligence. Through this, the researcher illustrates about the issues of obtaining competitive advantages.

3.1 Intelligence Management

Anandarajan, Anandarajan, and Srinivasan (2012) opined that the leaders of an organization concentrate on designing the intellectual abilities of the business. The organizational intelligence management system is developed by the abilities of the key performers in the business. Both the internal and external business environment affects the management system of an organization (Vukšić, Bach and Popovič 2013). In order to survive in such competitive and highly complex condition, the managers should provide appropriate and prompt responses. In such situations, the prime responsibility of the managers is to understand how to use their intellectual capitals (Anandarajan, Anandarajan and Srinivasan 2012).

Bolon *et al.* (2012) add that organizational intelligence management can be improved by investing more in organizational intelligence and developing more intelligence strategies. Bolon

et al. (2012) stated that some factors are there that majorly affects the organizations' intelligence management system. Among all the factors, learning culture of the organizations directly affects the intelligence management system. According to Anandarajan, Anandarajan, and Srinivasan (2012), learning culture is the aggregate value of organizational convention values, practices, and processes. A developed sense of ownership and accountability enhance the ability of the employees to adapt the changing policies (Bolon *et al.* 2012). Brodie and Mylopoulos (2012) added in this context that transformational leadership style has a major effect on the organizational intelligence. In most of the organizations, the transformational leadership style supports their subordinates to address the required changes. This particular leadership style improves the intelligence management of the organizations (Vukšić, Bach and Popovič 2013).

3.2 Business Intelligence

In the literature review section, the researcher has discussed business intelligence along with its importance in the business intelligence management. Here, the researcher concentrates on this variable more. Today's accelerating the pace of change and globalization, the ways of business management also change (Popovič *et al.* 2012). The managers find that running the business becomes harder than ever because of the greater complexity and new rules of competition. In this highest competitive market, the businesses are seeking new ways for enhancing their business awareness. Today's ever-changing business climate increases the competitiveness (Rouhani, Ghazanfari and Jafari 2012). Minelli, Chambers, and Dhiraj (2012) stated that the business intelligence management defines the ability of the business in utilizing the information. Without systematic information management, the leaders fail to identify their scope and opportunities in the new business market. As opined by Işık, Jones and Sidorova (2013), business intelligence management is the system that directs the business to identify what information they need, how it

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should be gathered and how it should be organized. Further, it is way more important to decide where and how it should be secured and who in the business should access to it (Popovič *et al.* 2012). Minelli, Chambers, and Dhiraj (2012) add that the prime goal of business intelligence management is to maximize the usefulness of the information that is gathered. Through this particular approach, the leaders are able to process as well as enrich essential information in the managerial context (Işık, Jones and Sidorova 2013).

3.2.1 Multidimensional Concept of Business Intelligence. Minelli, Chambers, and Dhiraj (2012) defined that business intelligence is the managerial tool which is used to manage the gathered information and produce new intelligence for strategic decision-making process. On the other way, Duan and Da Xu (2012) stated that the concept of business intelligence is not unambiguous but dualistic. The dualistic nature defines that this is the process of refining information and knowledge as well as the process of exploring recommendations (Duan and Da Xu 2012). In the dualistic nature, it further defines that it helps to produce insights and recommendations. Through this approach, the management and the decision makers are able to make effective decisions (Duan and Da Xu 2012).

As per the viewpoint of Chen, Chiang and Storey (2012), the business intelligence highly depends on the information technology based systems. This is considered as the most important task of business intelligence (Chen, Chiang and Storey 2012). Following the viewpoint of Işık, Jones, and Sidorova (2013), business intelligence is a crucial part of management that helps in leading the business in the competing business world. On the other way, Loshin (2012) identified that the business intelligence is the analytical process through which the management convert the raw data into relevant, usable, strategic knowledge and intelligence.

Chau and Xu (2012) defined that the business intelligence comprises variety types of intelligence that include customer intelligence, competitor intelligence, market intelligence, technological intelligence, product intelligence, and environment intelligence. After gathering the information, the managers analyze the data which helps in their decision-making process. Through this process, the managers are able to analyze the modern technology and explore a new technique to adapt those technologies to their business (Chang 2014).

It has been found that the concept of business intelligence varies from business to business by depending on their requirements as well as managerial skills (Duan and Da Xu 2012). The management process depends on the leaders' decision of which strategic approaches they are going to adapt (Duan and Da Xu 2012). The knowledge, skills, and ways of managing information are not same for all the managers. It depends on what they think and how they think. Popovič *et al.* (2012) added in this context that every leader promotes his own idea and knowledge in the process of their business intelligence management process. The managers need to pursue new approaches in their business intelligence process so that they would able to obtain competitive advantages over its competitors (Sauter 2014).

3.2.2 Levels of Business Intelligence. According to Rouhani, Ghazanfari, and Jafari (2012), the business intelligence is the legal and ethical tool that helps to examine strategic changes of the business. It represents a holistic picture of the business environment. Furthermore, it is a series of production that includes both the analytical rules and information required. Davenport (2012) discussed several roles of business intelligence by segmenting into three levels. The effective business intelligence levels include strategic intelligence, tactical intelligence, and operative intelligence. In the level of strategic intelligence, the collection, processing and analyzing of intelligence is needed for forming policy and plans. This helps the leaders to become

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effective strategists (Popovič *et al.* 2012). The effectiveness of strategic intelligence depends on the ability of understanding the current trend and opportunity of the business. In order to more precise, it is the process of visioning, systematic thinking, motivating and partnering. Davenport (2012) further stated that in the tactical intelligence level, the leaders analyze specific approaches which would guide the stakeholders. This particular level relies on between the strategic intelligence and operative intelligence where required information is gathered as well as enriched. Lastly, in the operative management, the leaders operate the gathered data and information. Minelli, Chambers, and Dhiraj (2012) added that in the operative level, the leaders implement daily activities of the business.

3.2.3 Other concept related to Business Intelligence. Petermann *et al.* (2014) stated that other related concepts include competitor intelligence, customers intelligence, strategic intelligence, product intelligence and environment intelligence. These intelligence concepts are sometimes incorporated into the business by having a similar perspective of business intelligence. However, these intelligence approaches are undertaken in order to concentrate on the external environment. More specifically, these tools are used to gather data and information from external sources. Rizzi (2012) added that these approaches are used as the subgroups of the business intelligence. This is the reason that they share the same purpose as business intelligence. All these approaches cover five main areas that include a refined form of information, process, managerial tool, philosophy, and technology (Stone and Woodcock 2014).

3.3 Competitive Intelligence

As stated by Wright, Bisson, and Duffy (2012), the competitive intelligence is a vital part of marketing strategy. Through the strategic planning process, the leaders enhance the firm's competitiveness. Hughes, Le Bon and Rapp (2013) added in this context that effective competitive

intelligence goes beyond the simple market research. Here, it is important to mention that the prime objective of competitive intelligence is to attain sustainable competitive advantages. Viviers, Muller and Du Toit (2014) supported that the effective competitive intelligence approach pulls all the data and information together from a massive strategic view. This helps the leaders to understand what is going to happen. Further, it helps to avoid the uncertainties, and as hence additional expenditures, as well as risk, can be mitigated (Wright, Bisson and Duffy 2012). Through improving the strategic decisions, the managers lead the employees to the better performance against the competitors. Following the statement of Viviers, Muller and Du Toit (2014), benchmarking is the process where a firm compares its business processes with the expectation of determining 'what is the best' and 'how the best can be achieved.

As discussed by Wright, Bisson, and Duffy (2012), the managers go through some essential questions under the competitive intelligence management process. The foremost important question is how much effort the competitors put to grow as well as capture the market share (Grabowski 2013). However, some major overlaps are there between these two approaches. Competitive intelligence is way more analytical and intense, whereas the business intelligence is more automated through technology (Hughes, Le Bon and Rapp 2013). Competitive intelligence is more dynamic in comparison to the business intelligence.

Viviers, Muller and Du Toit (2014) elaborated that the importance of competitive intelligence in the business management. The organizations cannot stick to one strategy and process and expect same will happen month after month, year after year. After a certain point, they need to change their assumption as per the strategic movement of their competitors. In such a case, if the leaders fail to maintain a continuous flow of new intelligence, they might lose the competitive advantage they have in the present (Wright, Bisson and Duffy 2012).

3.4 Nature of Advanced Information Technologies

Drnevich and Croson (2013) exclaimed that the critical characteristics of advanced information technology affect the organizational design, intelligence, and decision-making process. The characteristics of information technology are segmented into two groups that include basic characteristics and advanced characteristics. Basic characteristics of information technology define the firms' data storage capacity, transmission capacity, and processing capacity (Fai, Mark and Prasad 2013). The basic characteristics define the traditional information technology which is enhanced as well as modified and reached to the advanced level (Duffy and Jonassen 2013).

3.5 Impact on Business

3.5.1 Effect of Advanced Information Technologies on Organizational Design. Fai, Mark, and Prasad (2013) opined that the organizational design and structure is the process through which the business communicates and distributes their responsibilities. Organizational structures are designed in such a way that it would able to utilize their resources to the fullest extent. The advanced information technology helps the managers to achieve the goal within less possible time. In this context, the prime responsibility of the managers is to keep the organizational design dynamic so that they can provide prompt responses to the things that impact on the organizational structure (Duffy and Jonassen 2013). Drnevich and Croson (2013) mentioned that changes and adoption of new technology depend on the demand, requirement, and advancement in the industry. Progression in technology enhances the efficiency of the business. In order to restructure the organizational design and modify the position requirement, the organizations adopt specific strategies (Duffy and Jonassen 2013).

3.5.2 Effect of Advanced Information Technologies on Organizational Intelligence Management. Fai, Mark and Prasad (2013) explained that technological revolution affects almost every part of the business. However, the major impact has been experienced in the intelligence management of the business. The advanced information technology increases the employability skills of the employees, and thus it increases the productivity of the businesses. In order to more precise, business software and business programs help to gather as well as a process more information. It becomes easier to manage the organizational intelligence by the advance technology (Duffy and Jonassen 2013). Due to this reason, the firms reduce the number of human labors who are engaged in the business functions. The SMEs (Small and Medium Enterprises) are benefitted more because of this advanced information technology (Fai, Mark and Prasad 2013). Drnevich and Croson (2013) added in this context that the technological revolution helps the businesses to obtain better production output. Thus, they tend to enhance their output through expanding technological use rather than the engaging more employees. This clears the fact that the advanced information technology improves the intelligence management system of the business.

Fai, Mark and Prasad (2013) added in this context that because of the revolution in technology, the businesses could gather data and information in less possible time. This allows the small business to identify their scope of enhancing their business in new or existing market. As the intelligence management gets improved, the businesses can incorporate effective strategic policies (Duffy and Jonassen 2013). As a result, long-term growth is possible by implementing strategic techniques in the intelligence management process (Fai, Mark and Prasad 2013).

3.5.3 Effect of Advanced Information Technologies on Organizational Decision Making Process. According to Drnevich and Croson (2013), the decision-making process is the most significant activity of the business. The technology highly and majorly influences this

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process. As discussed by Duffy and Jonassen (2013), the advanced information technology provides artificial intelligence system (AIS) and decision support system (DCS). It has been mentioned that through the online analytical process (OLAP), the combination of AIS and DCS help to create information. Fai, Mark, and Prasad (2013) added in this context that the advanced information technology enhances the data processing capabilities (Duffy and Jonassen 2013).

Drnevich and Croson (2013) explained that advanced information technology supports in group decision making process. The group decision support system (GDSS) is the process of identifying as well as resolving the problems by a team. Through engaging the teams, the managers are able to take an effective decision. The group decision making process involves brainstorming, issue categorizing and analysis, ranking and voting. Through using advanced information technology in these processes, the managers are able to make effective decisions. Davenport (2013) added that the decision-making process involves intelligent, design, choice, and implementation. Involvement of advanced information technology in these four aspects helps the managers to take better decision.

3.5.4 Effect on Organizational Level. As opined by Harmon (2014), the technological revolution helps to acquire local information quickly as well as accurately. Management information system reduces the ignorance of essential information. In organizational level, it is essential to consider all major functions. The foremost responsibility is to analyze how the work is performed, and it can be improved. Through gathering the data and information of the present business, the managers are able to identify the strength as well as the weakness of the individuals. Through analyzing the skills and ability, the managers formulate strategies which would help to enhance the skills of the individuals (Dunning 2013).

3.6 Summary

In this chapter, it has been found that the business intelligence and competitive intelligence play the most important role in the organizational intelligence management process. In this particular chapter, the researcher has elaborated the intelligence management some more so that a clear understanding can be established. Apart from this, here the researcher has provided the multidimensional concept of the business intelligence management which clears the idea more. Three effective levels of business intelligence have been found in this chapter. During these three levels, the leaders cover the entire process. Some other concepts related to the business intelligence have also been demonstrated to build the complete concept of the topic. Besides, the researcher illustrated about the competitive intelligence. In this context, the researcher discussed that business intelligence has a major role in the competitive intelligence process. Here, the researcher elaborated two basic forms of competitive intelligence that are market research and benchmarking technique. It has been found that advanced information technology has a great impact on the organizational design, intelligence management, and managers' decision-making process.

Chapter 4: Research Methodology

4.1 Introduction

This particular chapter outlines several methods and techniques which are considered in this research. It is important to consider specific methods and approaches before start the research process, and it helps to investigate more effectively and proceed to the right direction. A better analysis can be done by considering certain theories and concepts related to the research topic (Mackey and Gass 2015). Research methodology defines the way through which the outcome of the research problem can be found out (Taylor, Bogdan and DeVault 2015). The chapter describes the specific research philosophy, approach, and design, which are considered in this study. Along with that, the processes of gathering all data and information are mentioned here. Apart from this, some ethics are highly considered throughout the research. However, some constraints are there that restrict the research to some extent. The time horizon of the entire research is demonstrated in this chapter as well as the restraints.

4.2 Disciplinary Focus of the Research

The research helps to focus on the importance of intelligence management in the quest for business organizations operating in different economic sectors of the UAE to achieve competitive advantage. This particular study is a focused disciplinary research as it maintains some specific steps. Firstly, it gathers the basics knowledge of the topic to build a clear concept. Afterward, it enters in the case study which is the center point of the research. The basic concept helps to understand the case scenario of the case study. Further, the study establishes an in-depth knowledge by gathering data and information from secondary sources. After that, the primary sources would help to gather more accurate data. The study would discuss the secondary and primary sources in

the later section of this chapter. Based on the gathered data, the analysis would be done. In this context, it is important to mention that the study would be conducted under some ethical considerations.

4.3 Method Outline

The research study was aimed at developing knowledge on opportunities that intelligence management presents to businesses operating in the UAE. To achieve the intended research objective, the study was based on a constructivist qualitative inquiry, which according to Klenke, Martin and Wallace (2015) emphasizes on 'understanding a phenomenon in all its complexities and within its particular environment' (p. 21). Along with that, the study investigates the challenges the organizations in the UAE encounter in implementing intelligence management as one of the strategic management practices (Jawadekar 2011).

The research study will be based on two main research philosophies that include positivism and interpretivism research philosophies. By integrating the positivism and interpretivism research philosophies, the researcher will be able to apply mixed research approach, which is comprised of both qualitative and quantitative research techniques.   The rationale of applying positivism research philosophy is to develop a comprehensive understanding of the relationship between intelligence management and businesses' attainment of sustainable competitive advantage. According to Chatterjee (2014), 'the researcher's role under the positivism research philosophy is limited to data collection and interpretation through the objective approach, and the research findings are usually quantifiable and observable' (p. 34). Application of the positivist philosophy was aimed at ensuring gathering empirical data on the application of intelligence management by business organizations in the UAE (Schutt 2006). This particular philosophy helps to collect data and information that are based on proper logic and evaluation. The rationale of employing

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positivism research approach in conducting the study is to aid in gathering sufficient data from the field. According to Baran and Jones (2016), the positivism research approach advocates for deductive reasoning, which means that the researcher is able to derive a theory by testing the research hypothesis. Thus, by incorporating deductive research approach, the research study has been able to develop the link between intelligence management and attaining sustainable competitive advantage.

Integration of the interpretivism research philosophy was aimed at gathering realistic information on the prevailing situation concerning the application of intelligence management amongst organizations in businesses operation (Gravetter & Forzano 2012). By using the descriptive analysis technique, the researcher was able to summarize the qualitative data collected. Wood and Kerr (2006) assert that 'summarization ranges from the use of content analysis to organize the data into categories to the use of descriptive statistics such as frequency distributions.' Incorporation of the descriptive data analysis enabled the researcher to code the qualitative data collected by the inherent themes (James & Williams 2014).

The research study was based on grounded theory (Creswell 2014; Myers & Newman 2007). In employing grounded theory, some issues which include, data collection, sampling, data analysis and ethical consideration were taken into account. The information of business intelligence management process will be collected by interviewing a number of managers of various sectors in UAE. The importance of sample and size of the sample is manifested in the later section of this chapter. The methods and techniques will be pursued under some ethical considerations.

4.4 Research Onion

As opined by Flick (2015), one of the key tools of research methodology is research onion. Research onion defines the set of stages through which the research will be conducted. Through establishing the sets of stages, one can investigate as well as analyze certain studies more successfully (Panneerselvam 2014). Gast and Ledford (2014) added in this context that each stage of research onion helps to take the suitable path in order to resolve the issues encountered in the research topic. As a result, the research can be done by adopting suitable method and design with philosophy, proper sampling, and data collection process.

Saunders et al. (2009) developed six stages through the research onion. The stages are covered by several research strategies. The concept of research onion is utilized in this study as it provides effective progression through which entire methodology can be designed. As mentioned by Saunders et al. (2009), the six divisions of research onion are research philosophies, research approaches, strategies, choices, time horizons, techniques, and procedures. The set of six divisions is demonstrated well in the blow figure:

Figure 1: Research Onion
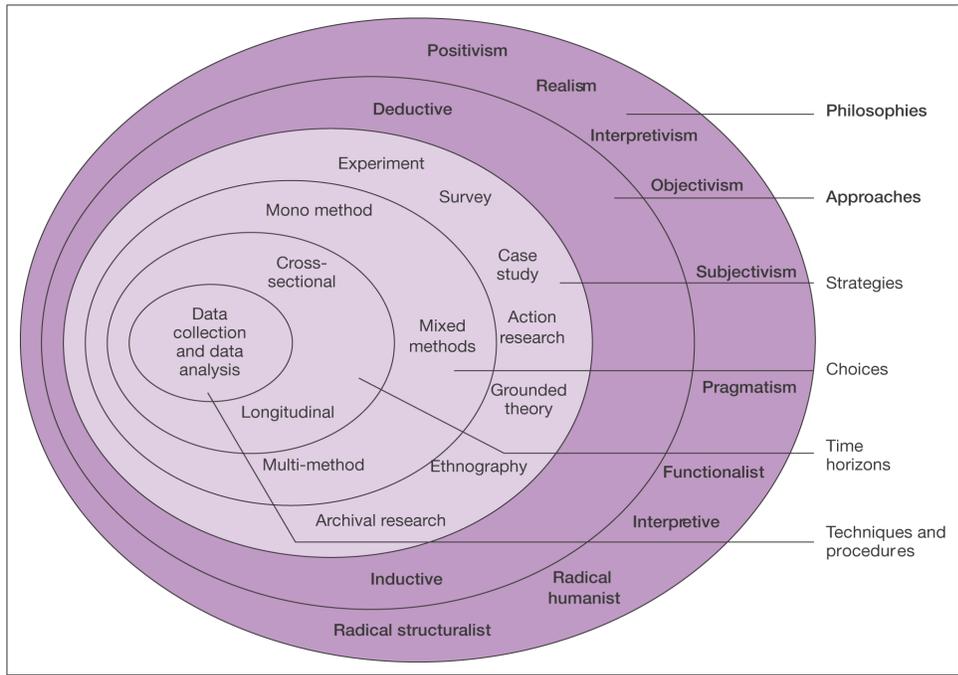
(Source: Saunders et al. 2009)

The first stage is research philosophy which defines the set of beliefs concerning the research topic (Saunders et al. 2009). Further. It helps to incorporate most appropriate approaches which are considered in the second stage of research onion. In the third stage, specific strategies are adopted, and certain choices are made in the fourth layer. The fifth layer identifies the time horizon. As the research needs to be completed within the limited time span, the entire process should be planned with a particular time frame. The sixth and last layer includes techniques and procedures. This stage defines how the data and information will be gathered. The process of collecting data is framed in this stage of research onion.

4.5 Research Philosophy

Billig and Waterman (2014) stated that the application of research philosophy helps to determine the research process more effectively. More specifically, one pursues specific research philosophy to understand the research process in a better way and conduct the studies in a proper manner. Pickard (2012) added in this context that the thinking procedure differed between several research topics and based on that the selection process of research philosophy is done. Reynolds et al. (2014) defined research philosophy as the underlying of the nature of knowledge. The assumption taken by research philosophy justifies how the research will be undertaken. The assumptions differ among several types of research as different studies have different objectives.

Billig and Waterman (2014) indicated three crucial research philosophies that include positivism research philosophy, interpretivism research philosophy, and realism research philosophy. As per the viewpoint of Lushey and Munro (2014), positivism research philosophy defines positive knowledge which is based on natural phenomenon. Through pursuing this philosophy, the research topic can be interpreted with appropriate logic and reasons. Further, it defines that empirical evidence which are based on verified data are gathered through investigating specific studies. It operates according to the general laws and holds the society. It is important to mention that introspective and intuitive knowledge is rejected under positivism research philosophy.

As described by Farrokhyar et al. (2014), interpretivism research philosophy is mainly used in complex studies that involve the social world of business and their operations. It is also known as an interpretive philosophy where one needs to interpret all the elements of the study in detail. Thus, it can be stated that interpretivism research philosophy integrates human interest in the study. On the other way, realism research philosophy is the mixed approach of positivism research

philosophy and interpretivism research philosophy (Bauman 2013). As it is a mixed of other two approaches, it also provides the set of assumption that brings empirical evidence. However, it is assumed that the positivism research philosophy would be suitable for this particular research.

4.5.1 Justification for selection of the chosen philosophy. The positivism research philosophy is chosen based on some specific reasons. Bauman (2013) mentioned that the positivism research philosophy helps to conduct the study in a scientific manner and it further helps to bring out some important hidden facts and information. Through avoiding metaphysics, it gathers essential information and observes it in a proper manner. In the present context, the study has chosen to apply the positivism philosophy so that it can bring out the real fact of the intelligence manages the process of UAE business market. However, it is essential to mention that the realism research philosophy could have used in this research, but the research necessitates completion within the limited time span, the realism research philosophy has been rejected.

4.6 Research Approach

Following the viewpoint of Archer et al. (2015), two essential research approaches are there that include inductive research approach and deductive research approach. Archer et al. (2015) defined inductive research approach is a bottom to top approach, and more specifically, it starts with the observation part. This particular research approach is time-consuming in nature, and at the same time, it is expensive to conduct a study by pursuing inductive research approach. As the financial restriction is there, it is not possible always to conduct research under this research approach. Dumay and Cai (2015) added in this context that this specific approach is characterized as a move from specific to general. As it starts from the observation part, no framework of data collection process is established at the initial stage. The research focus is formed only of the data and information is collected (Gale et al. 2013). However, Green, Camilli, and Elmore (2012)

opined that sometimes new theories are generated by applying the inductive research approach. However, it might be found to fit in existing theories (Green, Camilli and Elmore 2012).

According to Skinner (2015), deductive research approach is a top to bottom approach. Through incorporating this approach, proper application of some specific theories are studied. This helps to conduct the researchers in more effective manner. The prime objective of deductive approach is to build a theory which will deliver an in-depth knowledge of the topic with the concept of the data analysis. Jasti and Kodali (2014) stated that this particular research approach helps to develop hypothesis and hypotheses based on the existing theory. After developing the hypotheses, the research process is formulated to verify it. Following the viewpoint of Roberts (2013), deductive research approach is best suited to the studies which are conducted to examine whether the observed phenomenon fit with the expectation or not. Here, it is important to mention that the research approach is based on the researches that were done previously. In the present research, the deductive research approach will be applied.

4.6.1 Justification for selection of the chosen approach
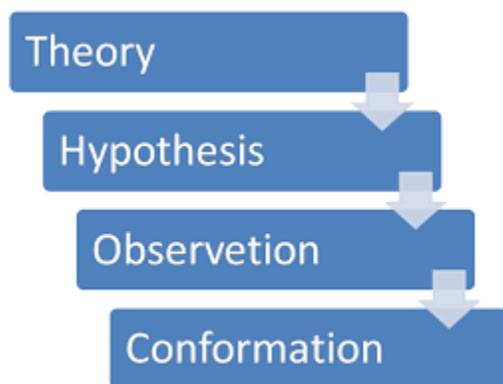
Figure 2: Process of Deductive approach

(Source: Kuada 2012)

The study concentrates on the concept of intelligence management process of the business in the UAE economy with the help of various data and information. As it is a top to bottom approach, it collects the data and information first and then analyzes them carefully (Kuada 2012). The observation is entirely based on the theories considered at the beginning of the study. The selection approach of the topic intelligence management process helps to understand the importance of the study in more precise manner. More specifically, it helps to discuss all other factors related to the intelligence management (Mangal and Mangal 2013).

4.7 Research Design
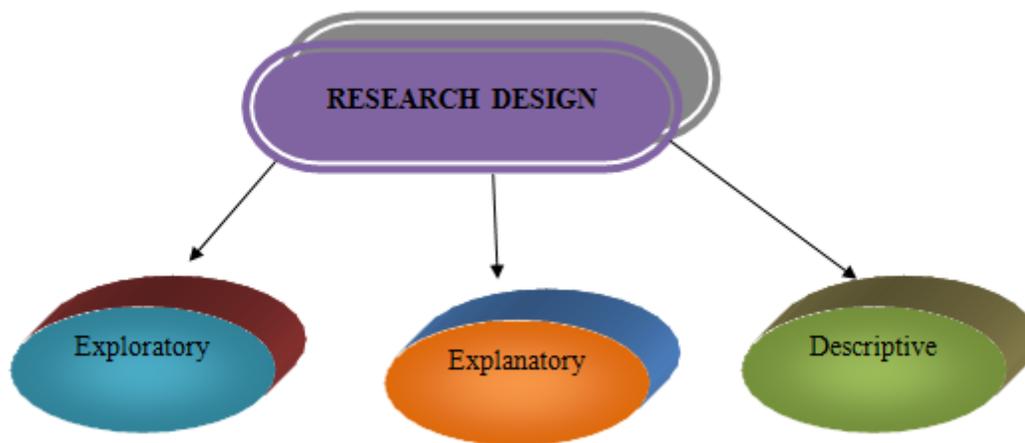
Figure 3: Kinds of Research design

(Source: Snyder 2012)

As stated by Snyder (2012), research design helps to demonstrate the framework of the research topic. In research methodology, it is essential to form specific research design as it helps to select the data collection process and analysis pattern. As mentioned by Taylor, Bogdan and DeVault (2015), specific research design needs to be applied data collection process. Green,

Camilli and Elmore (2012) added in this context that three specific types of research designs are there that include descriptive research design, exploratory research design and explanatory research design. Gale et al. (2013) define descriptive research design as the process of gaining the details of the information which is available with proper description. In the research process, the descriptive research design helps to depict the responses of the participants in more accurate way. Further, it helps to describe the participants as they play a key role in the research process.

Following the viewpoint of Archer et al. (2015), exploratory academic research pattern is the process that helps to acknowledge several ideas and thoughts to conduct specific studies. The exploratory research design is one of the most crucial tools used in research to analyze the issues more thoroughly. It is essential to understand the research issue well before attempting to quantify mass responses into statistically inferable data. As stated by Farrokhyar et al. (2014), the prime objective of this research design is to collect preliminary data and information which will help to elaborate the research design and suggest a hypothesis. According to Green, Camilli, and Elmore (2012), explanatory academic research pattern helps to illustrate the research issues and its effects. It is used mainly in analytical and experimental studies. Further, it is used for hypothesis testing and explains why any specific phenomenon is going on. Taylor, Bogdan, and DeVault (2015) opined that this particular research pattern gives support to the concept of a longitudinal study which is not appropriate in the current research. Both the exploratory and explanatory research pattern is rejected in this study. However, in this present study, the descriptive research design will be pursued.

**4.7.1 Justification for selection of the chosen design.** Through analyzing three research designs, it is found that descriptive research design is the most appropriate for this present study. This approach aids in the definition of the detailed process which involves the application of

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intelligence management in the business of UAE economy. Descriptive research design helps to describe the research in more detail manner, and it explores and explains all the additional information and their importance in this research. Further, it fills the missing part of the research and expands the understanding of the topic. In descriptive research pattern, three stages are incorporated that includes 'observational,' 'case study,' and 'survey' (Green, Camilli and Elmore 2012). Green, Camilli, and Elmore (2012) explained that in observational part, the methods of viewing the entire research are defined. The observation of this research will be done in two different ways. One will be done in a naturalistic way that means after gathering data from a survey or interview process the outcome will be observed. Another one will be based on the researches that were done previously. Both the process helps to obtain in-depth knowledge of the research topic and fulfill the research objectives as well. The case study defines that the outcome will help to study specific case which is the central point of the research. Moreover, the survey is the process of gathering data and information which is more relevant (Taylor, Bogdan and DeVault 2015).

4.8 Data Collection Procedure

As explained by Gale et al. (2013), data collection process is one of the essential parts of research as it helps to derive the accurate outcome and it also helps to provide the standard format of the research work. Through pursuing data collection process, required information and essential facts are gathered to study the research topic. Here, it is important to mention that data collection method includes data sources and data analysis plan. Data sources are the origins from where all the required, as well as relevant data, are gathered (Farrokhyar et al. 2014).

One of the methods that will be applied to collected research data entailed conducting an online survey. The online survey will be operationalized by entrenching effective data collection instruments. One of the online data collection instruments that will be applied entails the Survey

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Monkey, which is free online software that aids in gathering and analyzing qualitative research data. By conducting an online survey, the researcher will be able to gather research from the field in a convenient and cost-efficient manner. The research data obtained from the online survey will be effectively transcribed and stored for future reference.

The anonymity of sources will be highly observed as the names of the respondents will not be covered; however, the secondary and primary sources will necessitate keen referencing to capture all aspects of the sources. On the other way, data analysis is the process through which the collected data and information are observed (Archer et al. 2015). Following the discussion of Taylor, Bogdan, and DeVault (2015), the process helps to create the backbone of the research, and the process starts with determining the type of data. The data will be collected through an analysis of available literature and all the insights gathered will be assessed for fresh insights or support of the insights from another scholar. Before collecting the information, it is essential to identify which type of data is required in specific researches. Afterward, the sources and pattern of data collection are decided (Farrokhyar et al. 2014).

4.8.1 Data sources. The data and information are gathered from various data sources in order to conduct the study in a way that is more realistic. The gathered data helps to go through the research topic and its objectives. Through applying this process, the information in according to the requirement is exerted in order to analyze the research (Dumay and Cai 2015). Green, Camilli, and Elmore (2012) opined that two specific types of data sources are there that include primary data source and secondary data source. This particular research is conducted by considering the help of both the data sources. It is essential to mention that the secondary data helps to support only the literature review part. In order to establish a clear concept of intelligence management along with other related factors, the secondary sources are considered. Secondary

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data will be obtained by undertaking a comprehensive literature survey. In undertaking the literature survey, the researcher will ensure that an effective inclusive criterion is entrenched. The selection criterion will entail selecting secondary materials that specifically focuses on intelligence management are selected. Different secondary sources include various academic books, journals, and relevant websites (Archer et al. 2015). The materials will be sourced from credible online databases such as EBSCO, ProQuest, and Emerald. The researcher will ensure that secondary data is obtained from the most recent secondary information. This aspect will play a fundamental role in enhancing the validity of the secondary data collected by the current research study (Neelankavil 2015). The first three chapters are based on the data and information which were collected from secondary sources. Some researches have been done on the same topic by other researchers. These help to emphasize on the present research topic.

However, the raw data was gathered from primary data sources. The rationale for using primary sources was to gather relevant and reliable data from the field. Additionally, collecting data from secondary sources played a fundamental role in justifying and supporting the information collected from primary sources. The researcher identified managers from different firms operating different industries in the UAE. Consideration of different economic sectors was intended at varied insight concerning the application of intelligence management.

Qualitative interviews were used in collecting qualitative data. The decision to apply qualitative interviews is underlined by the fact that the research study has integrated the interpretivism research philosophy. According to Chatterjee et al. (2014), the interpretivism research philosophy advocates for the integration of interviews in gathering research data from the field. In actualizing the interpretive research approach, the research study employed interviewing techniques. This was achieved by applying unstructured or semi-structured interviews. In

undertaking a qualitative interview, a questionnaire comprising of open-ended and close-ended questions were sent to the selected respondents. The use of open-ended questions provided the researcher an opportunity to interrogate the respondents further on the research topic. Subsequently, the researcher was able to gather sufficient research data. Conversely, use of close-ended questions enabled the researcher to gather definite response about some research issues. The research questions were administered to the respondents through online technologies, which further reduced a number of resources required in undertaking the research study.

Besides, primary data and information establish the link between the research objectives and literature review (Gale et al. 2013). Journals, books, as well as online sources, will be sufficient for the research; however, publications that arise during the research proved to be effective in promoting the deduction of strong inferences. The data sources will also be filtered based on the year of review or publication in order to ascertain the use of recent articles that have assessed prior research inferences. To seal the gaps in intelligence management, the latest sources will be necessitated, as they encompass sophisticated research processes as well as thorough analysis of findings. While online sources can be deemed to be dubious, it is transparent that an analysis of the source of the article will be necessitated as well as cross-referencing of the core authors highlighted in the literature.

4.8.2 Data techniques: qualitative. Neuman and Robson (2012) described that two types of data techniques are used in data collection and analysis process that include quantitative data technique and qualitative data technique. Walter and Andersen (2013) defined quantitative data technique as the process which is based statistical data. This helps to record and analyze the data of a huge sample size which is not applicable in the present study. The data technique of the present study involves the qualitative data solely. As per the statement of Smith (2015), qualitative research

techniques help to record narrative form of data so that more importance can be added for a better description. Silverman (2016) added in this context that the qualitative data analysis helps to support the theoretical concept of intelligence management. Further, it helps to establish the knowledge of the research topic more effectively. The validity of the qualitative approach will also necessitate checking, and this will be referenced regarding internal as well as external. The validity is assessed based on the presence of a well-structured approach and how well the approach can counter the threats.

4.8.3 Justification for Qualitative Research. Scandura and Williams (2000, p. 1248) employed a statistical approach to management issues, but they recommended future scholars to look into more journals that have been presented in prior times for sturdier conclusions. From this recommendation, it is transparent to note that scholars who have employed the quantitative approach necessitate a qualitative aspect for the sake of filling the gaps left by this approach. Forza (2002, p.152) heads to these recommendations and embraces a qualitative approach to his assessment on operations management, and his justification lies in the fact that prior approaches have created extensive gaps. The gaps lie in the practical approach rather than the theoretical aspects, and hence, he finds a survey to be adequate to cover these gaps. Handfield & Melnyk (2015, p. 322) highlights that several researchers have opted for the statistical approach; however, he advises that the use of qualitative studies can elevate the strength of inferences made from these studies. The qualitative approach in management is necessary in establishing relationships, as well as analyzing them, and this allows viewing the findings in a parallel manner. This form of qualitative approach is able to counter the time restraints as it lays focus on the existing secondary and primary data, as well as takes advantage of the existing resources, to counter financial restraints in data collection as in quantitative approaches.

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4.9 Population and Sample

As stated by Gast and Ledford (2014), population defines the people who participate in the investigations and the individuals who are affected directly or indirectly by the process of research. In this process, the managers of various sectors of UAE economy are considered as the population of the research. Other people are not considered in this research, and hence smaller representation is considered as the sample. Dumay and Cai (2015) added in this context that the sampling process makes the research easier. It is impossible to gather information from every single person. Besides, as the research needs to be completed within the limited period, it is essential to choose the population and sample size effectively (Neuman and Robson 2012).

4.9.1 Sampling technique. The research participants were selected using purposive sampling technique. Under the purposive sampling technique, the researcher uses his or her judgment in selecting the research participants (Vogt, Gardner & Haeffele 2012). The use of purposive sampling technique ensured that the respondents selected adequately informed about the application of intelligence management in organization's management. Thus, the researcher increased the likelihood of gathering relevant data. Moreover, use of purposive sampling technique enabled the researcher to use gather sufficient data. According to Houser (2014), use of purposive sampling technique enables the researcher to dig deeper. A sample of 20 respondents was selected from the target organizations. The decision to construct a sample of 20 respondents was informed by a recommendation by Lincoln and Guba (1985) that interviews do not necessarily need to be so many to avail the requisite information for analysis in a given study.

Sample of small size is considered in this research as it suits the research objectives as well as the study on the topic of intelligence management in UAE economy. In this study, the managers of various sectors of UAE economy are considered for non-probability sampling technique. Simple

random probability sampling techniques will not be appropriate as other people are considered in this study. The interviews with the managers will be considered with flexible timing and schedule. The sample will be regarded from a static viewpoint based on the willingness of managers, and the interviews will be collected online due to the time factor. The insight dispensation survey will be filled from an online platform and will involve managers from as many industries as possible, gender sensitivity will also be highly recommended.

4.9.2 Sample size. The investigation will be done with the help of the sample size based on the qualitative technique. Primary data will be gathered by interviewing 50 managers drawn from 5 different sectors of the UAE economy. The rationale of considering a relatively larger sample size is to make the research study more representative of the prevailing situation. Subsequently, the likelihood of generalizing the research findings is increased substantially. These five sectors include finance sector, health sector, the manufacturing sector, tourism sector, and IT (Information Technology) sector. The sample size helps to plan and manage the study more effectively. The decision to select the managers from these sectors can be justified by the complexity of intelligence management in these industries as well as the extent to which these sectors have been studied in the past.

4.10 Data Coding

The data from the sample will be coded so that homogenous views from the parallel respondents can be picked out for the sake of redundancy. Conflicting thoughts as well as concurring thoughts will be useful for the making of sturdy inferences and will necessitate for coding. Therefore, integration the coding technique enabled the researcher to organize the research data collected on the basis of inherent themes. Thus, the researcher was able to determine the extent to which the data collected was aligned with the predetermined research questions. Apart from

coding, the qualitative data collected was analyzed by integrating content analysis technique. Ayers et al. (2007) accentuate that integration of content analysis technique provides the researcher an opportunity to analyze the data collected quantitatively hence increasing the ease with which the target respondents understand the research findings. Entrenching the coding and content analysis techniques further enabled the researcher to represent the research findings using tables, percentages, and graphs hence increasing the ease of understanding.

4.11 Ethical Considerations

In this study, some ethics will be considered for analyzing the intelligence management process in UAE economy that helps to standardize the specific research topic. The ethical consideration includes data application, respondents' involvement and respondents' anonymity (Miller et al. 2012). Data application describes the information that is gathered from the research topic to understand the intelligence management process in UAE economy. Respondents' involvement defines that participants are encouraged to participate in the research. Besides, respondents' anonymity explains that no verbal or physical harassment is involved during collecting the data. Ethical considerations for the respondents will range from early notices of the dates for scheduled interviews as well as background checks to ascertain the language for use when addressing the respondents. Before collecting the required data, the researcher ensured that informed consent was obtained from both the targeted organizations and the selected respondents. Therefore, an informed consent form was sent to the target organization explaining the purpose of the study and the use of the research data collected. Conversely, the respondents were assured that the personal information provided during the research process would not be disclosed. This approach assured the respondents of confidentiality of their personal information.

4.12 Research Limitations

During the research study, some constraints and restrictions have been confronted. These limitations are both avoidable and non-avoidable in nature. It is important to mention that the managers can be biased towards their company. It might affect the proper gaining of information. Besides, two major constraints are there that includes time constraint and budget constraint. Time is the major constraint as the research needs to be completed within the limited time span. Moreover, the financial constraint is another major limitation that restricts the research to reach to the largest possible extent. The financial aspect brings technological restraints about access to journals and publications as well as the conducting of interviews online. The financial aspects will also limit recording of interviews and transcriptions, and the convincing of managers to take up the interviews with no pay is also an extensive challenge.

One of the other core restraints for the study was the existence of an extensive amount of research on management as well as filtration through excessive theories that touch on intelligence management or management as a whole. The restraints ranged from assessing the relevant insights with the time restraints as well as avoidance of going through a series of redundant studies. The fact that the inferences for the studies are many meant that the cases studies reviewed necessitate an escalated amount of scrutiny to find the slight differences.

The research is also limited by the selection of respondents over a wide demographic location based on the existence of several industries and conglomerates that fall under the scope of the study that is the UAE. The willingness of respondents in management is often minimal based on time, and hence, the interview process is limited by this aspect. Maintenance of the anonymity of the respondents, while still using the online platform, is quite tricky based on the limitations that are introduced by technology.

4.13 Time Horizon

Main activities	1st week	2nd week	3rd week	4th+5th week	6th week	7th week
Selection of research topic	√					
Composition of the literature review		√				
Research methodology			√			
Collection of primary data				√		
Analysis and interpretation of data				√		
Findings					√	
Conclusion and Recommendation					√	
Final submission						√

Figure 4: Gantt chart

(Source: Created By Author)

4.14 Summary

Some specific and appropriate research methods and techniques are considered in this research. This chapter demonstrates the research tools, selection and analysis process with proper justification. Before starting the investigation, the research onion has been framed. In this study, the positivism research philosophy has been considered. The chapter concludes that the deductive research approach stands over the inductive research approach for this particular research. Apart from this, descriptive research design will be considered during the research. It is expected that the tools and techniques will be appropriate to analyze the concept of intelligence management process in business. The research methodology is framed with proper research methods and technique. The qualitative approach can be deemed as necessary for the analysis of the several sources as well as the analysis of the views of respondents captured in the study.

Chapter 5: Data Analysis and Discussion

5.1 Introduction

This chapter is deliberate in the presentation of collected data as well as the analysis of this data with the intent of answering the research questions highlighted in the initial chapter of this project. This chapter is subdivided into two sections, namely the data analysis section and the discussion section. The data analysis constitutes of a series of themes that are present in the responses of the interviewees, who are managers in this case and are 10 in number. The study conducted only ten interviews for the ten managers who had been selected as the participants of the research. The reason for conducting such a compact number of interviews is linked to the recommendation is given by Lincoln and Guba (1985, p. 235). Lincoln and Guba (1985, p. 235-

236) opine that interviews do not necessarily need to be so many to avail the requisite information for analysis in a given study; the number of interviews can be as few as 12-20. In fact, such a minimal number of conducted interviews can be more beneficial than so many interviews, as many as 20. If the participants are shrewdly chosen with regards to their knowledge and expertise of the study topic, then their responses and input will be more original, exhaustive, and qualitative. As opposed to instances where as many as 20 or more interviews are conducted, as these many interview responses, more often than not, yield redundant information (Holsti 1969). Hence, the study only interviewed ten managers; the selection of these managers was very strategic as their selection ensured that several sectors propelling the UAE economy were covered within the response data. Under each theme is a set of questions; these questions consist of the interview questions that the researcher asked the study's respondents in a bid to gain more understanding and insight regarding intelligence management among various organizations in the UAE. These questions are listed in Appendix A. The research questions addressed are highlighted under each theme to ascertain that the scope of the study is referenced and all the inquiries made are also covered. The findings are then cross-referenced with the existing literature to ascertain the strength of inferences observed and also to enforce the existing literature.

The first theme that will be addressed in this chapter is the emerging theme on emotional intelligence that will be tackled about how it operates and how it can elevate the management of business intelligence in a conglomerate. The second theme under opportunities is how the business can take advantage of existing willingness of employees and external influences to enhance cultural cohesion for the benefit of intelligence management. The managers note how employee preferences can be used as an advantage to enhance business intelligence through streamlining underlying processes to their favor so long as they meet consumer preferences. Under

opportunities, the exploration of how inflexible, ineffective and exhausted strategies can be phased out to elevate emotional intelligence comes off as a salient theme. In addition to these themes, the extension of the knowledge platform across all industry sectors will be discussed based on the responses by the management interviewees.

5.2 The Problem of Intelligence Management Opportunities

Comments

Intelligence management has been seen to encompass several sections starting from competitive intelligence management, the management of existing insights in the conglomerate as well as the exploration of existing opportunities. These opportunities range from the comprehension of the knowledge-based arena and the coordination of cultural actions to facilitate homogenous understanding. The intelligence levels of the leaders are part of the opportunities based on the idea that the thought process of leaders is a propagating factor for business intelligence expansion and control. To enable assessment of opportunities that arise from the thought process embraced by leaders, the emotional assessment emerged as a theme in the responses. The following are the first four interview questions that are aimed at probing the managers on their perceptions and views regarding the issue of intelligence management opportunities. These questions are listed in Appendix A.

Questions

What do you understand by business intelligence management?

Who is designated to handle business intelligence management?

Do you believe that business intelligence management has been explored to an extensive level?

What are the basic opportunities that exist for business intelligence in your industry sector?

Explain on the opportunities that you believe are available and how they can be exemplified in any business.

Response

The managers suggested that they were highly aware of business intelligence management existing as a salient factor for promotion of the business growth as well as managing competitive practices. The managers highlighted that business intelligence management encompasses the actions that they carry out to assist in stabilization of the operating environment of the business as well as in elevating their position as a business. The managers also noted that business intelligence management explores the acquisition of insights on the business from the environment and processing the insights, refining these insights, channeling them into the business and sustaining the benefits ignited by these insights.

The managers also noted that business intelligence management is mainly conducted from a managerial level; however, the exploration of all aspects of the business management is undertaken by any individual operating under the business objectives. The managers noted that business intelligence is mainly a factor of how much awareness exists in the institution and how this form of awareness can be channeled into the business process to improve the efficiency of operations as well as improve on the means embraced to carry out the activities. The role of the managers is central in business intelligence management as well as in the creation of comprehension and awareness of this factor in the firm for all employees to facilitate maximization of efforts. Concerning the opportunities, the respondents noted that the healthcare, education and the industry sectors are the core sectors where management intelligence opportunities have been explored and hence serve as an example for the rest of the industry.

5.2.1 Emotional intelligence. The first aspect that was noted as an opportunity by the managers is the exploration of emotional intelligence of all involved members but mainly by the leaders themselves. According to the responses, the emotional intelligence is categorized into various sections based on how it is acquired and used for propelling business intelligence management. Firstly, emotional intelligence encompasses the growth of a means by which the manager senses, comprehends as well as effectively enforces sentiments as a factor of control, the dispensation of insights and also a factor of pushing the thoughts and actions of other employees in a specific direction. The second aspect in the exploration of intelligence as an opportunity for business intelligence management is through the acquisition and comprehension of insights on opinions and how salient they are to the operations of the business. Thirdly, the managers purported that understanding the emotional intelligence levels in business intelligence management influences the reactions of the conglomerate heads to others and also to their decisions. In finality, the responses unraveled how emotional intelligence can be considered an opportunity for the understanding of how to link it with the actions of the workplace to maximize output through the creation of joint working forces as well as accountability of the leaders in charge.

5.2.2 Cultural cohesion. The second opportunity that emerged from the responses is the exploration of cultural barriers in the organization that can hinder the progress on intelligence management. Hence to improve and control business management, managers can take advantage of the existing desire to enhance cultural homogeneity by both employees and external forces in their companies. This opportunity can be taken advantage of through elimination of self-imposed regulations and the formulation of friendly conventions for the company. The managers highlighted that business intelligence management is often influenced by the willingness of the

individuals to collaborate to share ideas and implement them and hence cohesive culture would manage to deal with this shortcoming.

The managers highlighted that the employees demand participation in intelligence control and cohesion can allow them to be part of the process and introduce fresh perceptions on how things can be done or the adoption of technology. The motivation of the employees arises from their ability to indulge in this core decision process as well as their ability to reflect value to the respective stakeholders. Finances used to deal with issues that arise from a dispersed culture can be directed at elevating business intelligence control practices.

5.2.3 Consumer preferences. The managers claim that the desire of consumers to capture minimal insights on the processes that are encompassed in the acquisition of entities can be a means to explore business intelligence. The conglomerate is hence free to explore all production, transportation and marketing strategies that work in their favor to counter costs of production and to market their entities as long as they are able to maintain quality. Under this theme, the business intelligence opportunities are heightened by the existence of extensive preferences by consumers which act as an opening for greater intelligence management insights.

5.2.4 Technology. Technology is being highly incorporated in every conglomerate, and the society has held technology with heightened regard based on its ability to facilitate the progress of business objectives. Business intelligence management, according to the responses of the managers is highly swayed by the existing technology as well as the effective adoption and use of this technology. On the other end, conglomerates are stirring up efforts to ensure competitive technology in the market that is already tested as well as one that can be customized to suit user needs. The managers ascertain that technology exists as an opportunity in different ways:

Firstly, they highlight that technology availability acts as a platform for management of many business practices as well as the acquisition of insights on the sentiments of consumers rapidly and cheaply. One of the manager's highlights of how their computers and hence easily support social media and online survey platforms are their means of gaining information from consumers. Secondly, technology is a means of storage and processing of the data acquired and hence facilitates for the managers to highlight on several perspectives of how the insights acquired can be interpreted or even exemplified. In finality, the managers note that presence of technology that is customizable allows the use of the information that has been refined to produce quality services or entities. The customized or easily available technology ensures that effectiveness is observed in this enforcement process hence elevating the results of business intelligence management.

5.2.5 Alternative consumption. The responses of the managers suggest that business intelligence can explore the existence of awareness and push for alternative consumption to improve the performance of the company as well as maximize on resources. The managers note that the UAE platform has limited reserves based on the constant extension of population and hence exploration of a way to maximize on the available reserves can be a means of business intelligence improvement. Alternative ways of consumption encompass the use of rentals as opposed to asset acquisition, the use of subscriptions, crowdsourcing, collaborative businesses and also resource pooling.

The managers note that the few trials on rentals as a temporary means to access resources have proved to be effective and hence attempts to use other means of consumption can also be successful. Collaborations and subscriptions were highly mentioned by most managers based on their popularity, and they ascertained that these forms of consumption allow them to acquire

refined insights from other companies. For instance, one manager suggested how they have improved business intelligence through collaboration with a research-based firm that has global and insights on market performance in the UAE.

The majority of the managers confirmed that they are aware of the existence of crowdsourcing but have not taken the time to effectively comprehend the benefits of this aspect of business intelligence management. However, two of them noted that they have learned crowdsourcing can allow them to explore resources from other conglomerates as well as allow these companies to exploit their resources. Their argument was based on the idea that insights can be shared and the technology, workforce and intelligence of other individuals in the pool can be used to refine these insights. The implementation process is also likely to be easier and well-funded regarding technology available in the pool and sharing of manpower for any UAE business involved.

5.3 The Problem of Influence of Intelligence Management on Competitive Practices

While intelligent management has come off as a salient process in business enhancement, it is prudent to highlight on how this process is able to impact a conglomerate especially about competition increase. Based on the literature assessed, it is transparent that business intelligence has a role to play in the rate at which objectives are churned into reality and maximization of available reserves for a conglomerate. The business can progress through business intelligence management practices, but the question regards how this sways competitive practices. The issues of human labor reduction, elevation of skills for employees to improve turnover, the escalation of productivity and the heightening of output were mentioned as the influences of business intelligence management in general. The following questions are derived from the interview questions that were asked of the respondents. The questions aimed to probe the managers on their

perceptions and views regarding the problem of influence of intelligence management on competitive practices opportunities.

Questions

What is the role of business intelligence management in the company?

Is business intelligence management able to influence competitive practices?

If yes, how does it influence the business concerning the existing competition in the UAE?

Can you give examples of how business intelligence management has impacted your company?

Response

5.3.1 Exploration of business efficiency. The managers noted that through collection and assessment of insights from consumers and other individuals in the supply chain, they can ascertain how much the business has met the objectives set at the start of operations. The insights also aid in comprehending consumer preferences and hence the business can manage this information to formulate means of better and customized production. The responses shed light on how quality entities, timely products and differentiated means of delivery can facilitate for extended consumption hence improving business profitability.

Under the theme of efficiency, technology and intelligence were also mentioned in that a conglomerate can operate well when it has the quality technology, and to a great extent, it can dispense entities of greater quality than other businesses operating under low-scale technology. The effective use of technology is determined by the way the technology is governed by the managers as well as how it is put into use by the employees and leaders in general. The managers made a note of the fact that efficiency stands out as their differentiating practice as it facilitates for

delivery of entities within designated time frame, cost and even influences the quality to a great extent.

5.3.2 Flexibility. Respondents put forth the argument that business intelligence management introduces flexibility as it allows the managers to explore insights, link these insights with other affiliate knowledge and operate the data from parallel perspectives. Flexibility is mainly introduced by the ability to formulate different methods of operation for the businesses using similar insights. Competition can hence be improved through the address of issues in a different manner that can attract the attention of consumers. For instance, the managers took note of the issue of attracting consumers through environmentally sustainable practices of production and entity distribution. While the issue is homogenous for all companies, some of them have adopted means of cutting on waste disposal in the environment, some of them have resorted to green packaging solutions while others are pooling on transport to counter pollution. Based on preferences of consumers, the conglomerates are all able to lure the consumers onto their products in this manner. Consumers who are keen on packaging can acquire entities from the conglomerate that is mindful of their issue and those who hold the notion that car pollution is one of the greatest destroyers of the environment, can choose a business to exhibit loyalty. This form of flexibility is brought about by business intelligence management and facilitates differentiation for a business hence elevating the competitive levels of this company. In fact, the flexibility is also seen when the managers from different industries are able to dispense examples of a homogenous aspect of business intelligence that they are all able to exploit to their advantage.

5.3.3 Cost. Business intelligence management based on the available opportunities for exploration is seen as a means of cutting down on costs for the business through the use of efficient technology that is able to produce more entities using the minimal amount of resources. The

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managers noted the time as a factor of cost, such that use of less time to exemplify business services based on the refinement of knowledge acquired can aid a conglomerate to be highly competitive in the market. The managers responded by suggesting that profitability of a business is reliant on the deviation between expenditure and output and hence depressing expenditure can be a means to expand this deviation. When a business can attain greater profits through the sale of quality entities, comprehension of consumer preferences and also timeliness, they can be said to be highly competitive.

5.4 The Issue of Culture on Business Intelligence Management Implementation

The issue of high unemployment rates in the UAE, as well as the issue of oil prices fluctuation, are able to impact the platform of knowledge under which a business operates, impact the interests of a region as well influence the handling of insights in a business environment.

Questions

What is the underlying culture of the UAE as a region?

How does this culture impact the business in general?

How does this culture impact intelligence management system implementation?

Response

5.4.1 Religion, external influences on culture and cohesion. The respondents elucidated that a diverse culture characterizes the UAE; however, the Arabic culture is quite dominant and has great influence on how the insights acquired for business are handled. The managers noted that the culture has managed to influence hard work, peace and religion infusion in business promotion honesty in decision making as well as honesty in the use of the insights. The fact that the oil prices fluctuate occasionally, and the population is expanding while unemployment is still high, made the managers' report that the culture of mistrust and competition has been highly propagated in the

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business environment. The managers also shed light on how the cohesive culture is able to promote aspects of technological progression through idea sharing and collaborative research and development practices. Cohesive culture elevates trust, and hence the acquisition of insights from consumers or other businesses becomes easier, and the implementation is hence enhanced.

5.4.2 Political culture. The respondents emphasized that one of the core aspects that has impacted the implementation of business intelligence systems is the presence of favorable and unfavorable conventions that govern the businesses. The civil authority has put restraints that allow for strategic, tactical and operative business intelligence hence determination of how these systems are integrated in the business. Technology as a core enabler of business intelligence management was suggested to be impacted by influences of fluctuating interest rates conditioned by the political culture in the UAE. This infers that a flexible and friendly political culture facilitates for easier implementation of business intelligence management systems, however inflexible culture hinders this implementation.

5.5 Discussion

The findings from the responses concur with the sentiments of Duffy and Jonassen (2013) who shed light on how technology cannot be detached from business operations as well as intelligence management. The responses highlight that technology has a means of elevating competition through quality differentiation as well as maximization of input and hence technology not only stands out as an influential factor in the implementation of intelligence management but as an opportunity in the UAE region. The findings of this study concerning how technology impacts business intelligence management are in line with earlier studies by Drnevich and Croson (2013) who elucidate on how technology extension can facilitate for escalated output.

The initial research question sought to present a response to the available opportunities concerning business intelligence management in the UAE region, and it is transparent that technology, emotional intelligence, cultural cohesion awareness, long range of consumer preferences as well as availability and awareness of alternative consumption are the various opportunities referenced by the respondents. This confirms the literature review conducted on the significance of business intelligence and its various varieties. Also, the third chapter, the Theoretical Framework, enumerates the multi-dimensions of business intelligence as defined by Chau and Xu (2012). The listed varieties and types consist of customer intelligence, competitor intelligence, market intelligence, technological intelligence, product intelligence, and environment intelligence; thus meaning, that these responses from the interviewees corroborate the findings of both the literature review as well as the theoretical framework. Prior scholars have touched on the affiliation of business intelligence and all these aspects, however, the link between business intelligence and alternative consumption has not been highly explored.

Emotional intelligence mainly references how the leaders in the business are able to acquire insights and channel these insights into the business operations. As an opportunity, it is transparent that the rates of adult literacy in the UAE have expanded over the years and hence the intelligence levels of the individuals in the workplace have also gone up.
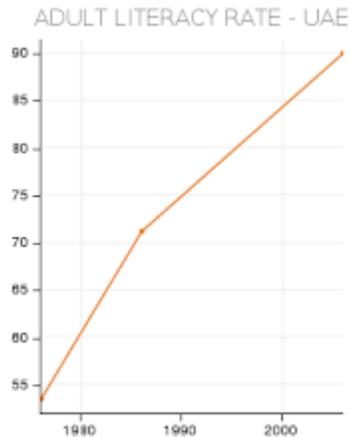
Figure 1. How intelligence has grown among individuals in the UAE based on high literacy levels (Source: Google Images)

Prior research has suggested that one of the core enablers of intelligent management opportunities is the existence of thought leaders and emotional intelligence is a characteristic of these leaders. Wilensky (2015) suggests that these leaders are able to tackle complex situations, enhance productivity and also promote team efforts that are salient in the progression of business intelligence. These results confirm the findings outlined in the literature review which state that there are four enablers of emotional intelligence, namely: thought leaders, knowledge platform, communities of interest, and adhocracies.

The goals of intelligence management according to Herschel and Jones (2005) are to enhance the rate at which the business is able to meet the set objectives and the opportunities mentioned by the respondents are all directed towards this phenomenon. For one, cultural cohesion facilitates for internal coordination and sharing of resources which facilitates for the easy attainment of the objectives. On the other end, technological exploration as an opportunity, consumer preferences as an opportunity, as well as alternative consumption as an opportunity are all directed at effectiveness in goal attainment. The opportunities listed by the respondents depict

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the all-around nature of business intelligence opportunities. Petermann et al. (2014) who illuminated extended concepts that can be explored to boost intelligence management suggest these opportunities. These include consumer intelligence, strategic intelligence, production intelligence and environmental intelligence which can be likened to technology, consumer preferences, cultural cohesion as an environment, and in finality alternative consumption as a means of production intelligence.

The second inquiry seeks to unravel the influence of intelligence management on competitive practices specifically in the UAE and hence explores the sentiments of the respondents towards this issue. The respondents argue in a similar line to Wright, Bisson, and Duffy (2012) who take note of how salient intelligence management is in the formulation of marketing strategies that elevate differentiation. On the other hand, the managers made a comment on how the efficiency of the business is part of the ways in which business intelligence can elevate competitive practices. These responses prove true the statements outlined by Wright, Bisson, and Duffy (2012), who assert that the aspect of competitive intelligence, in intelligence management, is core in devising marketing strategies. They suggest that leaders of businesses and organizations are bound to enhance a firm's competitiveness through the strategic planning process. This can only be achieved, however, by improving a given firm's strategic decisions and, that way, managers lead the employees to the better performance against the competitors. Hughes, Le Bon, and Rapp (2013) enriched the inferences of Dalkir (2013) when they highlighted that there are several elements of business intelligence that improve competitive practices. The responses of the managers were in line with these thoughts as they highlighted on issues of efficiency based on high intelligence levels and also based on technological progression. The insights on flexibility as unraveled by the managers are contributive to the studies by Dalkir (2013) as they note on how experiences of

parallel leaders and consumers can aid in the introduction of varied perspectives of entity and service delivery. Notwithstanding the use of homogenous platforms of attracting consumers, the ways in which the platform is used determines the competitive advantage developed by the conglomerate.

Figure 2: How technology as a factor of business intelligence influences increased output through networking (Source: McKinsey & Company2015)

The final research question addresses the issue of national culture as an influence on business intelligence system implementations and the findings unravel the fact that culture cannot be detached from the business. The respondents echoed the sentiments of De Jesus-Rivas, Conlon, and Burns (2016) who are deliberate in highlighting how failure in comprehension of national culture can be a challenge for the implementation of business systems. These findings particularly reflect the material outlined in the Literature Review section that state that nation culture has a great impact on the intelligence management of the organizations located in that country (Kent

2015). The organizations which have business across the world market, confront challenges in observing and measuring the cultural values and differences. The UAE, according to the respondents, has a favorable national culture based on the overall beliefs and cohesion of the people. The political culture also has an impact on the conducting of business in the region based on the stringent policies that have been laid for the operation of activities for the businesses. Cultural cohesion or diversity impacts communication effectiveness as well as strategies laid out for insight acquisition according to the responses. Dong (2012) noted similar inferences in his prior work by shedding light on how intelligence management is affiliated with competitive management which is all founded on effective dispensation and acquisition of insights, and the national culture sways all these.

Political culture has swayed the acquisition of technologies for us on business management as well as the strategic and tactical operations of business intelligence as noted in the responses. The arguments laid out by the managers concur with Kent (2015) who is deliberate on taking note of the fact that diversity has a negative influence while cohesive culture promotes business intelligence progression. On the other end, the fact that the managers have managed to identify the political culture of the business homogenously shows an escalated amount of awareness on national culture which is able to alter business practices by instilling confidence.

5.6 Conclusion

It is transparent that the inferences of this study are in line with prior studies on business intelligence and, hence, this study can be ascertained to contribute highly in the approval of existing literature. The study unravels how technology, emotional intelligence, the presence of alternative consumption, the existence of extensive consumer preferences, and escalated levels of emotional intelligence among leaders can be explored as a factor of business intelligence. These

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aspects exist as opportunities that are present in the UAE environment and, thus, facilitate the ease of integration of businesses with intelligence management systems.

The findings manage to introduce the link that exists between business intelligence and alternative consumption regarding crowdsourcing, use of subscriptions and also rentals as a means of asset attainment. The link reveals that business intelligence can be enhanced through aspects like crowdsourcing and rental of services from other businesses, which facilitate the use of progressive and extensive technology, by the business without having to make a purchase for the company which can be deemed costly.

In finality, the findings unravel answers to how flexibility and efficiency can be a means of using business intelligence to ascend the rate of competition in the UAE environment. The final inquiry of this study based on culture has confirmed that diverse culture has pessimistic effects on business intelligence implementation while cohesive culture has a positive influence. On the other end, it is transparent that awareness of culture, in general, can enhance the implementation of business intelligence systems as a means of either countering the shortfalls of culture or as a means of taking advantage of the positive aspects of culture in the nation.

Chapter 6: Discussion of Findings

6.0 Introduction

This section of the study provides a detailed discussion of the key research findings as presented in chapter 5, concerning the study purpose. The findings of the study are discussed about past research studies. The aim of the study was to investigate intelligence management opportunities that the organizations have in the UAE economy along with the impact of culture on the businesses. The first section of the chapter focused on the intelligent management opportunities that the organizations have in UAE economy. The second part discusses the intelligence management influences the business in the growing competitive market of UAE. The third part provided a discussion on the effect of national culture on the implementation of intelligence management system of the UAE. The last section of the chapter is a brief summary of the discussion of the findings.

The discussion is with regard to the following questions and supportive literature.

- What are the intelligent management opportunities that the organizations have in UAE economy?

- How does the intelligence management influence the business in the growing competitive market of UAE?

- What are the effects of national culture on the implementation of intelligence management system of UAE?

6. 1 Findings Summary

The study sought to understand the managers' understanding of business management and established that the respondents were adequately informed on the concept of business intelligence.

Also, the managers opined that business intelligence comprises a framework that helps organizations in making strategic, business and operational decisions. The managers also affirmed that business intelligence plays a critical in promoting organization's capacity to realize competitive advantage. The findings have also established that rationale for incorporating business intelligence is to help organizations cope with dynamism emanating from the business environment. Additionally, business intelligence enables businesses to capture, store, and interpret data gathered from the market. To acquire the desired results, managers can use business intelligence to provide authorized parties with an opportunity access and apply the data. Rental services and crowdsourcing can be used to promote business intelligence. In order to enhance competition in the UAE organizations promote efficiency and flexibility via business intelligence.

6.2 Intelligence Management Opportunities

Question One: What are the intelligent management opportunities that the organizations have in UAE economy?

From the findings analyzed, the outcomes established that the opportunities associated with business intelligence include enhancing emotional intelligence (30%), promoting social cohesion (20%), enhancing business technological capability (40%), and increasing understanding customer preferences. The emotional intelligence as part of BI encompasses the growth that allows a manager to sense, comprehend and effectively enforce sentiments as a factor of control, the dispensation of insights and push the thoughts and actions of other employees in a particular direction. Organisations can explore intelligence via the acquisition and comprehension of insights on opinions. By understanding the emotional intelligence levels in BIM, the reactions of managers can also be influenced. The findings have been supported by Rozell and Scroggins (2010) research that emotional intelligence provides managers with the opportunity to pursue own emotions for

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analyzing others emotions. Thus, in the UAE, organizations can employ EI to manage conflict and analyze problems in order to come up with preferred solutions. Moon (2010) pointed out that high level of the emotional intelligence comprises of tenacity, self-management, and interpersonal skills, which are required to enhance intelligence management in organizations. Emotional intelligence allows leaders in business are to acquire insights and channel them into the business operations. Rozell and Scroggins (2010) pointed out that EI is important for businesses because it plays an integral part in the progress of the organisations and development of teams within. As part of intelligent management opportunities, EI is important for business in UAE because it can be used to maintain social responsibility, enhance problem-solving and promote impulse control. Also, would assist to improve conflict control and management at the workplace.

The other opportunity is technological capability, whereby 40% of the managers contended that incorporation of business intelligence was critical in an organization's aim to be technologically savvy. This is important finding as it supports the need for technology in business intelligence management. So as to succeed in business intelligence exploitation organisations managers have to make sure that the requisite technologies are incorporated. The finding has been supported by North's (2015) research that technology was essential in the implementation of BI because it encouraged business efficiency regarding collection and utilization of the massive data collected from various sources. Subsequently, the businesses in the UAE could transform the massive raw data collected to enhance competitive advantage. North (2015) pointed out that there are specific technologies that are important to organisations and they include "event processing engines, relational database management systems, online analytic processing services, enterprise search engines, reporting servers, text analytic engines and data mining tools. They have to be entrenched in order for an organisation to benefit from business intelligence" (p. 47). Therefore,

incorporation of the concept of BI in businesses in the UAE plays a fundamental role in promoting competitiveness. As pointed by Baars and Kemper (2008), use of technology can find better solutions for the problems experienced at organizational levels.

Technology is highly integrated into organisations because of its ability to enable business progress. Business intelligence management, based on this study's responses by the managers established that is influenced by technology. Anaya, Dulaimi, and Abdallah (2015) findings that the use of the technological and information technology systems influences organisation and market support this. The managers noted that they were aware of BI and the opportunity technology has on its management. This is because the UAE has improved the new applications of digital communication and computer technologies in a business environment (Anaya et al., 2015). The managers noted that technology availability acted as a platform for management of business practices and the acquisition of insights on consumers' opinion. This can be supported by Al-Awadi and Saidani (2010) findings that organizations in UAE have invested heavily in technology and the exchange of the information is necessitated by the use of electronic means. Various kinds of software are currently being used for the storage of data. Also the government of UAE has paid more attention to the use of the new technologies to develop unique resources in businesses. Subsequently, the UAE government continues to encourage organizations to operate and incorporate new technologies and ICT applications in businesses (Al-Awadi & Saidani, 2010). Thus, technology is essential in ensuring that business can effectively manage business intelligence.

The goals of intelligence management according to Herschel and Jones (2005) are to enhance the rate at which the business is able to meet the set objectives and the opportunities mentioned by the respondents are all directed towards this phenomenon. This is supported by this

study's findings that business intelligence in organisations promotes business cohesion (20%). For instance, BI promotes the team group collaboration hence the creation of new knowledge. Social cohesion is important to organisations in the UAE because it improves the employees' internal performance, especially when employees from different departments share knowledge and information on various aspects of attaining competitive advantage. In support, Hopkins and Yonker (2015) observed that BI provides managers with the opportunity to manage cohesive groups, hence social cohesion. Moreover, social cohesion enhancement via BI facilitates internal coordination and resource sharing for easy objectives attainment. Both technological exploration and consumer preferences are part of BI, and they promote effectiveness in goal achievement. The opportunities listed have depicted the all-around nature of BI opportunities, and they illuminate various ways of boosting intelligence management (Petermann et al., 2014). The social cohesion is vital for organisations in the UAE because "new knowledge is needed to help teams become more cohesive so that dysfunction is minimized and performance and cohesion are increased" (Moore & Mamiseishvili, 2012, p. 296). Thus, the realization of social cohesion by UAE's organisations is necessary for ensuring performance.

According to the managers (10%) interviewed in this study, BI provides organisations adequate understanding on consumer product preferences. One of the managers pointed out that BI presents an opportunity for organisations to carry out continuous product improvement based on knowledge acquired and developed related to customer product and service preferences. Michalewicz et al., (2006) assert that 'consumer preferences are constantly changing and it is necessary to monitor these trends and update the predictions module on a regular basis' (p. 114). The responses by the managers are a suggestion that BI enable organisations to develop alternative ways of enhancing consumption to optimize resource utilization and strengthen performance. The

managers noted that available resources in the UAE could not sustain demand, and by developing business intelligence managers could have an opportunity of ensuring that customer preferences are met. This is based on the finding by Al-Hawari (2011) that technology has improved consumers levels, hence changes in demand and consumer behavior because consumers in contemporary markets have more options, BI can be used to capture consumer insights and improve consumer preferences. This finding is relevant to organisations operating in the UAE as it shows how BI can be used to meet the needs and preferences of consumers, irrespective of their cultural differences (Sankaran & Demangeot, 2011).

6. 3 Influence of Intelligence Management on Competitive Practices

Question two: On how the intelligence management influence the business in the growing competitive market of UAE has been satisfied by the study's findings which have established that BI is critical in promoting organisation's capacity to realize competitive advantage. In addition, in order to enhance competitive advantage, organisations collect data to increase the level of knowledge. Pattinson and Preece (2014) study that showed that through innovation and BI, organisations are in a position to gain the sustainable competitive advantage in the market, relate this to the findings. Baars and Kemper (2008) study that BI helps organizations keep a closer eye on competitors' activities have also supported the finding. Subsequently, monitoring the activities as well as the strategies applied by competitors assist them in making strategic moves to be competitive in long-run. In the article by Gilad (2011), it was established that a business strategy without business intelligence was ineffective, and therefore, organizations' have resulted to investing more and more into the technology accompanied by competitive intelligence in order to gain sustainable position in the market. In addition, managers can work in different dimensions to

gain the competitive advantage for their organisation (AlMazrouei & Pech, 2014). Therefore, business intelligence has an influence on competitive practices.

On whether business intelligence management can influence competitive practices, the managers noted that incorporation of BI was effective in the creation of a competitive edge. For instance, 30% noted that BI improved efficiency on organisations, and this led into competitiveness. Herschel and Jones (2005) findings on intelligence management established that business intelligence and the competitive intelligence ensure efficiency in business operations. The strategic tools help in the management and organisation to gather intelligence information related to competitors and the business market. After the information has been gathered, it is then evaluated and used by decision makers to prioritize areas that require immediate actions and strategic options. Based on the responses of the respondents, the managers in UAE have intelligence management processes that have been put in place to deal with the challenges faced in the complex economy. However, the intelligence management systems of each organisation are based on organizational environment. When an organization has technology accompanied by BI, then efficiency is achieved. Efficiency facilitates the delivery of services and products within the set time frame, and reduces costs of operations and impacts the quality of products and services as well. This finding is important because it shows how organisations in the UAE have adopted BI to promote efficiency and competitive practices.

Respondents (30%) noted that business intelligence management encouraged flexibility by allowing the managers to gather insightful information, link them with other affiliate knowledge, and operate the data from parallel perspectives. Thus, business intelligence management has impacted the companies in the UAE by promoting flexibility. The aspect of flexibility as a result of intelligence management has been explored by Kahraman, Kaya and Evikcan (2011) who

industries in the UAE economy require information management and intelligent management system as part of their organisations. In the context of this study, UAE businesses explored have employed business intelligence management and realized flexibility. The finding is significant to this study because when efficiency is achieved, accuracy and flexibility of the system are also promoted. Kahraman et al. (2011) pointed out that intelligence management techniques increase sensitiveness of system and be applied to make effective decisions. To promote competition, individual firms have to implement the intelligent management process. To the organisations in the UAE, flexibility is required to improve competition by addressing the issues in another manner and attract consumer's attention. Therefore, business intelligence management facilitates business differentiation, and this could elevate competitive levels of an organisation.

The other effect of business intelligence on competitiveness is cost reduction based on 20% of the respondents. Also, business intelligence promotes efficiency, which results in cost-effectiveness. Mayer and Quick (2015) findings that business intelligence tools compel organisations to realize operational efficiency through the identification of areas of wastage support this finding. Business intelligence management can be used to cut down operational costs via the application of efficient technology which is more effective regarding quantity and wastage. The finding was significant because it showed how BI could be used by organisations in the UAE to reduce wastage. The managers noted that efficiency is achieved through IB, which results into use of less time. In addition, the knowledge acquired helps organisations become highly competitive compared to their competitors. Similarly, Daghfous and Ahmad (2015) acknowledged that in spite the challenges associated with knowledge transfer, BI Incorporated via IT reduces the cost and increase revenues. As pointed by the managers, the profitability of a business relies on the difference between expenditure and output, and when costs are reduced, and then profitability

is increased. This finding is significant to this study because it showed how businesses in the UAE use BI to enhance efficiency and reduce costs.

The managers contended that as a factor of cost, time could play an integral part in ensuring competitive advantage. Hussain, Ajmal, Khan, and Saber (2015) have supported this finding by noting that BI related programs help organization to save cost. This is because they enhance knowledge sharing and provide the flexible environment for employees. Managers pointed out that BI encourage sharing the ideas for operational improvement, use of new technology and business expansions with increasing the productivity of organization. Therefore, value of business intelligence is to reduce the cost of operation and promote organizational competitiveness. In support of this finding, Gessner and Scott (2001) found that business intelligence tools help organisations identify redundancies and integrate alternative measures. They also identify unnecessary costs or excessive workforce in order to reduce costs of operations. To the business in the UAE, BI could be applied to gain knowledge and to allow businesses to make essential adjustments in order to reduce operation costs. Thus, the value of business intelligence in cost reduction is to enhance organizational competitiveness, and for this reason, organisations that have not adopted BI must have one.

6.4 The Effects of Culture on Business Intelligence Management System Implementation

The third question on what are the effects of national culture on the implementation of intelligence management system of UAE has been answered sufficiently. Form the study findings, the managers pointed out that the UAE has diverse culture; and that the Arabic culture is not only dominant but also has great influence on how the insights acquired for business are handled. Also, the managers pointed out that the culture has managed to influence hard work, peace and religion infusion in business promotion honesty in decision making as well as honesty in the use of the

insights. The managers articulated on the manner in which the cohesive culture promotes aspects of technological progression via idea sharing as well as collaborative research and development practices. This is in line with AlMazrouei and Pech (2014) definition of culture as a set of collective values, beliefs, attitudes and the key component of business that affect the strategic decision of the organizations. This finding is essential for managers managing organisations in the UK because it shows how culture has an influence on business operations and management system. As Khan, Clear, Al-Kaabi and Pezeshki (2010) pointed out organizational culture is imperative for organisations because it defines the self-image, current experiences as well as future expectations. In the context of this study, the culture in the UAE economy is required to ensure that organizations treat their employees, clients and the wider community in accordance with the set beliefs and customs.

Still, on culture, the managers (30%) noted that a balance between feminine and masculine dimensions of national culture characterizes the UAE. Also, they affirmed that such characterization was crucial in the implementation of BI. The managers also argued that it is possible for organisations in the UAE to experience extensive collaboration among employees in various business units in the implementation and utilization of BI. The dominance of femininity in UAE national culture is necessary for the promotion of social cohesion in organisations to improve communication. In line with this, Moon (2010) established that people from different areas or the culture interacts with each other to resolve problems born from complex international working environments. Also, the findings on culture and communication are supported by Khan et al.(2010) findings that culture influences the way individuals for communicating and behavior. In addition, businesses in UAE are required to understand diversity because it influences the performance of the organization as well as employee commitment.

The majority of the managers in the study (50%) contended that the UAE has an effective national culture that is valuable in the implementation of BI. In spite of the effective national culture, managers noted that in the UAE there is a high degree of uncertainty avoidance based Hofstede's cultural dimension. Culture differences must be established to ensure that employees are trained to promote national culture. Hassi and Storti (2011) have emphasized to consider the cultural aspects of the organizational training to avoid uncertainty avoidance. This is because is because when uncertainty avoidance has not soled the members of a culture feel may feel threatened. Thus, it is important for organisations to have knowledge of organizational and national culture in order to promote a brand (Rashid & Ghose, 2015). The finding on effective national culture is significant to this study because organisations could use business intelligence management practices to support the national culture in the UAE (Herschel & Jones, 2005). It is imperative for national culture to be encouraged in organisations because it maintains good market position. Moreover, the objective of intelligence management process is to promote sustainable competitive advantages (Herschel & Jones, 2005).

Political culture has an effect on business intelligence management system implementations. This claim is supported by this study's findings whereby only twenty percent (20%) of the respondents. They pointed out that business intelligence management is positively impacted by the political culture in the UAE region. The respondents contended that the UAE has a well-developed political culture. In support, Toledo (2014) pointed out that political economy in the UAE is guided by Emiratization, which is a major challenge faced by a business operating in the region. For the political culture to be successful, the government to ensure that local workers participate in the private sector of the country (Toledo, 2014) has implemented the Emiratization policy. Also, the UAE government has embraced technology to promote service delivery, and this

is achieved via the implementation of information communication technology infrastructure. The managers have argued that the UAE government has played a major role in the improvement of business intelligence that promotes the development of the UAE's economy. The managers also cited that the UAE's government is committed to maintaining stability of interest rate. Consequently, organizations can use business intelligence applications and apply them to the business operations in order to reduce costs of operations.

When businesses operate in global markets, they face organizational challenges of their differences in cultures. Various beliefs, norms, and attitudes have an impact on the implementation of business intelligence management in the UAE (Neal, 2010). Some of the challenges identified that business must be aware of include increase in costs of operations, improper business intelligence process, and cultural misalignment. Therefore, businesses can be affected badly as a result of cultural misalignment, while improper business intelligence process, could reduce the quality of the service

6.5 Summary of the Chapter

The purpose of the study was to understand the managers' understanding of business intelligence management and the impact of culture on the organizations in the UAE. The data analyzed and discussed has fully answered the three questions. Thus, the findings have been consistent with previous research studies on business intelligence management. For instance, in comparison to the previous studies, the current findings have indicated that there exist four opportunities linked with business intelligence: enhancing emotional intelligence, promoting social cohesion, increasing understanding of customer preferences, and enhancing business technological capability. Thus, in the UAE, intelligence management opportunities for organisations are present. The study has also established that managers in the UAE are aware of

business intelligence and the value it has on business intelligence in terms of realizing sustainability and competitiveness. Also, managers have an understanding of the important components that must be integrated to benefit from business intelligence. Both flexibility and efficiency use business intelligence to improve competition among business in the UAE environment. Also, efficiency promotes cost reduction, which in return, impacts the level of profitability in the organisation.

There is a consensus that technology plays a significant role in the implementation of BI it because it promotes business efficiency and competitive advantage. The use of enterprise search engines, text analytic engines as well as data mining tools by organisations can play a major role in promoting competitiveness. The use of technology can find better solutions for the problems experienced at organizational levels. Technology has its ability to enable business progress. Also, business intelligence management can use technological and information technology systems to influence organisation and market. The UAE has improved the new applications of digital communication and computer technologies in a business environment. There is similarity with past studies that organizations in UAE have invested heavily in technology, and the exchange of the information is necessitated by the use of electronic means. The goals of intelligence management are to promote the rate of which the business can be in a position to meet the set objectives and the opportunities, including cost reduction, efficiency, promote social cohesion, and increase understanding of customer preferences.

The final inquiry of this study discussed the effect of culture on business intelligence management and confirmed that diverse culture has positively and negatively affected the implementation of business intelligence. Conversely, when organisation employs both organizational and national culture in their operations, the implementation of business intelligence

systems is improved. The UAE has an effective national culture, and the government has encouraged organisations to use intelligence management process to promote sustainable competitive advantages.

6.6 Conclusion and Recommendation

The main argument is that investing in BI could play an integral role in business across UAE regarding promoting competitiveness. Also, BI is a highly known concept and applicable in the UAE, and it is used to promote growth, profitability, and competitive practices. Business intelligence is comprised of a framework that can be used by organisations to make strategic, business and operational decisions. The purpose of the present study was to bring out the intelligence management opportunities that the UAE organizations have.

The study set three main objectives. The first objective was to analyze the intelligent management opportunities that the organizations have in UAE economy. The second objective was to determine how the intelligence management influences the business in the growing competitive market of UAE. The last objective was to assess the effect of national culture on the implementation of intelligence management system of UAE

6.6.1 Overall Study Findings. The study established findings with regard to study questions and objectives proposed. For instance, the study established that organisation has the capacity to achieve competitive advantage and cope with dynamism that is generated from the business environment. The findings have also confirmed that BI in organisations is applied to capture, store, and interpret data gathered. For organisations to achieve the desired results, managers have the duty of ensuring that BI is implemented and applied to offer the opportunity of accessing and applying the data. It has also been identified from the interviews with the ten managers that BI provides easy access analytical tools that can improve forecasting capabilities

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and increase the ability to monitor market trends related to customer patterns. The increased ability by BI to analyze as well as monitor organizational performance results to optimization of processes. Nonetheless, it is crucial that business In UAE have the capability to use BI an analytical tool for improved quality of services and products.

The findings established that there were no strong theories that disapproved the argument that BI implementation enhances flexibility, cohesion, cost saving, and efficiency at organizational levels. Other studies closely support the finding that BI results to efficiency when implemented by organisations. When implemented correctly, BI has the capability to increase operational efficiency. This is achieved when people are supported in their work, and this encourages organisations to focus on time as well as resources that promote value-adding activities. However, BI does not generate increased efficiency automatically, because organisations must implement BI and use technology to achieve the benefits of increased efficiency. Thus, increased efficiency is part of the BI.

From the analysis, the study established that the intelligent management opportunities that the organizations have in UAE economy are enhancing emotional intelligence, promoting social cohesion, enhancing business technological capability, and increasing understanding customer preferences. For instance, the integration technology in organisation promotes BI by encouraging business efficiency in terms of collection and utilization of data. The data is then used to promote business competitiveness. Technology is also used to find better solutions for the issues experienced at organizational levels. The study has also established that BI can be used to capture consumer insights as well as improve consumer preferences and meet their demands in the future. In addition, BI offers an opportunity for organisations to undertake a continuous product improvement. This is promoted by the use of knowledge gathered via BI and to ensure customer

product and service preferences. To promote social cohesion BI management facilitates internal coordination as well as resource sharing to ensure that objectives are achieved. Thus, technological exploration and consumer preferences from BI and organisations in the UAE use them promote effectiveness in goal realization. Therefore, BI can increase operational efficiency, and it can enable the employees to not only focus time but also on resources by directing them to more value-adding activities.

Concerning how the intelligence management influences the business in the growing competitive market of the UAE, this study's findings established that BI is used in data collection, which improves knowledge and competitiveness. The process of BI management by organizations in the UAE helps a firm in keeping a closer eye on competitors' activities. The monitoring process used by competitors help to make strategic moves to remain competitive in long-term. In addition, BI promotes cost reduction and efficiency by cutting down operational costs, reducing wastage, and quality of products. When costs are reduced via BI, then efficiency is promoted, and this promotes profitability in the organisations. The other aspect related to BI implementation in terms of competitiveness is flexibility. Managers become flexible, and they can gather information and use it to promote competitiveness when compared to other companies in the UAE. Organisations that have implemented BI use business intelligence tools to identify redundancies and incorporate alternative measures. By cutting down the excessive costs and workforce, organisations in the UAE use their resources effectively. Thus, it is recommended for organisations in UAE to adopt IB in order to benefit from the different arrays of competitiveness.

About what are the effects of national culture on the implementation of intelligence management system of UAE, the study established that the adoption of IB and its implementation in organisations could influence business operations and management system. This is because the

UAE has been characterized by diverse national and political culture that has an influence on collected insights. The culture in the UAE economy through complex ensures that organizations have the ability to treat their clients, employees, and the community based on the available beliefs and customs (Herschel & Jones, 2005). The culture in the UAE economy is one which balances between masculine and feminine cultures in the workplace. For instance, culture influences the way in which individuals communicate and behave. Therefore, by understanding diversity in the UAE, managers can influences performance of the organization and employees' commitment. The effective national culture is present in the UAE, although the level of uncertainty avoidance is high. Culture differences must, therefore, be established to make sure that employees are well-trained to promote national culture. The study also established that effective national culture is positively related to use BI. This is because business intelligence management practices to support the national culture in the UAE (Herschel & Jones, 2005). The beliefs, norms, and attitudes of other people have to be considered when BI is implemented to prevent different kinds of challenges which may be experienced.

6.6.2 Relevance of the Findings. The reason the study was conducted was to improve theory and practice. Thus it was important to cast the findings of this study in the context of both theory and practice. The outcomes of this study have a significant impact for both theory and practice as they can be used to devise strategies that can be used by businesses in the UAE to optimize the opportunities of business intelligence management. In addition, given the opportunities of business intelligence related to competitive practices such as cost reduction, efficiency, and flexibility in business efficiency, managers in the UAE can improve the control over different significant processes in their organization by investing in a good business intelligence system. Subsequently, the use of business intelligence software can effectively

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improve the visibility of the processes and ensure that areas that need improvement are identified. In addition, based on the finding organisations in the UAE could invest in an effective business intelligence system in order to improve efficiency and flexibility within the organization and increase productivity. Thus, business intelligence can be used to share information across various departments in UAE's organization and save time and costs of production.

By identifying the culture-related problems associated with business intelligence in the UAE, organisations can solve the problems associated with having diverse cultures. Subsequently, the companies with employees with different beliefs, norms, and attitudes could use BI to promote competitiveness and efficiency in the workplace. When employees of an organisation interact with others, the business is affected in different ways, and this study could help in ensuring that insights from business intelligence are used to promote positive culture in their organisations. Therefore, the organisations must put into considerations both the national as well as organizational culture to align the cultures and enhance their business intelligence procedure.

From a practical perspective, the findings have shown the opportunities presented when organisations use business intelligence management practices. Thus, other organisations in the UAE could use BI to get insights into consumer behavior. This can be achieved via investment in business intelligence software as well as competent and skilled personnel in order to boot their ability to collect, process, and analyze present consumer buying trends. After the managers understand what the consumers are purchasing, the information can be used to develop products and services which match the present consumption trends. Subsequently, profitability is improved, and the organisation is able to attract valuable customers. In addition, companies can use BI to improve control over different significant processes in the organisation. Business intelligence software can thus be used to improve the visibility of the business processes and be used to identify

business areas in need of improvement. Therefore, companies in UAE could adopt and implement business intelligence practices to promote competitiveness over business competitors.

6.7 Study's Limitations

Although the topic was not exhaustive, the study was successful, and the important findings were generated with regard to intelligence management opportunities and the impact of culture on the businesses. In other words, the limitations of the study have been acknowledged, but this does not imply that the findings are not reliable and valid in nature. The primary problem faced when undertaking the study was the issue of culture, whereby the managers did not exhaustively answer the questions as they have to protect the organizational and national culture in the UAE. This could have to some extent limited the findings, but this limitation was solved by ensuring that only relevant questions and those directly linked to the study topic were answered. The other weakness of the study was because of time. The researcher was only constrained to a sample of ten and thus felt that more clarity could be added to the findings and improve the validity of the data.

The study was limited in terms of time and sample constraints. For example, the time for data collection was limited, while a small sample of ten subjects was used. Thus, there was no adequate time for probing and analyzing the findings fully. However, the use of interviews ensured that the researcher could probe the findings and the participants explained their answers when the researcher felt that it was not exhaustive. The researcher also had limited time to probe because only 30minutes were scheduled for each of the managers. Also, time which required undertaking content and thematic analyses were because it needed reading of the transcripts for more than one time and generating primary themes. The small sample used cannot generate findings which can be used for generalization purposes.

6.8 Suggestions for Further Research'

More precise and concise information is needed on the current situation with regard to business intelligence management opportunities in UAE and challenges associated with culture. This is because there exists limited research related to the topic studied and a further study could be used to complement the current findings. For example, rather than using a sample of 10 managers from 10 organisations, it would be interesting for a future to study one organization that has already implemented a BI system. Basically, through the case study, the possible cultural challenges could be noted and established whether the arguments provided in this study were achieved or not. Another approach could be to compare to UAE organisations which have already put into place a BI system. The rationale would be to compare one organisation which has failed in its implementations with another which has already implemented the BI system successfully and establish the success factors and the culturally related reasons of failure. After the comparison, the researcher would investigate intelligence management opportunities that the organizations have in the UAE economy along with the impact of culture on the businesses.

The topic used in this study is too broad, and thus, a much narrower topic may be considered in a further study. For instance, rather than investigate intelligence management opportunities that the organizations have in the UAE economy along with the impact of culture on the businesses, the study can focus on the role of culture in intelligence management the UAE. In this, the study could focus majorly on the cultural aspect of business intelligence management.

The other recommendation is to conduct a study similar to this one, but use quantitative methods rather than qualitative methods when collecting and analyzing the empirical findings, and hence establish the outcomes from a larger sample size. A quantitative research approach is recommended over a qualitative one because it focuses more on statistical data of the study, rather

than the opinions of the subjects. In addition, the study would enhance generalization of the findings as this would mean that they are applied to the UAE region without any problems. Currently, the findings are based on the opinions of few respondents (10 managers), and this sample is not only small but not a representation of the numerous companies operating in the UAE. Also, the advantage of using a large sample size in a future study is to interpret the significance of the results, and this would allow a more precise estimate of the outcomes. It is also easier to investigate the representativeness of the sample as well as to generalize the findings. Although the use of interviews allowed probing of the results, a questionnaire could be more effective because it is not time-consuming in terms of delivery, and distribution of the respondents. Moreover, interviews are cumbersome and consume a lot of time where listening to the interviews, reading the transcripts, and deriving the primary themes.

6.9 Reflections

During the identification and analysis of the responses from the interviews, the researcher immediately acknowledged that the topic had some complexity. Other responses were abstract and required a high level of interpretation in terms of highlighting as well as categorizing them. Nonetheless, the researcher has confirmed that most of the responses were closely interlinked and they presented various cause and effect relationships between them. As a result of the high level of interpretation evident in this thesis, I concluded that there is the likelihood that a different researcher could have replicated slightly different research findings. As a master's student, additional theories have been learned that could positively contribute to personal and career development in reference to the implementation of business intelligence by organisations in the UAE. Therefore, for a future career as a manager, the findings of this study have provided insights related to the implementation of business intelligence and the realization of competitive advantage.

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Appendix

Appendix A: Interview Questions

What do you understand by business intelligence management?

Who is designated to handle business intelligence management?

Do you believe that business intelligence management has been explored to an extensive level?

What are the basic opportunities that exist for business intelligence in your industry sector?

Explain on the opportunities that you believe are available and how they can be exemplified in any

business?

What is the role of business intelligence management in the company?

Is business intelligence management able to influence competitive practices?

If yes, how does it influence the business with reference to the existing competition in the UAE?

Can you give examples of how business intelligence management has impacted your company?

What is the underlying culture of the UAE as a region?

How does this culture impact the business in general?

How is intelligence management system implementation impacted by this culture?