

# THE IMPACT OF INTELLECTUAL CAPITAL COMPONENTS ON ORGANIZATIONAL PERFORMANCE: A CASE STUDY OF ISLAMIC BANKS IN IRAQ

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## THE IMPACT OF INTELLECTUAL CAPITAL COMPONENTS ON ORGANIZATIONAL PERFORMANCE: A CASE STUDY OF ISLAMIC BANKS IN IRAQ

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#### THESIS APPROVAL PAGE

I certify that in my opinion the thesis submitted by Rami Gorges Sarges" The Impact of Intellectual Capital Components on Organizational Performance: A Case Study of Islamic Banks in Iraq, is fully adequate in scope and quality as a thesis for the degree of Master of Science.

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**DECLARATION** 

"I declare that all the information within this thesis has been gathered and

presented by academic regulations and ethical principles and I have according to the

requirements of these regulations and principles cited all those which do not originate

in this work as well."

Name Surname: Rami Gorges SARGES

**Signature:** 

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#### **FOREWORD**

The first and most important thing I am grateful for is God who has blessed me with health and the ability to complete my education.

I would like to express my sincere appreciation to my supervisor Dr. ABDELKADER LAALLAM, for dedicating his time and attention to me. It was the accumulation of information that made the greatest contribution to the completion of my thesis. This research is the result of his courage and help in the form of important advice and recommendations. Finally. I would like to express my gratitude to my supportive family, especially my mother, brother, wife, and sister for always being there for me. Helping me in my most difficult moments and also helping me with my studies.

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#### **ABSTRACT**

This study aims to identify the impact of intellectual capital (IC) with its dimensions (human capital, relational capital, structural capital, social capital, technical capital) on organizational performance in Iraqi Islamic banks. The researcher adopted a questionnaire from previous studies. As for the subject of the study, the researcher used the quantitative method to reach the results of the study. The study sample consists of workers in Iraqi Islamic banks. The researcher used the appropriate statistical methods for the study where (220) questionnaires were distributed. The researcher retrieved (180) valid questionnaires for statistical analysis, and the validity of the data was verified for appropriate statistical analysis using Statistical Package for the Social Sciences (SPSS) and Structural Equation Modeling using AMOS (SEM-AMOS). This study provides an awareness on how good IC in the banking industry will bring more assistance to improve the performance of Islamic banks. As per the knowledge of researcher, this study is one of few studies which examine the impact of IC on organizational performance of Iraqi Islamic banks. The study reached several results, the most important of which are; human capital, relational capital and social capitals have positive and significant relationship with the organizational performance of Islamic banks in Iraq. Whereas, structural and technological capitals have negative and significant relationship with organizational performance. The study recommended that Islamic banks that were investigated need to pay attention to IC as one of the most important factors in improving the performance of workers in Iraqi Islamic banks.

**Keywords:** Intellectual capital; Organizational performance; Iraqi Islamic banks

#### ÖZ

Bu çalışma, Irak İslami bankalarında entelektüel sermayenin boyutlarıyla (insan sermayesi, İlişkisel Sermaye, yapısal sermaye, sosyal sermaye, teknik sermaye) örgütsel performans üzerindeki etkisini belirlemeyi amaçlamaktadır. Araştırmacı, önceki çalışmalara dayanarak bir anket geliştirdi. Araştırmanın konusu ile ilgili olarak araştırmacı, araştırmanın sonuçlarına ulaşmak için betimsel analitik yöntemi kullanmıştır. Irak İslami bankalarında çalışan işçilerin çalışma örneği. Araştırmacı, araştırma için uygun istatistiksel yöntemleri kullanmıştır. (220) formların dağıtıldığı yerde, araştırmacı istatistiksel analiz için geçerli anketleri (180) ithal etti ve verilerin geçerliliği (SEM-AMOS ve SPSS .V. 26.0.) kullanılarak uygun istatistiksel analiz için doğrulandı. Bu çalışma aynı zamanda bankacılık şirketlerinin iyi bir IC'sinin bir toplumun daha iyi bir yaşamına ne kadar daha fazla yardım getireceği konusunda bir farkındalık sağlamaktadır. (insan sermayesi, İlişkisel Sermaye, yapısal sermaye, sosyal sermaye, teknik sermaye)- Bu, Irak İslami bankalarında IC'nin örgütsel performans üzerindeki etkisini inceleyen çok az çalışmadan biridir. Çalışmada en önemlileri entelektüel sermayenin örgütsel performansı etkileyen boyutları olmak üzere çeşitli sonuçlara ulaşılmıştır. Çalışma, İrak İslami bankalarında çalışanların performansının iyileştirilmesinde en önemli faktörlerden biri olarak entelektüel sermayeye dikkat edilmesi gerektiğinin araştırıldığı İslami bankaların önermektedir.

Anahtar Kelimeler: Entelektüel sermaye; Örgütsel performans; Irak İslami bankaları

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#### **ABBREVIATIONS**

IC: Intellectual Capital

**HC**: Human Capital

**STC**: Structural Capital

**RC**: Relational Capital

SC : Social Capital

TC: Technological Capital

**OP**: Organizational Performance

#### SUBJECT OF THE RESEARCH

The Impact of Intellectual Capital Components on Organizational Performance: A Case Study of Islamic Banks in Iraq

#### PURPOSE AND IMPORTANCE OF THE RESEARCH

The significance of this study is derived from the significance of the subject matter it addresses, which aims to link variables that have become very significant in the field of business institutions, namely IC and its function in achieving financial performance by relying on organizational performance. It is considered one of the most important goals pursued by economic institutions, especially Islamic financial institutions, in order to gain a competitive advantage among Islamic banking financial institutions, IC has an important role in creating added value and attracting customers through excellence in exploiting the components of IC and using them in a way that achieves the goals that these institutions aspire to.

#### METHOD OF THE RESEARCH

There are a Collection of methods that can be used to collect information for the survey, and in this case, a questionnaire has been adopted and administered to managers in Islamic banks in Iraq to collect the information needed for statistical analysis

#### HYPOTHESIS OF THE RESEARCH / RESEARCH PROBLEM

The innovations in the banking sector should start by considering the importance of intangibles such IC, that are considered as platforms of innovation and organizational performance. IC concentrate more on the effectiveness and the quality of employees, staff, structure, and strategies of the organization. Neglecting IC development may result in issues like incompetent employees, subpar products or services, inefficient processes, and a disconnect from the outside world. Intellectual property (IP) is essential to Islamic banks because it represents intangible assets

containing information that may aid the institutions in achieving their aims and boosting their efficiency and effectiveness.

#### POPULATION AND SAMPLE (IF AVAILABLE)

The estimated population size for this research, as well as the sample size determination for this study, are explained in this section. In addition, the sample frame and sample approaches are emphasized in more detail to facilitate a better grasp of the subject matter.

#### SCOPE AND LIMITATIONS / DIFFICULTIES

Intellectual capital (IC) is currently a popular and widely discussed topic. According to Huang and Liu (2005), there is universal agreement that IC is a crucial factor driving a country's economic progress. Previously, enterprises were assessed and valued solely by their physical and tangible assets; however, the specifics of their financial or non-financial assets are now significant determinants in the valuation process; consequently, a very comprehensive evaluation of a company's genuine value is necessary.

This study has some shortcomings. The main impediment is connected with the sample of the study which seems relatively small. Another flaw in this research is that it is cross-sectional

#### **CHAPTER ONE**

#### INTRODUCTION

#### 1.1. Background of Study

Increasingly, corporations are finding it challenging to maintain control of their operations in an era defined by rapid change and high dynamism. We live in a time when the information economy and globalization are thriving, contemporary manufacturing is common, harsh rivalry is rampant, and recordkeeping and communication mechanisms are undergoing revolutionary changes all at once (Ireland & Hitt, 1999). As a result of the strain caused by these events, businesses had to be flexible and adapt to new organizational patterns focused on knowledge and intangible assets, or what is described as "Intellectual Capital (IC)" in fee generation. IC assets, such as human capital and customer connections, are critical in today's modern economic technologies for achieving business goals, preserving a competitive edge, and building company value. IC was regarded as one of the most significant resources for building and developing contemporary companies throughout the knowledge economy period. Consequently, most firms have turned to techniques of evaluation that are more successful in order to get the most from their intangible asset investments. Islamic Banks in particular – as well as Iraqi firms – have been forced to move their IC investments in order to ensure long-term organizational performance improvement as a result of the changing economic climate (Houhou & Mustafa, 2019).

The banking sector currently plays a crucial role in the development and growth of the country's economy. Financial transactions are made easier by the banking sector. Businesses have been driven to modify their business models in light of the competitive environment and the globalization of business challenges. Organizational resources, particularly IC, need to be capitalized when knowledge-extensive enterprises prevail in the competitive financial arena. In Iraq, the banking sector plays a critical role in the development and growth of the economy. Banks are a part of our daily lives, and we can recall this since they are a part of the economy's bottom backbone. Conventional and Islamic banking are the two main pillars of Iraqi

banking. For the Iraqi government, each of these sectors is working in parallel to enhance the country's economy, which is properly assessed (Salehi et al., 2022).

For the Islamic financial industry to thrive, individuals who have a thorough understanding of Sharia law are needed, as well as an organization that is able to put together the right resources to carry out work quickly and effectively in compliance with Sharia criteria (Mustafa, 2017). There has been a surge in interest in these intangible assets, as well as an expansion in the variety of their types, forms, and consequences. Its importance in producing value and gaining competitive advantages has expanded, and it has now become a new source of wealth for the institution, representing IC, which scholars now see as being just as valuable as tangible resources (Setianto, 2016, Laallam et al., 2022).

#### 1.2. Problem Statement

Competition is fierce, and firms strive to gain an edge by delivering value to their consumers, controlling the intellectual and personal capacities of their workforces, and improving their human skills and energies. Intangible assets including as knowledge, expertise, experience, and potential make up the bulk of IC, making it particularly valuable to businesses. It's the long-term future of the company that aims for long-term success. Moreover, IC is regarded as a key factor for the global improvement of organizations, and the backbone that ensures the company's life and continuation. An advantage for a firm is investing in IC, which it may use to grow its revenue and profits by leveraging the knowledge it gains from it. This unique technological knowledge enables intellectual contributions that increase the company's output (Taleb & Al-Abadi, 2006).

Competition in the financial sector market in Iraq is fierce, and in light of rapid development and a growth in financial and banking demands, Islamic banks must modernize systems and services and produce new Islamic banking products (Al-Ibrahimi, 2019). In order for Islamic banks to maintain a competitive edge, the Islamic financial sector must train its employees in Islamic banking methods while also teaching them Islamic sciences (Al-Mahali, 2021).

The innovations in the banking sector should start by considering the importance of intangibles such IC, that are considered as platforms of innovation and organizational performance. IC concentrate more on the effectiveness and the quality of employees, staff, structure, and strategies of the organization. Neglecting IC development may result in issues like incompetent employees, subpar products or services, inefficient processes, and a disconnect from the outside world (Laallam et al., 2020). Intellectual property (IP) is essential to Islamic banks because it represents intangible assets containing information that may aid the institutions in achieving their aims and boosting their efficiency and effectiveness (Ousama, Hammami & Abdulkarim, 2020). As a result, the purpose of this research is to assess the value of IC, how it can be measured, and how it contributes to the overall performance of companies within the Islamic banking business in Iraq.

#### 1.3. Research Questions

This study aims to answer the following questions:

- 1. What is the effect of human capital on organizational performance in Iraqi Islamic banks?
- 2. what is the effect of structural capital on organizational performance in Iraqi Islamic banks?
- 3. What is the effect of relational capital on organizational performance in Iraqi Islamic banks?
- 4. What is the effect of social capital on organizational performance in Iraqi Islamic banks?
- 5. What is the effect of technological capital on organizational performance in Iraqi Islamic banks?

#### 1.4. Research Objectives

This study aims to achieve the following objectives:

1. To investigate the effect of human capital on organizational performance.

- 2. To investigate the effect of structural capital on organizational performance.
- 3. To investigate the effect of relational capital on organizational performance.
- 4. To investigate the effect of social capital on organizational performance.
- 5. To investigate the effect of technological capital on organizational performance.

#### 1.5. Significance of the Study

The significance of this study is derived from the significance of the subject matter it addresses, which aims to link variables that have become very significant in the field of business institutions, namely IC and its function in achieving financial performance by relying on organizational performance. It is considered one of the most important goals pursued by economic institutions, especially Islamic financial institutions, in order to gain a competitive advantage among Islamic banking financial institutions, IC has an important role in creating added value and attracting customers through excellence in exploiting the components of IC and using them in a way that achieves the goals that these institutions aspire to.

#### 1.6. Research Scope

Intellectual capital (IC) is currently a popular and widely discussed topic. According to Huang and Liu (2005), there is universal agreement that IC is a crucial factor driving a country's economic progress. Previously, enterprises were assessed and valued solely by their physical and tangible assets; however, the specifics of their financial or non-financial assets are now significant determinants in the valuation process; consequently, a very comprehensive evaluation of a company's genuine value is necessary. This transformation is the primary reason why IC has essential importance for businesses and governments. The effective integration of human capital and business objectives to meet organizational financial goals and favorably influence shareholder value is essential for successful people management, according to Lockwood (2005, as referenced in Hejase et al., 2016). "companies may construct quantifiable leading-edge value indicators and easily communicable current

accomplishments that frontline people can directly affect and that have a big good influence on the long-term value of the firm," as Rappaport (2006) puts it. There are numerous motivations for scholars to examine this topic. First and foremost, this study will help readers and researchers understand what IC is. Readers will comprehend how these tools assist to bank achievement. Managers and entrepreneurs will be able to determine the underlying worth of banks and will understand how to utilize the most precious assets - people - to access deeper influence within banks. This study will also highlight the significance of investigating workers' skills and requirements. It will primarily define how IC will be handled in order to maximize its power to create wealth. Banks may be ignorant of the amount and significance of their IC to their long-term viability. Accordingly, this research explores how bank's view IC and how it is managed in Islamic banks in Iraq.

#### 1.7. Key Terms Definition

#### 1.7.1. Human Capital

According to Ding and Li (2010) state that human capital is the investment in an organization's ultimate success made up of employees' skills, expertise, and other intangible assets. The importance of human capital to IC has been recognized (Edvinsson & Malone, 1997; Stewart, 1997; Bontis, 1998; Choo & Bontis, 2002; Shaari, et al., 2010). Bontis (1998) argues that it is clear that human capital in an organization is a source of strategic innovation and creative thinking. The success of IC introduction depends on the skills, mindsets, and intellectual acuity of the company's personnel, say Roos & Roos (1997) and Shaari et al. (2010). Therefore, a company's human capital is its most valuable asset.

#### 1.7.2. Relationship Capital

This is the cost that a group offers to a firm, which is derived from the quality of service it provides or the ideals of its clients. This capital is entirely present in each part of the firm's environment that permits the generation of cost for the company (Abdel Moneim, 2009).

#### 1.7.3. Structural Capital

It relates to an organization's present business processes. It includes the costs of research and development, trademarks, inventions, and patent rights. Structural capital is also impacted by organizational culture, which refers to the rules and values held by an organization's personnel (Hsu & Fang, 2009). Furthermore, behavioral conventions and unwritten regulations, such as employee appearance and attitude, are linked to human capital. It has been stated that a company's organizational culture is a valued asset. A strong corporate culture is important in efficiently servicing clients and has a beneficial impact on organizational performance (Andreeva & Garanina, 2016; Saleim et al., 2004).

#### 1.7.4. Social Capital

It is described as "a resource that represents the nature of social ties inside an organization" (Bueno et al., 2006, p.?). It has been stated that social capital is an asset that improves both organizational and personnel performance. According to Inkpen and Tsang (2005), employees of a company can tap into the resources available in social capital even if they did not contribute to the network's development.

#### 1.7.5. Technological Capital

It includes information technology (IT), research and development (R&D), and innovation. The current technical capital is critical for making information accessible and quickly shared with others. The collection, storage, and circulation of information will be facilitated by technological capital (Ngah, 2011). A study of fabless enterprises in Taiwan discovered that innovation and information technology had a favorable influence on the companies' success (Lu et al., 2010).

#### 1.7.6. Organizational Performance

Identifying the performance of an organization reveals the degree of the organization's ability to deal with environmental determinants and the degree of appropriateness of strategic action for the organization's goals and resources. An organization's performance reflects how it uses its materials and invests them in

achieving its goals. Or it is the result of all the operations performed by the organization and the shortcomings in it that performance shows (Sawsan, 2008).

#### 1.8. Thesis Organization

Chapter 2: This chapter is devoted to a discussion of the factors of the study conducted by other academics and researchers, as well as their conclusions. In addition to the definitions, explanations, and arguments put up by them, it also contains the findings that they reached after conducting numerous research. The researcher also presents hypotheses on some of the factors that were used to obtain insight into the problem at hand. In addition, the conceptual framework that functioned as a framework for the research illustrates the conceptual model as well as the hypothesis that leads the model's development.

Chapter 3: This chapter describes how the whole data gathering procedure was conceptualized and planned. The research strategy and methods that served as the parameters for the study are described in detail in this section. The researcher also described the sampling procedure that was used to pick the respondents, as well as the sample that comprised the study's participants. Additionally, the researcher stated how they planned to gather the data as well as the equipment that would be utilized to do this task.

**Chapter 4:** This section As described in this chapter, we used SPSS and SEM-AMOS to generate Demographic descriptive statistics, a regression model, a correlation test, a normalcy test, and a measurement of relevant and crucial customer responses We then determined whether or not to accept the theory based on these interesting results.

**Chapter 5:** In this chapter all discussions on conclusions and findings of research analyses, as well as recommendations are presented. The first section of this chapter contains a summary of results that will help at achieving the research goals. After that, we concentrated on ideas and proposals that may contribute to the improvement of financial services and the advancement of research in the future.

#### **CHAPTER TWO**

#### LITERATURE REVIEW

#### 2.1. Introduction

The objective of this study is to identify the factors that influence the organizational performance in the banking industry. This chapter focuses on the literature relevant to the subject, such as the influence of human capital (HC), structural capital (STC), relational capital (RC), social capital (SC), technological capital (TC). They altogether constitute one section which are the independent variable of this study, while the dependent variable is represented in organizational performance (OP). This chapter reviews and clearly concentrates on the organizational performance in the banking industry in Iraq. In general, this chapter discusses the HC, STC, RC, SC, TC, and OP within the Iraqi banking sector.

#### 2.2. Islamic Banks in The Iraqi Environment

Islamic banks are not considered a modern industry in the Iraqi environment, as it extends to more than two decades since the establishment of the first Islamic bank in Iraq under the name of the Iraqi Investment and Development Bank in 1993 (Molyneux & Iqbal, 2016).

The accounting regulation that takes into account the privacy of Islamic banks in the Iraqi environment was late, as it relied in organizing their work on the provisions of the laws applicable to conventional banks, such as the law of public and private companies, the banking law, the law of central bank of Iraq and the anti-money laundering law. The central bank turned to the privacy of Islamic banks and began to organize their work through a set of laws, instructions, and controls that govern their work.

The Islamic Banking Law in Iraq No. (43) of 2015 published in the Iraqi Gazette No. (4390) on December 7, 2015 was enacted, as the law included most of the paragraphs mentioned in the banking instructions above, and the law added a set of legislative articles to regulate Islamic banking more, as it touched upon The

mechanism for establishing Islamic banks is to be subject to the provisions of the Public and Private Companies Law (21) and (22) respectively for the year 1997 and the Banking Law No. (94) for the year 2004. As for obtaining a work permit, it is subject to the provisions of the Central Bank of Iraq Law No. (56) for the year 2004 as amended and the above banking law (Al Thabit et al., 2021).

The Central Bank of Iraq, according to its book No. (289) on 1/8/2018, circulated the controls of Islamic financing tools to work according to what was stated in the Islamic Banking Law Article No. 15, which stipulated (the bank may issue instructions to facilitate this law) and the controls came so that these tools are compatible with the international Islamic financial companies' accounting and auditing requirements (AAOIFI) (Al Thabit., 2021).

#### 2.3. Intellectual Capital (IC)

The correlation between IC and business success has been studied extensively. Most previous research has relied on the The VAIC model provides a consistent and comprehensive evaluation of intellectual capital and allows empirical comparisons between enterprises and nations to discover how IC influences the financial performance of firms in the banking and finance industries (Pulic & Bornemann, 1999; Mavridis, 2004; Goh, 2005; Nazari & Herremans, 2007; Yıldız, 2011; Gigante, 2013; Mohammadi & Taherkhani, 2017; Ozkan et al., 2017; Tran & Vo, 2018). While some research has suggested that IC significantly and positively affects the bottom lines of banking sector companies (Bassi & Buren, 1999; Chen Goh, 2005; Pew Tan et al., 2007; Zeghal & Maaloul, 2010; Ozkan et al., 2017), Some studies have identified positive correlations between IC and corporate financial success, while others have found either no correlation or an inverse relationship (Firer & Williams, 2003; Bharathi, 2008). (Maria, 2014).

To the best of the researcher's knowledge, there is a dearth of studies in the relevant literature that focus on the importance of IC in the rapidly expanding field of Islamic banking. Nawaz and Haniffa (2017) conducted an empirical analysis of the effect of IC on the financial performance of 64 Islamic financial institutions operating in 18 different countries between 2007 and 2011 utilizing VAIC methodology and a bank scope database. Human capital efficiency and employed capital efficiency play a

major role in their empirical findings, which provide support for the value production of Islamic financial institutions. In 2013, Musibah and Alfa analyzed data from an empirical study of 53 Islamic banks in the countries of the Gulf Cooperation Council (Saudi Arabia, Kuwait, the United Arab Emirates, Qatar, Bahrain and Oman). Their research shows that IC negatively correlates with the CSR initiatives of regional Islamic financial institutions. In particular, although improvements in the efficiency with which banks use various forms of capital asset have had a positive effect on their corporate responsibility, improvements in the efficiency with which they use human capital have had a negative effect. Before and after the 2008 financial crisis, Nawaz (2017) looked into the practices of 47 Islamic banks in GCC countries. He argues that IC is essential for Islamic banks to weather the current economic storm, and that increased effectiveness in the use of IC may help these institutions continue to turn a profit.

Since the last 30 years have witnessed great growth in the Islamic banking business in Muslim-majority countries like as Malaysia, Indonesia, and Pakistan, several studies have been undertaken recently to evaluate the progress of Islamic banks in terms of IC. For instance, Husnin et al. (2014) analyzed the economic and creative output of 15 Islamic banks in Malaysia between 2008 and 2012. Using the VAIC method on a panel dataset, they discovered a correlation between Islamic banks' intellectual capital and their financial success in Malaysia. To further explore the effect of intellectual capital on the organizational performance of the Islamic banking sector, Khalique et al. (2013) conducted a similar study on the Malaysian Islamic banking industry. The researchers utilized multiple regression and Pearson correlation analysis on data from 120 individuals. They found that intellectual capital significantly affects the organizational performance of Islamic banks in Malaysia.

Similar as how Ousama and Fatima (2015) evaluated the efficiency of Malaysia's Islamic banking system, they looked at the connection between IC efficiency and financial results. Human capital efficiency (a component of VAIC) was found to have a significant impact on the profitability of Islamic banks using data from their annual reports for 2008, 2009, and 2010. Optimal utilization of IC and resources was also found to boost bank profitability. The IC and financial performance of Islamic banks in Malaysia and Indonesia from 2010 to 2014 were analyzed objectively by Setianto and Sukmana (2016). When compared to their Indonesian counterparts,

Islamic banks in Malaysia were determined to be more efficient conceptually. Their research also shows that Islamic banks in Indonesia and Malaysia that are more efficient in terms of human capital efficiency and employed capital efficiency are also more likely to be successful. From 2013 to 2016, researchers Setyawati et al. (2019) looked at 11 Indonesian Islamic banks' financial performance in relation to their intellectual capital. It was shown that in Indonesia's Islamic banking sector, intangible assets such as standard operating procedures, data storage, structural processes, and so on had a significant effect on return on assets and asset growth. Intellectual property was studied by Rehman et al. (2011) and Yao et al. (2019) in Pakistan's Islamic banking business, yielding results that were similar to those found in Malaysia and Indonesia.

#### 2.3.1. The Concept of Intellectual Capital

Most researchers use the term intellectual capital to describe intangible assets. According to a group of empirical studies, intangible (intellectual) capital is referred to as the knowledge that an enterprise possesses Here, it must be noted that this term is attributed to John K Galbraith, and it appeared in 1969, He believed that IC includes now no longer simplest expertise and understanding however additionally the capacity to use them as a way to generate value (Yadegari, 2018).

Intellectual capital is defined as a combination of human capital on the one hand, which consists of creative minds, multiple skills, ideas and capabilities of those in the institution. And structural capital on the other hand, which consists of operations, databases, brands, information technology systems and organizational structures in the institution.

It expresses the foregoing, that is the cap potential to convert understanding and intangible belongings into wealth-growing assets. By multiplying human capital with the aid of using structural capital (Vairinhos. 2020). Relevant literature indicates that there's no unmarried definition of IC. According to the IASB, highbrow capital consists of non-economic constant belongings that aren't economic in nature however may be diagnosed and managed with the aid of using businesses. Based in this definition, highbrow capital specifically consists of patents, emblems and goodwill. As highbrow capital will become the principal motive force in enhancing performance

(Babai, 2016). It is brought to the preceding definition as visible with the aid of using (Turkish, 2016) Intellectual capital is the incorporated intellectual strength, which incorporates a mixture of understanding, information, highbrow traits and innovative reviews which can be owned with the aid of using the personnel of the employer Which are the principal assets of latest economy. In the equal field, highbrow capital is described because the intangible cost of a commercial enterprise activity and it relies upon generally at the extent and degree of understanding of the human assets with inside the employer (Ståhle et al., 2015).

The OECD defines IC as the "knowledge and information-based intangible resources of a firm " (OECD, 1999). According to the OECD, even if these resources are not readily and universally assessed, they always have a positive influence on business performance. IC is defined by the OECD as "human, structural, and relational capital." Human capital, in a broader sense, refers to resources such as competencies, know-how, and knowledge.structural capital, to resources such as work procedures and information systems; and relationship capital, to resources such as customer connections and brands. Similarly, Roos and Roos (1997) state that IC is divided into three categories: human capital, organizational capital, and customer or relationship capital. According to them, because IC is not entirely visible in a corporation, it cannot be properly represented on the balance sheet. Furthermore, managers should be aware of the need of assessing and following up on IC because it is highly helpful and vital for all organizations functioning in any field. According to Sveiby (1997), intangible assets include outward structure, internal structure, and human capital. In other words, a company's intangible assets may be tracked through a mix of customers and suppliers, as well as organization and human competency. Although it appears that the relevance of IC has grown during the 2000s, certain research have shown its value prior to these years. Stewart (1991) claims in one of these studies that IC is becoming increasingly valued in American corporations and would give the finest competitive edge for them. The research also notes that identifying what these businesses have and then putting it to use are two extremely difficult difficulties for them. Petty and Guthrie (2000) also highlighted the importance of IC, stating that the value of human capital and technology is rising faster than the value of traditional resources and systems in businesses. As a result, it is vital to raise firms' awareness of IC in order to make them eager to investigate how and why they should try to boost IC.

Researchers agree that the relevance of IC has grown in recent years. When it comes to the concept of IC, we observe that, while some of them have somewhat distinct perspectives, practically all of them have many intersections with each other. As a result, it may be feasible to agree on the optimal definition of IC, or it may be redefined by including and utilizing all current definitions. However, we can see that measuring IC is more complex and harder than describing it. Because most IC measurement methods have subjective components, a relatively simple and objective approach for measuring it is necessary, according to Pulic (1998). Companies that want to be successful today must generate value inside their organizations, which may be accomplished by effectively utilizing knowledge. Pulic (1998) proposes the VAIC model, which assesses the IC using monetary criteria, in order to give an objective and straightforward way.

#### 2.3.2. The Importance of Intellectual Capital (IC)

The Organization for Economic Co-operation and Development (OECD) emphasizes the importance of IC and gradually moves away from the traditional field of physical asset investment. OECD emphasized that the time has moved towards investment in intangible assets. This is because, intangible assets are flexible in the event of a crisis. Furthermore, they are classified less sensitive and less risky than physical assets (Eugénia Pedro, 2018). According to OECD (2011, 2013, 2016), Investment in intangible assets contributes to the growth of exertions productivity in evolved international locations which includes America, Japan and the EU Union. The same organization points out the importance of cooperation between trading countries, and the World Bank estimates that the dominant form of wealth in these countries depends on international cooperation. The European Commission also places particular emphasis on the issue of international cooperation, especially with regard to strengthening innovation policies (Abazeed, 2017).

The importance of IC is represented in the following points according to Fangash (2017):

1. Competitive advantage: Companies are looking for a competitive advantage that distinguishes the goods and services they produce from others, which makes the

beneficiaries accept to deal with them. Examples of competitive advantage are low costs, high quality of goods or services, flexibility and ideas.

- 2. Great fortune: The importance of IC as it is a source of wealth generation, as three-quarters of the added value is derived from knowledge, and more than that, learning results in a power in profit.
- 3. IC is the future of organizations seeking success in the long run, as it essentially represents the possession of individual expertise, experiences, techniques and competencies in the organization.
- 4. IC is the primary key success factor of an organization in today's world, as it is a fixed force that guarantees the survival of the organization.
- 5. Johansson (2014) contributed to the importance of IC by providing the organization with the skills and abilities that are fundamentally contributing to the success of the organization. It is also a real funding in expertise and records on the way to assist the included gadget. Miles clinical strength has the capability to create, change and innovate. In conclusion, he asserts that knowledge and skills are as important as one of the sources of wealth in an organization, as they require a high degree of attention and attention to maintain productivity.

#### 2.4. The Components of Intellectual Capital (IC)

IC is an intangible element, a shape of tacit information that contributes maximum to the manner of making a living for a company, and may be in addition subdivided into 5 sub-dimensions: HC, STC, SC, RC and TC (Marco Bellucci et al., 2021), Martín (2019) Believes that a number of the additives of IC is that HC and SC are among the subjects of developing interest specifically with inside the current length due to its superb results that paintings to draw buyers and customers, because it will increase in handling the establishment. Intellectual capital consists of main components:

#### 2.4.1. Human Capital (HC)

It is the performance that emerges from individuals and contributes to improving human productivity. It is represented in the individuals' intellectual and knowledge production, the innovations they provide, and the non-traditional solutions they contribute to improving performance in general (Chowdhury, 2019). The economic impact of HC practices, and the role of individuals in providing value-added innovations that enhance competitiveness and profitability, reduce costs, as well as increase employment opportunities (Uddin, 2020).

The importance of HC is reflected in its active role in the life of organizations, as it is one of the most important elements in the production process. It helps in innovation and creativity and achieve a competitive advantage. In mild of technological progress, which reduces the roles that require expertise and is represented via way of means of an aggregate of experience, awareness, skill, values and information, the significance of human capital crystallizes (tanay, 2016). This impacts performance and new knowledge as it helps to increase plant efficiency, increase productivity, improve customer service, influence partners, new idea owners, and generate the necessary funding. It is one of the important and unique sources of information that can help you create or start a new project (Chaudhry, 2017).

HC represents the only distinct wealth that cannot be easily imitated, such as skills, talent, motivation and experience. It is the only way to compete in the knowledge economy. Which can occupy the place completely and contribute significantly to creating organizational value, and has a great impact as a source of innovation its importance also comes through its active role as a decisive factor for sustainable competitive advantage (Shafii, 2020).

#### 2.4.2. Structural Capital (STC)

STC Represents the procedures structural performance, experience, and organizational and institutional knowledge accumulated in the institutional organization, which is owned by the institution and works through it to improve institutional performance and achieve the goals it seeks (Kim, 2018). In addition to reducing the costs of managing relationships with suppliers and improving the quality

and cost of inputs, With the identification of the best organizational procedures that contribute directly to maximizing the returns from managing and organizing the supplies and inputs of operational processes (Oduro, 2020).

So, it is the philosophy of the organization, its administrative systems, and its ability to manage its capabilities in terms of capital operations, techniques, procedures, and programs implemented, and to enhance the receipt and delivery of goods and services. As well as capital, innovation, intellectual property, intangible assets, policies and procedures for applied programs for research and development, training courses and patents (Tayeh, 2020).

#### **2.4.3. Relationship Capital (RC)**

RC displays the character of the relationships that the company has with its customers, suppliers, competition or any party, every other enable in growing and remodeling the concept right into a product or service, too often, the company limits its picks and its capacity to growth value, via way of means of searching at person objects handiest for its meant purposes (Hamed, 2018). Managers emphasize the importance of satisfying customers' needs and desires, their devotion, as well as the creation and presentation of their business Feedback, brand recognition, and ongoing market orientation are the foundations for the institution gaining a market share among its rivals. (Antonio, 2015).

To improve its human and structural resources, an organization can increase its relationship capital by cultivating positive external interactions and effective communication. A company's internal knowledge capacity may be bolstered by the strength of the ties it maintains with its suppliers, customers, and local and international partners. This demonstrates the significance of relational capital, particularly for service-oriented businesses whose success hinges on their ability to meet the expectations and gratify the desires of their clientele. When an organisation has strong relationships with its customers and suppliers in terms of quality of those relationships and mutual understanding, it may expect higher demand to follow (Razalli, 2019).

RC impacts organizational performance, that is a crucial monetary indicator for measuring sustainable improvement. Relational capital has been an influential issue in sustainable social improvement. The concept of sustainable improvement indicated that social sustainability and monetary sustainability are intently related (Wang, 2021).

#### 2.4.4. Social Capital (SC)

SC Is one of the relatively new concepts in management thought It is defined at the organizational level as a multidimensional concept that is intertwined with other terms synonymous with it. Perhaps this case accompanies every new emergence of ideas and concepts in the humanities and social sciences, causing confusion when using it. Which made the need continue at the academic level in the research to agree on a basic content for this concept and with a clear vocabulary that gives it distinction from other concepts (Kassar, 2015).

#### 2.4.5. Technological Capital (TC)

Information technology (IT), including research, development and innovation, can be considered as a component of TC. It allows speed in providing information and knowledge to others. The presence of TC is important because of its broad capabilities in collecting, storing and distributing information, as technical capital has a positive impact on innovation and company performance in the main (Jameelah, 2015).

#### 2.5. Organizational Performance (OP)

The term performance first appeared in the mid-19th century and was first used to determine the outcome of athletics. In the 20th century, this concept evolved and developed a set of definitions aimed at encapsulating the broadest meaning of what is perceived by performance. Currently, there is no goal-independent benefit. Achieving the goal also leads to achievement. Due to the uncertainty and overlap of organizational goals, performance decisions are increasingly difficult as they are relative measures (Iuliana, 2019). Today's society relies on the development of technology, knowledge and globalization, which inevitably contributes to its rapid development. For this reason, the roles of manager and leader are essential to building

a learning organization. This can only be achieved through the success of the organization by rethinking the strategies and values underlying the

Decision-making process and the role of leadership at the organizational level, are reflected in the fact that both the efficiency of activities of the entire work team and the skills of leaders are taken into account in order to achieve the goals of the organization. Therefore, the role of leadership in the modern context is emphasized by the need for both corporate organizations, individuals, and the world as a whole (Eleonora, 2020).

The literature contains several definitions of OP. It is then expressed as the ability to achieve results through acceptable processes. In addition, organizations seek to meet their needs and stakeholder needs in order to survive and move forward (Maqableh, 2017). OP is defined as the actual performance of the company compared to what was planned according to the company's desired goals (Singh et al., 2016). Pointing out that what is measured in the planned output is the actual output of the company or its result. It is also the effectiveness of the company in the efficiency of each member (Tomal & Jones, 2015).

#### 2.6. Intellectual Capital Theory

Jon Kenneth Galbraith popularized the term "IC" in 1969. (Chang & Hsieh, 2010; Khalique et al., 2011). There are several definitions of IC that are closely related, and various scholars give explanations of its role. According to Kozak (2011), the idea of IC is yet immature, and there is no agreed consistent definition for defining its sub-components. IC is a repository of concentrated and structured information (knowledge) that a company may utilize to be more productive (Edvinsson & Sullivan, 1996). The best definition of intellectual capital is "packaged usable knowledge," which is provided by Stewart (1997). Stewart (1997) defines intellectual capital as the ability to create value via the use of a company's accumulated knowledge, information, technology, skills, expertise, intellectual property, customer loyalty, and strong team management. According to Roos and Roos (1997), intellectual capital encompasses both human capital and in-kind assets. According to Edvinsson (1997), intellectual capital is the mix of human capital and structural capital. Stewart distinguishes three types of intellectual capital: human capital, relational capital, and structural capital

(1997). The three components of IC are human capital, relational capital, and structural capital, as agreed upon by Sveiby (1997), Brooking (1996), Edvinsson (1997), Roos et al. (1997), Bontis (1998; 2000), and Kujansivu (2000). (2009).

According to the researchers, a company's intellectual capital is built on intangibles including its workers' expertise, information, training, skills, intellectual agility, brand image, relationships with customers, and corporate structure. The authors Bueno et al. (2004) and Wu and Tsai (2005) define intellectual capital as including both social capital and technology capital (2005). Ismail (2005) makes an argument that spiritual capital, like intellectual capital, should be taken into account. Human capital, organizational capital, structural capital, technological capital, social capital, and relational capital are all elements of intellectual capital, as defined by Ramezan (2011). An key takeaway from this literature review was the realization that distinct forms of intellectual capital are rarely employed togetherwithin the same type. Human capital, relational capital, structural capital, social capital, technical capital, and spiritual capital are some of the common subcategories of intellectual capital. Instead, Khalique et al. (2011) created a new paradigm that takes these many forms of capital and unifies them. Khalique, et al., claim that intellectual capital is crucial to knowledge-based economies (2011). Business owners are urged to study and monetize their most valuable intangible assets.

#### 2.7. Theoretical Framework and Research Hypotheses

## 2.7.1. Relationship Between Human Capital and Organizational Performance

According to Khalique et al. (2015), as company owners or corporate executives want to remain competitive in today's market, they need to learn how to put a price on their intangible assets, such as their human capital. Managers could advocate for open communication amongst staff members in order to boost productivity and take use of the wide range of skills present in any given workforce.

Furthermore, Buallay et al. (2020) prove the positive effect of intellectual capital on bank performance in GCC states by analyzing the relationship between human capital efficiency and capital-employed efficiency. They illustrate that raising

ROE and increasing Tobin's Q can be accomplished through better management of intellectual capital. The intellectual capital subcomponents of a bank's performance benefit from increased human capital efficiency and capital utilized efficiency. Profitability and productivity can only go up so far as intellectual capital performance goes, according to research by Haris et al. (2019). Further increases in intellectual capital are correlated with declining business results once this threshold has been reached.

According to Yao et al. (2019), human capital efficiency has the greatest influence on company performance. Poh et al. (2018) also confirm that capital used efficiency is related to return on assets (ROA). However, Tran and Vo (2018) suggest that intellectual capital is unrelated to Thai bank financial success. They conclude, however, that capital utilized efficiency has the greatest influence on bank profitability. According to Ozkan et al. (2017) and Singh et al. (2016), human capital efficiency and capital utilized efficiency have a beneficial influence on bank performance. Capital employed efficiency has the greatest influence on public sector banks, while human capital efficiency and structural capital efficiency are also related to bank performance (Meles et al., 2016; Mondal & Ghosh, 2012).

**H1.** Human capital has a positive and significant relationship with the organizational performance of Iraqi Islamic banks.

## 2.7.2. Relationship Between Relational Capital and Organizational Performance

Relational Capital (RC) is the information embedded in relationships with every stakeholder that has an influence on the business and benefits its longevity (Bontis et al. 2000). In other words, RC is the The firm's external contacts, such as those with customers, suppliers, distributors, partners, the local community, and all other parties, include value and information (Inkinen, 2015). Conducting knowledge creation, building project databases, and fostering internal and external contact with various stakeholders all contribute to the organization's ability to increase its level of RC (Gogan, 2014). According to Cabrita and Bontis (2008), relationship capital is the information inherent in connections with consumers, suppliers, industry associations,

and other stakeholders in order to affect organizational performance (Tripathy et al., 2015).

The interaction of organizational elements Collaboration by stakeholders, through a complicated system of borders and agents who may bridge gaps because to the inherent variability in the surrounding environment, can increase RC and organizational learning (Urban & Greyling, 2015). According to the researchers, a structure of organization that promotes decision-making that is inclusive procedures promotes corporate education and aids in the development of RC (Chiva et al., 2007). Failure to connect to the appropriate network may limit access to resources and impair employee morale, limiting the organization's ability to grow and expand its RC (Gogan, 2014). Furthermore, in some investigations, RC has been demonstrated to be favorably related with OP (Bontis, 1998; Bontis et al., 2000; Cabrita & Vaz, 2005; Cabrita & Bontis, 2008; Inkinen, 2015).

**H2.** Relational capital has a positive and significant relationship with the organizational performance of Iraqi Islamic banks.

# 2.7.3. Relationship Between Structural Capital and Organizational Performance

According to Khalique et al. (2018)'s research on the link between structural capital and organizational performance, structural capital has a strong beneficial influence on organizational performance. This is because the presence of the finest infrastructure and management system may give employees with access to important information as well as possibilities to enhance skills or education in order to promote organizational innovation and processes. Based on this discovery, the following hypothesis is proposed in this study:

**H3.** Structural capital has a positive and significant relationship with the organizational performance of Iraqi Islamic banks.

# 2.7.4. Relationship Between Social Capital and Organizational Performance

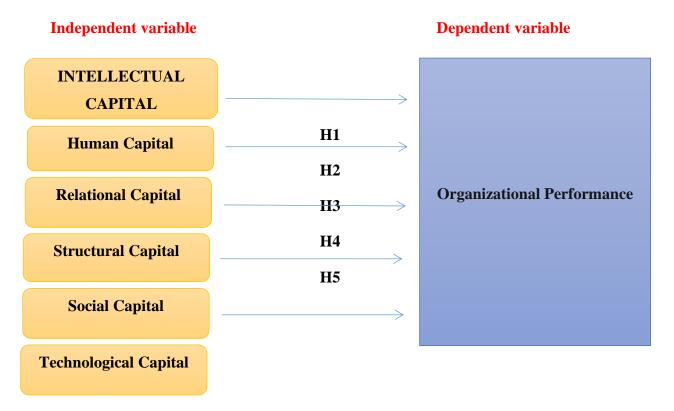
According to Khalique and Pablos (2015), The value of social capital to an organization is substantial. The firm recognizes the value of social capital and actively pursues its cultivation. This is because social capital can help build professional networks characterized by trust and mutual respect, which in turn can lead to a competitive advantage in a knowledge base, employee and company collaboration, and the cultivation of good relationships with suppliers or suppliers or other business partners in order to generate solutions for effort. Therefore, the following theory has been advanced by this investigation:

**H4.** Social capital has a positive and significant relationship with the organizational performance of Iraqi Islamic banks.

# 2.7.5. Relationship Between Technological Capital and Organizational Performance

According to Hashim et al. (2015) and Khalique et al. (2018), technology capital improves organizational performance significantly. This is due to the fact that technical advancements may make it simpler to manage a firm and generate competitive ideas. As technology advances, the outcomes of innovation and the company's aims will be optimized and become more effective and efficient. This might have a good influence on the organization and help it expand. As a result, the following theory is proposed:

**H5.** Technological capital has a positive and significant relationship with the organizational performance of Iraqi Islamic banks.



**Figure 1.** The Conceptual Framework

#### 2.8. Gap in Literature

The topic of IC is of great importance in the field of management sciences. The researcher considers that This subject is critical because of the important function that IC plays in improving the OP of organizations, including the banking sector in general and Islamic ones in particular, and in light of the growing desire of most business organizations Orientation towards the educated organizations model as it is most compatible with the changes in the environment in which these organizations are active, which can benefit the institutions working in the Iraqi environment in general and the Islamic banking sector in particular as it was an area of field study.

Although the aforementioned studies unanimously agreed on the existence of a positive impact of the components of IC on OP, regardless of the target sector or the country in which the study was conducted, Accordingly, this study will not depart from the general framework of this problem, but what distinguishes this study from its predecessors is that it dealt with the Islamic banking sector, which is bounded by a set of Islamic Sharia restrictions.

It also included technological and social capital in addition to the common components of IC in order to achieve quality in OP, which will reflect on the profitability of the organization and ensure its market share. The following are the most important points that distinguish the current study:

- 1- On the theoretical level: The current study is distinguished by the fact that it sheds light on a number of concepts that are still recent in Arabic studies.
- 2- On the field level: This study targeted the Islamic banking sector in the Iraqi environment, as "according to the researchers' knowledge, there are few studies that cover this sector completely, and the importance of this sector is highlighted in that it is most in accordance with the study's topic.

### 2.9. Chapter Summary

The second chapter discussed IC and its impact on OP in banks, and also reviewed the literature on previous and current empirical work on the six variables of the study which are (human capital, relational capital, social capital, technological capital, structural capital and organizational performance). the variables were reviewed and discussed to provide a better interpretation that leads to the formulation of hypotheses to answer the research questions, theoretical foundations of intellectual capital, and the possibility of establishing relationships between theories and entire structures.

#### **CHAPTER THREE**

#### RESEARCH METHODOLOGY

#### 3.1. Introduction

This chapter highlights the study's research approach, as well as identifies the study's community and describes the characteristics of its members. Also, this chapter presents the method of building the study tool and ensure the ratification of the study tool (questionnaire). Statistical methods used in analyzing data also are highlighted in this chapter.

#### 3.2. Research Design

The researcher in this study employed the quantitative approach of research because it quantifies the phenomenon and clarifies its characteristics; this strategy is grounded in studying the phenomenon in its natural state, describing it accurately, and expressing it quantitatively. A thorough survey was adopted from previous studies on the topic of IC, and all data was analyzed by responding to questionnaire items sanctioned by the study, while quantitative expression gives numerically (Obeidat et al, 2001), revealing the amount or size of the phenomenon and the degrees to which it is related to other phenomena. It also involves analysis, linking, and interpretation to reach conclusions based on the given scenario, as opposed to merely collecting facts on the phenomenon to examine its different forms and relationships (Al-ssaf, 2000).

#### 3.3. Population and Sample Size

The estimated population size for this research, as well as the sample size determination for this study, are explained in this section. In addition, the sample frame and sample approaches are emphasized in more detail to facilitate a better grasp of the subject matter.

#### 3.3.1. Population Size

A researcher's population consists of everyone, everything, or everything of interest that has to be studied (Sekaran & Bougie, 2016). According to Klassen (2012), the term "population" refers to a group of individuals who have enough observable characteristics to be examined collectively. Results from a survey may be extrapolated to the entire population by selecting a sample that accurately reflects that population (Gobo, 2004).

#### 3.3.2. Sample Size Determination

A method for looking at the sample size is as a fraction of the entire population that can be collected. It's a sample size that's calculated using data from the full population or a subset of it that's been selected for analysis. In addition, data collecting was cited as one of the primary goals of the sampling process by Sekaran and Bougies (2016). Research relies heavily on the accuracy of its samples, and as it is difficult to subject an entire huge population for information collecting, determining an appropriate sample size is crucial. With the right number of participants, you can gather data more efficiently and accurately, and you won't have to worry as much about making mistakes.

As of the year 2022, 340 people were employed by Iraq's Islamic financial institutions. Thus, 180 workers were chosen for this study based on the sample size selections made using Krejcie and Morgan's (1970) sample determination table. With this study's sample size being as large as it is. The current study adopts a common method to adjust the sample size that was first introduced by Malhotra (2012) to make the sample size more accurate and reliable, to reduce errors in the sample size, and to avoid the problems of lack of responses that typically arise while conducting survey research (Bartlett, 2001).

**Table 1.** Sample size calculation

| N  | S  | N   | S   | N    | S   |
|----|----|-----|-----|------|-----|
| 10 | 10 | 220 | 140 | 1200 | 291 |
| 15 | 14 | 230 | 144 | 1300 | 297 |
| 20 | 19 | 240 | 148 | 1400 | 302 |
| 25 | 24 | 250 | 152 | 1500 | 306 |
| 30 | 28 | 260 | 155 | 1600 | 310 |
| 35 | 32 | 270 | 159 | 1700 | 313 |
| 40 | 36 | 280 | 162 | 1800 | 317 |
| 45 | 40 | 290 | 165 | 1900 | 320 |
| 50 | 44 | 300 | 169 | 2000 | 322 |
| 55 | 48 | 320 | 175 | 2200 | 327 |
| 60 | 52 | 340 | 180 | 2400 | 331 |
| 65 | 56 | 360 | 186 | 2600 | 335 |
| 70 | 59 | 380 | 191 | 2800 | 338 |
| 75 | 63 | 400 | 196 | 3000 | 341 |
| 80 | 66 | 420 | 201 | 3500 | 346 |
|    |    |     |     |      |     |

Source: "Research Methods for Business A skill-building approach" by (Bougie &Sekaran, 2019)

When selecting a sample from a larger population, a simple random sampling (SRS) ensures that every member of the sample has the same chance of choosing any other member. Using SRS, the probability of selection for any given group of people k is independent of other groups of individuals k (Stapleton, 2018). The use of a simple a random sample is the cornerstone of every unbiased sampling strategy. There are many different types of sampling, but one of the most basic is random sampling (Qian et al.,2021).

#### 3.3.3. Sample Techniques

This study followed the suggestion of Bryman and Bell (2015) and used the random sampling method to obtain a representative sample from the entire population. Simple random sampling, according to Hair et al. (2017), is to choose a random initial starting point in the list, and then randomly select each n element in the sampling frame. Zickmond et al. (2013) elaborate on this concept by defining simple sampling as a technique in which a random starting point is selected, and then the N number of population items per unit is randomly selected.

The present study employed a simple random sample approach to generalize the results to the entire population (Bryman & Bell, 2015). Based on his findings, Creswell (2012) advocates for a random sampling strategy, wherein samples from a given population are picked at random. The goal of using a simple randomized sampling method is to have the characteristics of the sample more accurately reflect those of the population as a whole (Sekaran & Bougies, 2016).

In addition to reducing the potential for human error and bias in the selection of instances in the sample, simple random sampling is also advantageous since it is quick and simple to use. It guaranteed that a representative sample of the population was drawn, and it enabled for in-sample statistical analysis to be performed (Hair et al., 2017; Sekaran & Bougies, 2016; Zikmund et al., 2013). In the current study, an appropriate sampling strategy was adopted and was effective in previous studies (Aliyu, 2014).

#### 3.4. Data Collection Method

There are a Collection of methods that can be used to collect information for the survey, and in this case, a questionnaire has been adopted and administered to managers in Islamic banks in Iraq to collect the information needed for statistical analysis. According to data collected by the Central Bank of Iraq, there are about 340 employees working for Islamic banks in Iraq (CBI, 2022). In this study, we were able to obtain a large amount of data at once due to the strategy we used. The researcher used quantitative methods to review his results again and provide context for his findings. The researcher chose to collect responses using manual questionnaires for their effectiveness and relevance (Hancock et al., 2021).

#### 3.5. Measurement of Instruments

The study relies heavily on original sources. The survey questionnaire used to identify participants and obtain responses is the primary data source for this investigation. Articles, magazines, newspapers, and online sources were reviwed for descriptive details. The researcher may benefit from the descriptive platform not only

in developing the literature review and strengthening the research framework, but also in understanding the research phenomenon and gaps. (Churchill, 1999).

The tools used to collect data for analysis in order to arrive at a conclusive fact is called "data tool tool" by researchers. The questionnaire is used to collect information for this investigation. A questionnaire organized by the researcher was used for this study because it is the most practical and easiest way to collect data. The respondent was asked to answer one of the five items. Using a set of custom questions and answer options derived from the 5-point Likert scale (Churchill, 1999).

The current study utilizes and modifies a measuring strategy established by prior research (Churchill, 1999). This means that the study model includes descriptions of construction factors related to Organizational Performance, Human Capital, Relational Capital, Structural Capital, Social Capital, and Technological Capital. The study's five-point scale is displayed in the following table.

**Table 2.** Illustrates the 5 Likert scale

| 1        | 2        | 3       | 4     | 5              |
|----------|----------|---------|-------|----------------|
| Strongly | Disagree | Neutral | Agree | Strongly Agree |
| Disagree | Agree    |         |       |                |

#### 3.5.1. Human Capital

Human capital, as defined by Ding and Li (2008), includes a workforce's wide range of knowledge, experience, and abilities, and is crucial to an organization's long-term success. Understanding the importance of human capital in the creation of intellectual capital (Edvinsson and Malone, 1997; Stewart, 1997; Bontis, 1998; Choo and Bontis, 2002; Shaari, et al., 2010). Human capital may be seen as a source of creativity and strategic innovation at the organizational level, as stated by Bontis (1998). According to Roos and Roos (1997) and Shaari et al. (2010), we've discovered that an organization's ability to successfully introduce intellectual capital depends on the knowledge, perspective, and mental acuity of its employees. Therefore, a company's most important source of wealth is its employees.

**Table 3.** Measurement of Human Capital

| Ser. | Attributes  |
|------|---|
| 1    | HC1. Our organization has a highly competent management team.                       |
| 2    | HC2. In our organization employees are motivated and creative.                      |
| 3    | HC3. Our employees are experts in their particular jobs and functions.              |
| 4    | HC4. Our employees are able to develop new ideas.                                   |
| 5    | HC5. Our organization takes initiative to launch new products.                      |
| 6    | HC6. Our organization encourages the sharing of ideas, knowledge and practices.     |
| 7    | HC7. Our employees generally understand the target markets and customer profiles.   |
| 8    | HC8. Our organization recognizes the importance of knowledge as a strategic asset.  |
| 9    | HC9. Our employees are willing to work overtime                                     |
| 10   | HC10. Our organization encourages and supports research and development activities. |
| 11   | HC11. Our employees are unique to our organization.                                 |
| 12   | HC12. Our employees are satisfied with the performance evaluation system            |
| 13   | HC13. Our employees are satisfied with the remuneration scheme                      |
| 14   | HC14. In our organization, employees are satisfied with the top management.         |

# 3.5.2. Relational Capital

It displays the character of the relationships that the company has with its customers, suppliers, competition or any party, every other enable in growing and remodelling the concept right into a product or service, too often, the company limits its picks and its capacity to growth value, via way of means of searching at person objects handiest for its meant purposes (Hamed, 2018).

Managers emphasize the importance of satisfying customers' needs and desires, their devotion, as well as the creation and presentation of their business Feedback, brand recognition, and ongoing market orientation are the foundations for the institution gaining a market share among its rivals (Antonio, 2016).

To improve its people and structural resources, an organization can increase its Relational capital by cultivating positive external interactions and effective communication. A company's internal knowledge capacity may be bolstered by the strength of the ties it maintains with its suppliers, customers, and local and international partners. This demonstrates the significance of relational capital, particularly for service-oriented businesses whose success hinges on their ability to meet the expectations and gratify the desires of their clientele. When a business has strong relationships with its customers and suppliers in terms of quality of those relationships and mutual understanding, it may expect higher demand to follow (Razalli, 2019).

Relational capital impacts organizational performance, that is a crucial monetary indicator for measuring sustainable improvement. Relational capital has been an influential issue in sustainable social improvement. The concept of sustainable improvement indicated that social sustainability and monetary sustainability are intently related (Wang, 2021).

Table 4. Measurement of Relationship Capital

| Ser. | Attributes  |
|------|---|
| 1    | RC1. Our organization is aware of customer's complaints.                        |
| 2    | RC2. Our customers increasingly select our product or services.                 |
| 3    | RC3. Our customers have loyalty toward our organization.                        |
| 4    | RC4. Customer are satisfied with timeliness of our product or service delivery. |
| 5    | RC5. Our suppliers constantly do business with our organization.                |
| 6    | RC6. Our organization cares about what the customer thinks and demands from     |
|      | us.   |
| 7    | RC7. Our organization distributes customer's data to all relevant departments.  |
| 8    | RC8. Collaboration with international organizations can enhance our             |
|      | performance.  |
| 9    | RC9. Our organization has enough distribution channels for the satisfaction of  |
|      | our customers.  |
| 10   | RC10. Government's agencies provide support to our organization to meet the     |
|      | challenges and serve the customers better.                                      |
| 11   | RC11. Our products or services are based on market and customer information.    |

#### 3.5.3. Structural Capital

Structural capital represents the procedures structural performance, experience, and organizational and institutional knowledge accumulated in the institutional organization, which is owned by the institution and works through it to improve

institutional performance and achieve the goals it seeks (Kim, 2018). In addition to reducing the costs of managing relationships with suppliers and improving the quality and cost of inputs, With the identification of the best organizational procedures that contribute directly to maximizing the returns from managing and organizing the supplies and inputs of operational processes (Oduro, 2020).

So, it is the philosophy of the organization, its administrative systems, and its ability to manage its capabilities in terms of capital operations, techniques, procedures, and programs implemented, and to enhance the receipt and delivery of goods and services. As well as capital, innovation, intellectual property, intangible assets, policies and procedures for applied programs for research and development, training courses and patents (Tayeh, 2020).

Table 5. Measurement of Structural Capital

| Ser. | Attributes  |
|------|---|
| 1    | SC1. In our organization, information is always available.                      |
| 2    | SC2. Our organization uses the best and most integrated management system to    |
|      | serve the customers.  |
| 3    | SC3. In our organization, knowledge is embedded in the structures, systems and  |
|      | procedures.   |
| 4    | SC4. Our organization uses patents and licenses as a way to store knowledge.    |
| 5    | SC5. Our organizational structure keeps employees close to each other.          |
| 6    | SC6. Our organizational system and procedures support innovation.               |
| 7    | SC7. Our organization increasingly reduces time to solve problems.              |
| 8    | SC8. Our recruitment department is fully dedicated to hiring the best available |
|      | employees.  |
| 9    | SC9. Our organization encourage creative ideas by employees.                    |
| 10   | SC10. Our organization provides opportunities to upgrade the education level of |
|      | employees.  |
| 11   | SC11. Our organization's policies, procedures, databases, and networks are up-  |
|      | to-date.  |
| 12   | SC12. Our organization encourages employees to speak their minds.               |
| 13   | SC13. Our employees are involved in the organization's decision making.         |
| 14   | SC14. A lot of vital knowledge and information would be lost if key people      |
|      | leave the organization.   |

#### 3.5.4. Social Capital

Is one of the relatively new concepts in management thought It is defined at the organizational level as a multidimensional concept that is intertwined with other terms synonymous with it. Perhaps this case accompanies every new emergence of ideas and concepts in the humanities and social sciences, causing confusion when using it. Which made the need continue at the academic level in the research to agree on a basic content for this concept and with a clear vocabulary that gives it distinction from other concepts (Kassar, 2015).

**Table 6.** Measurement of Social Capital

| Ser. | Attributes   |
|------|--|
| 1    | SO1. Our organization makes efforts to create and sustain organizational culture |
|      | in the market.   |
| 2    | SO2. Our organization always considers environmental health & public social      |
|      | benefits in any planning, development & implementation of projects.              |
| 3    | SO3. Our employees are skillful and collaborating with each other to diagnose    |
|      | and solve the problems.  |
| 4    | SO4. In general, in our organization employees are sincere and honest.           |
| 5    | SO5. Our employees like to share information and learn from each other.          |
| 6    | SO6. Our employees have good relationship with each other in performing their    |
|      | duties.  |
| 7    | SO7. Our employees exchange ideas with people from different areas of the        |
|      | organization.  |
| 8    | SO8. Our employees have good relationship with customers, suppliers, alliance    |
|      | partners and friends to develop solutions for organization.                      |
| 9    | SO9. Our employees share organizational myths or stories from each other.        |
| 10   | SO10. Our employees have strong internal relationship e.g., respect, friendship, |
|      | communication, etc.  |
| 11   | SO11. Our employees co-operate with each other's to accomplish team tasks        |
| 12   | SO12. Our employees exchange experiences with people from different              |
|      | departments of the organization.   |

#### 3.5.5. Technological Capital

Information technology (IT), including research, development and innovation, can be considered as a component of technical capital. It allows speed in providing information and knowledge to others. The presence of technological capital is important because of its broad capabilities in collecting, storing and distributing

information, as technical In general, money has a beneficial influence on innovation and firm performance (Jameelah, 2015).

**Table 7.** Measurement of Technological Capital

| Ser. | Attributes  |
|------|---|
| 1    | TC1. In our organization, technological knowledge is easy to understand,      |
|      | transfer and use.   |
| 2    | TC2. Our organization has had a leading role in the market for a long time on |
|      | the basis of technological capital.   |
| 3    | TC3. Our organization has a large number of technological concepts which are  |
|      | useful for innovation.  |
| 4    | TC4. Our organization has coordination among different departments which is   |
|      | vital for technological innovation.   |
| 5    | TC5. Our organization knows innovation depends on the control of various      |
|      | technologies.   |
| 6    | TC6. Our organization use latest and high-tech equipment & technology to      |
|      | remain competitive.   |
| 7    | TC7. Our organization has good research and development infrastructure.       |
| 8    | TC8. Our organization has sufficient budget for technological development.    |
| 9    | TC9. Our organization improves technological knowledge by using               |
|      | technologies from external sources.   |
| 10   | TC10. Our organization has professional skillful employees which are          |
|      | necessary for technological innovation.                                       |
| 11   | TC11. Our organization has good systems to secure our intellectual property.  |
| 12   | TC12. Our organization has good systems to protect our industrial property.   |

#### 3.5.6. Organizational Performance

The term performance first appeared in the mid-19th century and was first used to determine the outcome of athletics. In the 20th century, this concept evolved and developed a set of definitions aimed at encapsulating the broadest meaning of what is perceived by performance. Currently, there is no goal-independent benefit. Achieving the goal also leads to achievement. Due to the uncertainty and overlap of organizational goals, performance decisions are increasingly difficult as they are relative measures (IULIANA, 2019). Today's society relies on the development of technology, knowledge and globalization, which inevitably contributes to its rapid development. For this reason, the roles of manager and leader are essential to building

a learning organization. This can only be achieved through the success of the organization by rethinking the strategies and values underlying the

Decision-making process. The role of leadership at the organizational level is reflected in the fact that both the efficiency of activities of the entire work team and the skills of leaders are taken into account in order to accomplish the organization's objectives. Therefore, the role of leadership in the modern context is emphasized by the need for both corporate organizations, individuals, and the world as a whole. (Eleonora, 2020).

The literature contains several definitions of organizational performance. Organizational performance is then expressed as the ability to achieve results through acceptable processes. In addition, organizations seek to meet their needs and stakeholder needs in order to survive and move forward (Maqableh, 2017). It is defined as the actual performance of the company compared to what was planned according to the company's desired goals (Singh et al., 2016). (Tomal and Jones 2015) points out that what is measured in the planned output is the actual output of the company or its result. It is also the effectiveness of the company in the efficiency of each member.

**Table 8.** Measurement of Organizational Performance

| Ser.   | Attributes  |
|--------|---|
| 1      | IP1. Our organization's revenue is continuously increasing growth.            |
| 2      | IP2. Our organization's profit is continuously increasing growth.             |
| 3      | IP3. Our organization has been continuously reducing cost per revenue unit.   |
| 4      | IP4. Our organization's net return on assets has been increasing.             |
| 5      | IP5. Our organization's net return on sales has been increasing.              |
| 6      | IP6. Due to organizational performance, customer loyalty level is increasing. |
| 7      | IP7. Our customers are satisfied with our products or services.               |
| 8      | IP8. Our customers believe that our organization offers high value-added      |
|        | products and services to them.  |
| 9      | IP9. Our market share is continuously increasing.                             |
| 10     | IP10. Our organization achieves a high success rate in new products/services  |
|        | launched.   |
| 11     | IP11. Our organization practices 'On Time Delivery' of its products and       |
|        | services to customers.  |
| 12     | IP12. Our organization is very responsive to local & international market     |
| -<br>- | needs.  |

| 13 | IP13. Our employee turnover is the lowest among others in the market. |  |  |  |  |
|----|---|--|--|--|--|
| 14 | IP14. Our organization always able to achieve and maintain superior   |  |  |  |  |
|    | performance.  |  |  |  |  |
| 15 | IP15. Our organization has good overall performance and success.      |  |  |  |  |

# 3.6. Chapter Summary

In this chapter, including the sample strategy, sampling framework, and sampling method, were detailed in this section. A survey was given to all of the participants in the case study. Primary data, acquired from the actual people being studied, was used for everything. The study's conclusions were derived by SEM-AMOS analysis following data collection. The obtained data is then examined in the next chapter and presented in the form of graphs, tables, and charts to facilitate comprehension and analysis.

#### **CHAPTER FOUR**

#### **RESULTS AND FINDINGS**

#### 4.1. Introduction

This chapter is divided into three parts: first, a discussion of the demographics of the respondents. Second, a presentation of the psychometric properties of the measurement scales used in the study, including the results of the Cronbach's Alpha Reliability Test. Third, a an explanation of the research. Finally, the examination of the research hypotheses is discussed in the fourth part.

### 4.2. Response Rate and Demographic Profile

The rate of response and the demographic profile of the respondents are both essential in explaining the implications of research findings. Therefore, in the present section, the rate of response and the respondent profiles (demographic characteristics) are presented and discussed.

#### 4.2.1. Response Rate

Following three months of data collection and the distribution of 200 questionnaires, 193 questionnaires were retrieved, while the remaining 07 were unreturned. Only, 180 were found to be useful for further analysis as in Table 9.

Table 9. Summary of questionnaires distributed

| The data                                     | The number | The ratio |
|--|------------|-----------|
| Distributed questionnaires                   | 200        | 100 %     |
| questionnaires retrieved                     | 193        | 96.5 %    |
| Invalid questionnaires                       | 5          | 2.5 %     |
| Questionnaires with duplicate answers        | 8          | 4 %       |
| Questionnaires received (valid for analysis) | 180        | 90        |

# 4.2.2. Demographic Profile

Data about the demographics of the respondents (e.g., gender and age) educational level are presented in Table 9.

**Table 10.** Profile of the respondents

| Q1             |                              |           |         |
|----------------|------------------------------|-----------|---------|
|                |                              | Frequency | Percent |
| Valid          | Male                         | 120       | 66.7    |
|                | Female                       | 59        | 32.8    |
|                | Total                        | 179       | 99.4    |
| Missing S      | ystem                        | 1         | .6      |
| Total          |                              | 180       | 100.0   |
| Q2             |                              |           |         |
|                |                              | Frequency | Percent |
| Valid          | Less than 30                 | 28        | 15.6    |
|                | 40-50 years                  | 74        | 41.1    |
|                | 50-60 years                  | 52        | 28.9    |
|                | 60 years and over            | 26        | 14.4    |
|                | Total                        | 180       | 100.0   |
| Q3             |                              |           |         |
|                |                              | Frequency | Percent |
| Valid          | Intermediate Diploma or less | 52        | 28.9    |
|                | Bachelor                     | 38        | 21.1    |
|                | Higher Studies diploma       | 49        | 27.2    |
|                | Master                       | 40        | 22.2    |
|                | Total                        | 179       | 99.4    |
| Missing System |                              | 1         | .6      |
| Total          |                              | 180       | 100.0   |
| Q4             |                              |           |         |
|                |                              | Frequency | Percent |
| Valid          | Associate Director           | 18        | 10.0    |
|                | branch Manager               | 39        | 21.7    |
|                | Bank manger                  | 13        | 7.2     |
|                | Other                        | 110       | 61.1    |
|                | Total                        | 180       | 100.0   |
| Q5             |                              |           |         |
|                |                              | Frequency | Percent |
| Valid          | from 6 to 10 year            | 50        | 27.8    |
|                | from 11 years to 15 years    | 67        | 37.2    |
|                | 16 years and over            | 59        | 32.8    |
|                | Total                        | 176       | 97.8    |
| Missing S      | ystem                        | 4         | 2.2     |
| Total          |                              | 180       | 100.0   |

#### 4.3. Reliability Analysis

According to Sekaran (2010), the fundamental instrument for the reliability test is the Cronbach's alpha, which measures the consistency and stability of the variable. The greater the Cronbach's alpha coefficient, the more trustworthy the data, whereas values below 0.70 indicate less than optimal reliability and values over 0.80 indicate excellent reliability (Sekaran, 2010). The reliability analysis report is in Table 10.

**Table 11.** Reliability Statistics

| Construct                  | No. of Items | Cronbach's |
|----------------------------|--------------|------------|
|                            |              | Alpha      |
| Human capital              | 14           | 0.860      |
| Relational Capital         | 11           | 0.865      |
| structural capital         | 14           | 0.870      |
| Social capital             | 12           | 0.775      |
| Technological capital      | 12           | 0.850      |
| organizational performance | 15           | 0.868      |

In Table 11, the reliability analysis of variables from banks' data is presented. From the table it can be seen that the obtained alpha-Cronbach coefficient of organizational performance (dependent variable) is 0.868. For the independent variables, the obtained Cronbach's alpha coefficients are as follows; 0.860 for human capital, 0.865 for relational capital, 0.870 for structural capital, 0.775 for social capital and finally 0.850 for technological capital. All results obtained from Cronbach's alpha coefficients for the dependent variable as well as for the independent variables ranged from acceptable to good.

In all, all scales had a high alpha credibility of Cronbach that ranged between 0.870 -0.775 in the case of Islamic banks in Iraq, and all of them exceeded the cut-off value of 0.70 recommended by previous studies (Wells & Wollack, 2003). Given the above accepted values, all items were retained, especially since the organizational performance values were 0.868 in Islamic banks in Iraq.

#### 4.4. Normality Assumption

According to Table 15 which represents the model summary of the study's variables. The value obtained from Durbin Watson test is 2.015 which is higher than the rule of thumb (2). Therefore, the variables of the study are free from the issue of normality.

#### 4.5. Descriptive Analysis

**Table 12.** Summary of Descriptive finding

| Variables                  | Minimum | Maximum | Mean   | Std. Deviation |
|----------------------------|---------|---------|--------|----------------|
| Human capital              | 3.00    | 5.00    | 4.2464 | .46365         |
| Relational Capital         | 2.45    | 5.00    | 4.1843 | .51277         |
| structural capital         | 2.71    | 5.00    | 4.2490 | .46969         |
| Social capital             | 3.08    | 5.00    | 4.2532 | .39857         |
| Technological capital      | 2.83    | 5.00    | 4.4690 | .36201         |
| organizational performance | 3.27    | 5.00    | 4.4931 | .34049         |
|                            |         |         |        |                |

On the basis of the descriptive analysis, the summary of the respondents' perceptions of variables were obtained to confirm their validity and reliability. Human capital, relational capital, structural capital, social capital, and technical capital were all measured in detail, and descriptive analyses were performed on the data. Ratings below 1.99 were deemed inadequate, while ratings above 3.50 were deemed excellent. Values between 2.00 and 3.49 were deemed moderate (Lopes, 2012).

#### 4.6. Pearson Correlation Analysis

A multicollinearity to the linear correlation between extra explanatory variables. In this look at, two diagnostic checks are used to decide the presence of multicollinearity between independent variables. Table 4.5 shows the effects of Pearson's correlation evaluation of unbiased variables (human capital, Relational capital, structural capital, social capital, technical capital, organizational overall performance). The consequences show that the correlation coefficient between pairs of unbiased variables is much less than 0.80 and that there may be no huge correlation

among them. Richter et al. (1955) show that the correlation coefficient shows severe co-linearity only when the value is greater than 0.80, and the regression model used is not statistically significant with high R2 and all coefficients. We have found that it is characterized by t-statistics. As is clear from the results in Table 13, these conditions are not included in the study.

The below stated table shows that human capital, relational capital, structural capital, social capital, and Technological capital) have a significant positive correlation value of 0.01 with each other, but the correlation is less than 0.80. Technology capital negatively correlates organizational performance across all variables, but that is not important.

Table 13. Pearson's Correlation Analysis of Variables

|                            | Human capital | Relational<br>Capital | structural<br>capital | Social capital | Technical<br>capital | organizational<br>performance |
|----------------------------|---------------|-----------------------|-----------------------|----------------|----------------------|-------------------------------|
| Human capital              | 1             |                       |                       |                |                      |                               |
| Relational Capital         | .773**        | 1                     |                       |                |                      |                               |
| structural capital         | .683**        | .837**                | 1                     |                |                      |                               |
| Social capital             | .609**        | .696**                | .773**                | 1              |                      | •                             |
| Technological capital      | 195**         | 251**                 | 179*                  | 009            | 1                    |                               |
| Organizational performance | 142           | 174*                  | 114                   | .054           | .887**               | 1                             |

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

Table 14 Victor Inflation Factor (VIF) outcomes for independent variables examined inside the regression version The VIF measures the multicollinearity of regression analysis. Multicollinearity happens in a multivariate regression model when there is a relationship between many independent variableses. As a result, the regression findings may deteriorate. High multicollinearity is identified whilst the fee is extra than 10.00 (Gujarati, 2003). The outcomes display that the calculated variance factor is less than or equal to 10. Therefore, Pearson correlation and VIF tests show that multicollinearity of predictors is not a trouble.

<sup>\*.</sup> Correlation is significant at the 0.05 level (2-tailed).

**Table 14.** Multicollinearity

| Coefficients <sup>a</sup>                         |              |                                |  |  |  |
|---|--------------|--------------------------------|--|--|--|
| Model   | Collinearity | <b>Collinearity Statistics</b> |  |  |  |
|   | Tolerance    | VIF                            |  |  |  |
| Human capital                                     | .614         | 1.628                          |  |  |  |
| Relational Capital                                | .342         | 2.924                          |  |  |  |
| structural capital                                | .196         | 5.101                          |  |  |  |
| Social capital                                    | .264         | 3.787                          |  |  |  |
| Technological capital                             | .261         | 3.836                          |  |  |  |
| a. Dependent Variable: organizational performance |              |                                |  |  |  |

### 4.7. Regression Analysis

Through regression analysis, we may determine how much weight each of 5 independent variables should be given in relation to a fixed one. There were found to be statistically significant correlations between human capital, relational capital, structural capital, social capital, technical capital, and organizational performance factors.

**Table 15.** Model Summary

| Model Summary  |                          |                   |   |     |        |       |
|--|--------------------------|-------------------|---|-----|--------|-------|
| Model  |                          | Change Statistics |   |     |        |       |
|  | R Square F df df2 Sig. F |                   |   |     |        |       |
|  | Change                   | Change            | 1 |     | Change |       |
| 1  | .939                     | 535.484           | 5 | 174 | .000   | 2.015 |
| a. Predictors: (Constant), Human capital, relational capital, social capital, structural |                          |                   |   |     |        |       |
| capital and technological capital.   |                          |                   |   |     |        |       |
| b. Dependent Variable: organizational performance  |                          |                   |   |     |        |       |

**H1:** Human capital has a positive and significant relationship with the organizational performance of Iraqi Islamic banks.

The findings indicate that human capital has a positive and significant relationship with organizational performance of Iraqi Islamic banks. A standardized coefficient (beta) is equal to (.509) and t-test is equal to (21.295) which is significant at (0.000). Therefore, H1 of the study is accepted. This result is in line with previous studies (Ousama et al., (2019); Ozkan et al., (2017). This means that human factors is

among the essential drivers of value in achieving high performance at Islamic banks in Iraq.

**H2:** Relational Capital has a positive and significant relationship with the organizational performance of Iraqi Islamic banks.

The findings indicate that relational capital has a positive and significant relationship with organizational performance of Iraqi Islamic banks. A standardized coefficient (beta) is equal to (.628) and t-test is equal to (19.600) which is significant at (0.000). Therefore, H2 of the study is accepted. This result is in line with previous studies (Rehman et al., (2022); Khalique et al., (2019). This means that relational capital is among the upper critical determinants in attaining great performance for Islamic banks.

**H3:** Structural capital has a positive and significant relationship with the organizational performance of Iraqi Islamic banks.

The findings indicate that the structural capital has a negative but but strong relation with the organizational performance of Iraqi Islamic banks. The standard coefficient (beta) of is equal to (-.211) and t equals (-4.988) which is significant at (0.000). Therefore, H3 of the study is rejected. This result is somehow in line with the output of Khalique et al. (2019) who found insignificant association between structural capital and financial performance of banks in Sialkot Pakistan. Also, it is somehow in accordance with the finding of Ousama et al. (2019) in the GCC context. This result indicates that structural capital within the Islamic banking Industry in Iraq is impacting the organizational performance negatively, and this requires urgent corrections by policy and decision makers in Iraq.

**H4:** Social capital has a positive and significant relationship with the organizational performance of Iraqi Islamic banks.

The results show that social capital has a positive and but strong relation with organizational performance of Iraqi Islamic banks. The standardized coefficient (beta) is equal to (.876), t-test is equal to (24.029) which is significant at (0.000). Therefore, the H4 of the study is accepted. This result is in line with Khalique et al. (2019). This means that the Islamic banking industry in Iraq considers social capital as an important factor of organizational performance.

**H5:** Technological capital has a positive and significant relationship with the organizational performance of Iraqi Islamic banks.

The findings indicate that the technological capital has a negative but strong relation with the organizational performance of Iraqi Islamic banks. The standardized coefficient (beta) is equals to (-.825) and t equals to (-22.483) which is significant at (0.000). Therefore, H5 of the study is rejected. This means that technological capital within the Islamic banking industry in Iraq, is not playing and effective and efficient role in developing the industry and not contributing towards the performance enhancements. This finding contradicts with the result of Khalique et al. (2019).

**Table 16.** Model Summary

|   | Model                 | Unstandardized<br>Coefficients |            |      |         | Sig. |
|---|-----------------------|--------------------------------|------------|------|---------|------|
|   |                       | В                              | Std. Error | Beta |         |      |
|   | (Constant)            | 101                            | .082       |      | -1.241  | .216 |
|   | Human capital         | .667                           | .031       | .509 | 21.295  | .000 |
| 1   | Relational Capital    | .655                           | .033       | .628 | 19.600  | .000 |
| 1   | structural capital    | 280                            | .056       | 211  | -4.988  | .000 |
|   | Social capital        | .849                           | .035       | .876 | 24.029  | .000 |
|   | Technological capital | 895                            | .040       | 825  | -22.483 | .000 |
| a. Dependent Variable: organizational performance |                       |                                |            |      |         |      |

### 4.7. Summary of Findings

**Table 17.** Summary of Hypotheses

| The        | Result   |           |  |  |  |
|------------|--|-----------|--|--|--|
| Hypotheses |  |           |  |  |  |
| H1         | Human capital has a positive and significant relationship with the organizational performance of Iraqi Islamic banks.      | Supported |  |  |  |
| Н2         | Relational Capital has a positive and significant relationship with the organizational performance of Iraqi Islamic banks. | Support   |  |  |  |
| Н3         | Structural capital has a positive and significant relationship   | Not       |  |  |  |
|            | with the organizational performance of Iraqi Islamic banks.  | Supported |  |  |  |
| H4         | Social capital has a positive and significant relationship with  | Supported |  |  |  |
|            | the organizational performance of Iraqi Islamic banks.   |           |  |  |  |
| Н5         | Technological capital has a positive and significant   | Not       |  |  |  |
|            | relationship with the organizational performance of Iraqi  | Supported |  |  |  |
|            | Islamic banks.   |           |  |  |  |

## 4.8. Chapter Summary

In this chapter, the proposed hypotheses of the study are examined. Analyses such as a frequency table, descriptive analysis, and reliability and validity tests were conducted using SPSS and SEM- AMOS. This chapter explains the proposed approach to analyze the performance of relevant indicators and the impact of Human Capital, Structural Capital, Relational Capital, Social Capital and Technological Capital on the Organizational Performance. Three of the posited assumptions were validated (H1, H2 and H4), and the results confirmed the influence of intellectual capital aspects on organizational performance.

#### **CHAPTER FIVE**

#### DISCUSSION AND CONCLUSION

#### 5.1. Introduction

In this chapter, the data collected are explained in accordance with the five research questions presented in the first chapter in order to meet thesis objectives. The findings are discussed in connection to the ideas that explain them, based on the research results and preceding findings presented in the literature. Limitations and suggestions for further research are also included in the chapter.

#### 5.2. Recapitulation of the Study

The objectives that this study attempts to reach are:

- 1-To investigate the effect of human capital on organizational performance.
- 2-To investigate the effect of structural capital on organizational performance.
- 3-To investigate the effect of relational capital on organizational performance.
- 4-To investigate the effect of social capital on organizational performance.
- 5-To investigate the effect of technological capital on organizational performance.

The survey method was used, where the sample was selected through random sampling technique in this research. The information was gathered from 180 employees of Islamic banks in Iraq. Accordingly, 220 questionnaires were distributed, after which 180 questionnaires were retrieved in a row. The final conceptual model was tested in term of reliability and validity.

Based on hypotheses testing, the results supported H1 (Human capital has a positive impact on organizational performance in Islamic banks in Iraq). Also, H2 was supported by the results (Relational Capital has a positive impact on organizational performance in Islamic banks in Iraq). Furthermore, H4 was also supported by the results (Social capital has a positive impact on organizational performance in Islamic banks in Iraq). On the other hand, H3 (Structural capital has a positive impact on

organizational performance in Islamic banks in Iraq) and H5 (Technological capital has a positive impact on organizational performance in Islamic banks in Iraq) were not supported by the results.

#### 5.3. Research Implications

For policy and decision makers, it is a must to rectify the causes of negative effects of structural and technological capital within Islamic banks in Iraq. These two capitals have been negatively affecting the organizational performance of Islamic banks. In other words, Islamic banks in Iraq do not capitalize from these two resources which are of great importance to the developments of performance of banks. Therefore, in depth study and correction are needed by the policy makers in order to overcome the consequences. They ought to likewise promote the business esteem added and shed a light on the productivity of human and other resources much the same as that of conventional monetary measures.

For managers, they ought to focus on reconsider the proficiency of significant worth creation in their business climate. This will permit the bank to recognize those factors that need improvement to further develop bank execution by work on scholarly capital on execution. The discoveries of this study assess a bank to empower them to benchmark with the general exhibition of banks across areas inside the Iraqi economy.

#### 5.4. Limitations and Recommendation for future Studies

This study has some shortcomings. The main impediment is connected with the sample of the study which seems relatively small. Another flaw in this research is that it is cross-sectional. A longterm research may be conducted in the future. Also, this study was restricted only to quantitative techniques methods, as one of the main goals of conducting this research was to explore and provide a comprehensive view regarding the existence and the assessment IC components within the banking industry in Iraq. Therefore, future researches are advised to follow a qualitative approach, to concentrate on and investigate every component of the model individually, along with its dimensions and to investigate its influence on the OP. In addition, some other components of IC were not included in the study, therefore future research might

consider the inclusion of other intangible resources which might uplift the organizational performance further.

#### **5.5.** Conclusion

This is the final chapter of the work which summarizes the research process and key results. This study hopes to contribute to an understanding of the relationship between intellectual capital and organizational performance in the Islamic banking sector of Iraq. In particular, IC (human capital, Relational Capital, structural capital, social capital, and technological capital) has been regarded as an important factor in the development and implementation of the knowledge economy. This study highlights the importance of ICs in businesses that have a long-term impact on the image of banks. It is normal for validation discoveries and conversations to help with the attention and execution of variables that determine IC in hierarchical execution.

#### REFERENCES

- Abazeed Riad Ahmad (2017) The Impact of Intellectual Capital Dimensions on Organizational Performance of Public Hospitals in Jordan Global Journal of Management and Business Research: A Administration and Management Volume 17 Issue 5 Version 1.0
- Abdel Moneim Osama and the Metropolitans Abdel Wahab (2009) "Intellectual Capital and its Impact on Creativity and Institutional Excellence in the Jordanian Industrial Companies" Issue (2), Volume (3), p. 87-120
- Al-Assaf, Saleh bin Ahmed (2000). "Introduction to Research in Behavioral Sciences", Al-Obaikan Publishing, Riyadh. p. 429
- Aliyu, A. A., Bello, M. U., Kasim, R., & Martin, D. (2014). Positivist and non-positivist paradigm in social science research: Conflicting paradigms or perfect partners. J. Mgmt. & Sustainability, 4, 79.
- Al-Mahlawi, Saad Othman (2021), The effect of intellectual capital on the performance of employees, a case study of Faisal Islamic Bank, Journal of Economic and Administrative Sciences, Volume 22, Issue 1
- Andreeva, T., & Garanina, T. (2016). Do all elements of intellectual capital matter for organizational performance? Evidence from Russian context. *Journal of Intellectual Capital*.
- Babai, L. (2016, June). Graph isomorphism in quasipolynomial time. In Proceedings of the forty-eighth annual ACM symposium on Theory of Computing (pp. 684-697).
- Bagozzi, R. P., Yi, Y., & Phillips, L. W. (1991). Assessing Construct Validity in Organizational Research. *Administrative Science Quarterly*, *36*(3), 421–458. <a href="https://doi.org/10.2307/2393203">https://doi.org/10.2307/2393203</a>
- Baltagi, B. H., Bresson, G., & Pirotte, A. (2005). Adaptive estimation of heteroskedastic error component models. *Econometric Reviews*, 24(1), 39-58.
- Bartlett, K. R. (2001). The relationship between training and organizational commitment: A study in the health care field. Human resource development quarterly, 12(4), 335-352.
- Bassi, L.J. and Van Buren, M.E., (1999). Valuing investments in intellectual capital. International Journal of Technology Management, 18(5-8), 414-432.
- Bell, E., Bryman, A., & Harley, B. (2015). Business research methods. Oxford university press.

- Bewick, V., Cheek, L., & Ball, J. (2003). Statistics review 7: Correlation and regression. Critical care, 7(6), 1-9.
- Bharathi Kamath, G., (2008). Intellectual capital and corporate performance in Indian pharmaceutical industry. Journal of Intellectual Capital, 9(4), 684-704.
- BONTIS N, KEOW WCC & RICHARDSON S. 2000. Intellectual capital and business performance in Malaysian industries. Journal of Intellectual Capital 1(1):85–100.
- Bontis, N. (1998) 'Intellectual capital: an exploratory study that develops measures and models', Management Decision, Vol. 36, No. 2, pp.63–76.
- Bougie, R., & Sekaran, U. (2019). Research methods for business: A skill building approach. John Wiley & Sons.
- Brahimi, Karima (2019) The impact of human capital on organizational performance in private hospitals-Chlef, Journal of Development and Applied Economics University of M'Sila Volume: 03 / Issue 02.
- Buallay, A., Hamdan, A.M., Reyad, S., Badawi, S. and Madbouly, A. (2020), "The efficiency of GCC banks: the role of intellectual capital", European Business Review, Vol. 32 No. 3, pp. 383-404, doi: 10.1108/EBR-04-2019-0053.
- Bueno, E., Salmador, M.P. and Rodríguez, O. (2004) 'The role of social capital in today's economy empirical evidence and proposal of a new model of intellectual capital', Journal of Intellectual Capital, Vol. 5, No. 4, pp.556–574.
- CABRITA MDR & BONTIS N. 2008. Intellectual capital and business performance in the Portuguese banking industry. International Journal of Technology Management 43(1):212–237.
- Campbell, D. T., & Fiske, D. W. (1959). Convergent and discriminant validation by the. *Personality*, 56, 162.
- Carmines, E. G., & Zeller, R. A. (1979). *Reliability and validity assessment*. Sage publications.
- Cavana, R., Delahaye, B., & Sekeran, U. (2001). Applied business research: Qualitative and quantitative methods. John Wiley & Sons.
- Chang, W.S. and Hsieh, J. (2010) 'The dynamics of intellectual capital: taking organizational lifecycle into consideration', IEEE.
- Chaudhry J. Imran Sharif (2017) Effect of Human Capital on Organization Performance: An Analysis from Service Sector of Punjab, Pakistan European Online Journal of Natural and Social Sciences 2017; Vol.6, No 3 pp. 475-48

- Chen Goh, P., (2005). Intellectual capital performance of commercial banks in Malaysia. Journal of intellectual capital, 6(3), 385-396.
- Cherryholmes, C. H. (1988). Construct validity and the discourses of research. *American Journal of Education*, 96(3), 421-457.
- CHIVA R, ALEGRE J & LAPIEDRA R. 2007. Measuring organisational learning capability among the workforce. International Journal of Manpower 28(3/4):224–242.
- Chowdhury, Leena Afroz Mostofa (2019) Intellectual capital efficiency and organisational performance In the context of the pharmaceutical industry in Bangladesh, Journal of Intellectual Capital Vol. 20 No. 6, 2019 pp. 784-806 Emerald Publishing Limited1930-1469 DOI 10.1108/JIC-10-2018-0171
- Coakes, E., Amar, A. D., & Granados, M. L. (2010). Knowledge management, strategy, and technology: a global snapshot. Journal of Enterprise Information Management..
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. psychometrika, 16(3), 297-334.
- Edvinsson, L. and Malone, M.S. (1997) Intellectual Capital: Realizing your Company's True Value by Finding its Hidden Brainpower, Harper Collins, New York, NY.
- Edvinsson, L. and Sullivan, P. (1996) 'Developing a model for managing intellectual capital', European Management Journal, Vol. 14, No. 4, pp.356–364.
- Eleonora Gabriela (2020) Organizational performance theoretical and practical approaches; study on students' perceptions DOI: 10.2478/picbe-2020-0038, pp. 398-406, ISSN 2558-9652| Proceedings of the 14th International Conference on Business
- Eugénia Pedro, João Leitão and Helena Alves Intellectual capital and performance Taxonomy of components and multi-dimensional analysis axes, Journal of Intellectual Capital, Vol. 19 No. 2, 2018, pp. 407-452 Emerald Publishing Limited, 1930-1469, DOI 10.1108/JIC-11-2016-0118
- F Li, W J Morgan, X Ding (2008) "The Expansion of Higher Education, Employment, and Overeducation in China" International Journal of Educational Development, volume 28, p. 678 97
- Fangash, Abbas Lafta (2017) University of Al-Qadisiyah College of Administration and Economics Department of Business Administration The role of intellectual capital in the financial performance of banks

- Firer, S. and Mitchell W. S., (2003). Intellectual capital and traditional measures of corporate performance. Journal of intellectual capital, 4(3), 348-360.
- García-Nieto, J., Alba, E., & Olivera, A. C. (2012). Swarm intelligence for traffic light scheduling: Application to real urban areas. Engineering Applications of Artificial Intelligence, 25(2), 274-283.
- Gigante, G., (2013). Intellectual capital and bank performance in Europe. Accounting and Finance Research, 2(4), 120-129.
- Gobo, G. (2004). Sampling, representativeness and generalizability. *Qualitative research practice*, 405, 426.
- GOGAN LM. 2014. A new platform to evaluate intellectual capital. Paper presented at the Proceedings of the 6th European Conference on Intellectual Capital. (Slovak University of Technology (STU); Trnava; Slovak Republic on 10-11 April).
- Gutenberg, B., and C. F. Richter (1955), Magnitude and Energy of Earthquakes, Science, 176(4486), 795-795.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., & Thiele, K. O. (2017). Mirror, mirror on the wall: a comparative evaluation of composite-based structural equation modeling methods. Journal of the academy of marketing science, 45(5), 616-632.
- Hair, J. F., Money, A. H., Samouel, P., & Page, M. (2007). Research methods for business. Education+ Training.
- Hamed Abdel-Ghani (2018) The role of intellectual capital in achieving outstanding organizational performance, Afaq Journal for Studies and Research, first issue
- Hancock, D. R., Algozzine, B., & Lim, J. H. (2021). Doing case study research: A practical guide for beginning researchers.
- Haris, M., Yao, H., Tariq, G., Malik, A. and Javaid, H. (2019), "Intellectual capital performance and profitability of banks: evidence from Pakistan", Journal of Risk and Financial Management, Vol. 12 No. 2, p. 56, doi: 10.3390/jrfm12020056.
- Hejase, H.J., Hejase, A.J., Mikdashi, G. and Farhat, Z. (2016) Talent Management Challenges: An Exploratory Assessment from Lebanon. International Journal of Business Management and Economic Research, 7, 504-520.
- Hinkin, T. R., & Schriesheim, C. A. (1989). Development and application of new scales to measure the French and Raven (1959) bases of social power. *Journal of applied psychology*, 74(4), 561.

- Houhou Mustapha (2018) The Role of Investment in Intellectual Capital in improving organizational performance considering knowledge management: The case study of wireless communication sector in Algeriav Volume 13, Issue 1, June 2018, Pages 73-91
- Hsu, Y. H., & Fang, W. (2009). Intellectual capital and new product development performance: The mediating role of organizational learning capability. *Technological Forecasting and Social Change*, 76(5), 664-677.
- Huang, C.J. and Liu, C.J. (2005) Exploration for the Relationship between Innovation, IT and Performance. Journal of Intellectual Capital, 6, 237-252.
- Husnin, M., Yusof, M., Mohamed, Z., Che Wan, K., Che Wan, K., Khalid, K., Mohamad, W., Hamid, C. (2014). Intellectual Capital and Performance of Islamic Banks in Malaysia. Terengganu International Business and Economic Conference 2014 – TiBEC IV.
- INKINEN H. 2015. Review of empirical research on intellectual capital and firm performance. Journal of Intellectual Capital 16(3):518–565.
- Inkpen, A. C., & Tsang, E. W. (2005). Social capital, networks, and knowledge transfer. *Academy of management review*, 30(1), 146-165.
- Ireland, R. D., & Hitt, M. A. (1999). Achieving and maintaining strategic competitiveness in the 21st century: The role of strategic leadership. Academy of Management Perspectives, 13(1), 43-57.
- Ismail, M.B. (2005) 'The influence of intellectual capital on the performance of Telekom Malaysia', PhD thesis, Universiti Teknologi Malaysia.
- IULIANA, ION ELENA (2019) ORGANIZATIONAL PERFORMANCE A CONCEPT THAT SELF-SEEKS TO FIND ITSELF, Annals of the "Constantin Brâncuşi" University of Târgu Jiu, Economy Series, Issue 4/2019
- Jameelah, Maryam Hashim (2015) Effect of Intellectual Capital on Organizational Performance, Social and Behavioral Sciences 211 (2015) 207 214
- Johansson, U (2014). Measuring to understand Intangible performance
- Kassar, Rasha Mahdi Salih (2015) The relationship between social capital and organizational performance, a field study in the Iraqi Drilling Company in Basra, Al-Ghari Journal of Economic and Administrative Sciences, Volume 16, Issue 36
- Khalique, M., Bontis, N., Bin Shaari, J. A. N., & Isa, A. H. M. (2015). Intellectual capital in small and medium enterprises in Pakistan. *Journal of intellectual capital*.

- Khalique, M., Shaari, J.A.N. and Isa, A.H.Md. (2011b) 'Intellectual capital and its major components', International Journal of Current Research, Vol. 3, No. 6.
- Khalique, M., Shaari, J.A.N., Isa, A.H.Md. and Ageel, A. (2011c) 'The challenges faced by the small medium enterprises (SMEs) in Malaysia: in intellectual capital perspective', International Journal of Current Research, Vol. 3, No. 6, pp.398–401.
- Khalique, M., Shaari, N., Abdul, J., Isa, A.H.B.M. and Samad, N., (2013). Impact of intellectual capital on the organizational performance of Islamic banking sector in Malaysia. Asian Journal of Finance & Accounting, 5(2), 75-83.
- Khalique, M., Ramayah, T., Shah, M. T. A., & Iqbal, Z. (2019). Intellectual capital and financial performance of banks in Sialkot Pakistan. Journal of management sciences, 6(1), 50-61.
- Kim, D. (2018), "Examining effects of internal public relations practices on organizational social capital in the Korean context: Mediating roles of employee-organization relationships", Corporate Communications: An International Journal, Vol. 23 No. 1, pp. 100-116.
- Klassen, A. C., Creswell, J., Plano Clark, V. L., Smith, K. C., & Meissner, H. I. (2012). Best practices in mixed methods for quality of life research. Quality of life Research, 21(3), 377-380.
- Kozak, M. (2011) 'Strategic approach to intellectual capital development in regions', Int. J. Learning and Intellectual Capital, Vol. 8, No. 1, pp.76–93.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. Educational and psychological measurement, 30(3), 607-610.
- Kujansivu, P. (2009) 'Is there something wrong with intellectual capital management models & quest', Knowledge Management Research & Practice, Vol. 7, No. 4, pp.300–307.
- Laallam, A., Kassim, S., Engku Ali, E.R.A. and Saiti, B. (2020), "Intellectual capital in non-profit organisations: lessons learnt for waqf institutions", ISRA International Journal of Islamic Finance, Vol. 12 No. 1, pp. 27-48.
- Laallam, A., Uluyol, B., Kassim, S. and Engku Ali, E.R.A. (2022), "The components of intellectual capital and organisational performance in waqf institutions: evidence from Algeria based on structural equation modelling", Journal of Islamic Accounting and Business Research, Vol. 13 No. 7, pp. 1110-1136.
- Lu, W. M., Wang, W. K., Tung, W. T., & Lin, F. (2010). Capability and efficiency of intellectual capital: The case of fabless companies in

- Malhotra, N. K., & Malhotra, N. K. (2012). Basic marketing research: Integration of social media.
- Maqableh, Mahmoud (2017) The Effect of Intellectual Capital on rganizational Performance: The Mediating Role of Knowledge Sharing, Communications and Network, 2017, 9, 1-27
- Marco Bellucci (2021) Journal of Intellectual Capital: a review of emerging themes and future trends Journal of Intellectual Capital Volume 22 Issue 4
- Maria M., C., (2014). Intellectual capital performance in the case of Romanian public companies. Journal of Intellectual Capital, 15(3), 392-410.
- Martín, Gregorio Intellectual capital and the firm: evolution and research trends, Journal of Intellectual Capital Vol. 20 No. 4, 2019
- Mavridis, D.G., (2004). The intellectual capital performance of the Japanese banking sector. Journal of Intellectual capital, 5(1), 92-115.
- Meles, A., Porzio, C., Sampagnaro, G. and Verdoliva, V. (2016), "The impact of the intellectual capital efficiency on commercial banks performance: evidence from the US", Journal of Multinational Financial Management, Vol. 36, pp. 64-74.
- Meles, Antonio (2016), The impact of the Intellectual Capital Efficiency on Commercial Banks Performance: Evidence from the US, Department of Business and Quantitative studies, Via G. Parisi, 13, 80132.
- Mohammadi, A. and Taherkhani, P., (2017). Organizational capital, intellectual capital and cost stickiness (evidence from Iran). Journal of Intellectual Capital, 18(3), 625-642.
- Mondal, A. and Ghosh, S.K. (2012), "Intellectual capital and financial performance of Indian banks", Journal of Intellectual Capital, Vol. 13 No. 4, pp. 515-530.
- Musibah, A.S. and Alfa, W.S.B.W.Y., (2013). Impact of intellectual capital on corporate social responsibility evidence from Islamic banking sector in GCC. International Journal of Finance and Accounting, 2(6), 307-311.
- Mustafa, Bahjat Sabri (2017) Role of Intellectual Capital in Achieving Competitive Advantage for Islamic Financial Industry A Case Study of Islamic Banks in Gaza Strip, The Islamic University of Gaza, Master of Business Economics.
- Molyneux, P., & Iqbal, M. (2016). Banking and financial systems in the Arab world. Springer.
- Nawaz, T., (2017). Intellectual capital, financial crisis and performance of Islamic banks: Does Shariah governance matter? International Journal of Business and Society, 18(1), 1-23.

- Nazari, J.A. and Herremans, I.M., (2007). Extended VAIC model: measuring intellectual capital components. Journal of Intellectual Capital, 8(4), 595-609.
- Ngah, R., & Ibrahim, A. R. (2011). The Influence of intellectual capital on knowledge sharing: small and medium enterprises' perspective. Communications of the IBIMA.
- Nunnally, J. C. (1978). An overview of psychological measurement. *Clinical diagnosis* of mental disorders, 97-146.
- Obeidat Thouqan et al. (2001). Scientific research concept and tools. Dar Al Fikr for Printing and Publishing. 179.
- Oduro, Stephen (2020) Supplier relationship management and organizational performance of hospitals in an emerging economy context A comparative study Journal of Modelling in Management Vol. 15 No. 4, 2020 pp. 1451-1478 © Emerald Publishing Limited 1746-5664 DOI 10.1108/JM2-03-2019-0072
- OECD, (1999). MEASURING AND REPORTING INTELLECTUAL CAPITAL FROM A DIVERSE CANADIAN INDUSTRY PERSPECTIVE: Experiences, Issues and Prospects. OECD Symposium. Amsterdam. 1-59.
- Ousama, A.A. and Fatima, A.H., (2015). Intellectual capital and financial performance of Islamic banks. International Journal of Learning and Intellectual Capital, 12(1), 1-15.
- Ousama, A.A., Hammami, H. and Abdulkarim, M. (2020), "The association between intellectual capital and financial performance in the Islamic banking industry: An analysis of the GCC banks", International Journal of Islamic and Middle Eastern Finance and Management, Vol. 13 No. 1, pp. 75-93
- Ozkan, N., Cakan, S. and Kayacan, M. (2017), "Intellectual capital and financial performance: a study of the Turkish banking sector", Borsa Istanbul Review, Vol. 17 No. 3, pp. 190-198.
- PETTY, Richard & GUTHRIE, James. (2000). Intellectual capital literature review-Measurement, reporting and management. Journal of Intellectual Capital, 1(2), 155-176.
- Pew Tan, H., Plowman, D. and Hancock, P., (2007). Intellectual capital and financial returns of companies. Journal of Intellectual capital, 8(1), 76-95.
- Poh, L.T., Kilicman, A. and Ibrahim, S.N.I. (2018), "On intellectual capital and financial performances of banks in Malaysia", Cogent Economics and Finance, Vol. 6 No. 1, doi: 10.1080/23322039.2018. 1453574. pp. 555-580

- Pulic, A. and Bornemann, M., (1999). The physical and intellectual capital of Austrian banks. available at: www. vaic-on. net/download/Papers/Physical% 20and% 20intellectual% 20Capital% 20of% 20Austrain% 20Banks. htm (accessed 12 December, 2019).
- PULIC, Ante. (1998). Measuring the Performance of Intellectual Potential in Knowledge Economy. 2nd McMaster World Congress. 1-20.
- Qian, W., Chen, W., & He, X. (2021). Parameter estimation for the Pareto distribution based on ranked set sampling. Statistical Papers, 62(1), 395-417.
- Ramezan, M. (2011) 'Intellectual capital and organizational organic structure in knowledge society: how are these concepts related?', International journal of Information Management, Vol. 31, No. 1, pp.88–95.
- Rappaport, A. (2006) Ten Ways to Create Shareholder Value. Harvard Business Review.
- Aziz, T. N., Razalli, M. R., & Othman, A. A. (2019). The Impact of Relational Capital as an Important Instrument of Increasing Competitiveness On Balanced Scorecard Performance in Life Insurance Agency in Malaysia. International Journal of Academic Research in Business and Social Sciences, 9(12). Rehman, W.U., Chaudhary, A.R., Rehman, H.U. and Zahid, A., (2011). Intellectual capital performance and its impact on corporate performance: Empirical evidence from MODARABA sector of Pakistan. Australian journal of business and management research, 1(5), p.8.
- Rehman, A. U., Aslam, E., & Iqbal, A. (2022). Intellectual capital efficiency and bank performance: evidence from Islamic banks. Borsa Istanbul Review, 22(1), 113-121.
- Roos, G. and Roos, J. (1997) 'Measuring your company's intellectual capital performance', Long Range Planning, Vol. 30, No. 3, pp.413–26.
- Salehi, M., Ali Mohammed Al-Msafir, H., Homayoun, S. and Zimon, G. (2022), "The effect of social and intellectual capital on fraud and money laundering in Iraq", Journal of Money Laundering Control, Vol. ahead-of-print No. ahead-of-print
- Schriesheim, C. A., Hinkin, T. R., & Tetrault, L. A. (1991). The discriminant validity of the Leader Reward and Punishment Questionnaire (LRPQ) and satisfaction with supervision: A two-sample, factor analytic investigation. *Journal of Occupational Psychology*, 64(2), 159-166.
- Sekaran, U. (2003). Research Methods for Business: A skill-bulding approach. New York: John Willey and Son. Inc Year.

- Sekaran, U., & Bougie, R. (2010). Research Methods for Business A Skill-Building Approach (Fifth Edit.). John Wiley and Sons Ltd.
- Sekaran, U., & Bougie, R. (2016). Research methods for business: A skill building approach. john wiley & sons.
- Setianto, R.H. and Sukmana, R., (2016). Intellectual Capital and Islamic Banks Performance; Evidence from Indonesia and Malaysia. Iqtishadia: Jurnal Kajian Ekonomi dan Bisnis Islam STAIN Kudus, 9(2), 376-397.
- Setianto, Rahmat Heru (2016) Intellectual Capital and Islamic Banks' Performance; Evidence from Indonesia and Malaysia, Universities Airlangga Department of Management, IQTISHADIA Vol. 9, No. 2,
- Setyawati, I., Widyastuti, T., Suryati, A. and Hartani, N., (2019). Intellectual capital performance of Islamic banks in Indonesia: Towards competitive advantages. Management Science Letters, 9(12), 1999-2008.
- Shafii Yousuf Said Mohammed (2020) THE ROLE OF HUMAN CAPITAL AND INSTITUTIONAL PERFORMANCE IN ACHIEVING COMPETITIVENESS AT SUHAR UNIVERSITY IN THE SULTANATE OF OMAN, IJASOS-International E-Journal of Advances in Social Sciences, Vol. VI, Issue 17, August
- Singh, S., Sidhu, J., Joshi, M. and Kansal, M. (2016), "Measuring intellectual capital performance of Indian banks", Managerial Finance, Vol. 42 No. 7, pp. 635-655.
- Sireci, S. G. (1998). The construct of content validity. *Social indicators* research, 45(1), 83-117.
- Ståhle, P., Ståhle, S, & Lin, C. 2015. Intangibles and national economic wealth a new perspective on how they are linked. Journal of Intellectual Capital, Vol. 16 Iss: 1, pp. 20-57.
- Stewart, T.A. (1997) Intellectual Capital: The New Wealth of Organizations, Bantam Doubleday Dell Publishing Group, New York, NY.
- STEWART, Thomas A. (1991). Brainpower. Fortune Magazine, (127), 44-60.
- Sveiby, K.E. (1997) The New Organizational Wealth: Managing and Measuring Knowledge-Based Assets, Berrett-Koehler Publishers, CA, San Francisco.
- Stapleton, L. M.(2018). Survey sampling, administration, and analysis. In The reviewer's guide to quantitative methods in the social sciences (pp. 467-481). Routledge.)
- Tanay, Ghani Daham (2016) The role of human capital and the outstanding performance of workers in achieving organizational excellence, field research

- in the Iraqi Ministry of Oil, Vol. Al-Ghari Journal of Economic and International Sciences (14) Issue (28).
- Tayeh Muhammad Ibrahim (2020) The impact of the dimensions of intellectual capital in managing organizational change an exploratory study of the opinions of a sample of managers in the National Insurance Company Iraqi University Journal Issue Volume (2) Issue 48
- Tomal, Daniel R. and Jones, Kevin J. Jr. (2015) "A COMPARISON OF CORE COMPETENCIES OF WOMEN AND MEN LEADERS IN THE MANUFACTURING INDUSTRY," The Coastal Business Journal: Vol. 14: No. 1.
- Tran, D.B. and Vo, D.H. (2018), "Should bankers be concerned with intellectual capital? A study of the Thai banking sector", Journal of Intellectual Capital, Vol. 19 No. 5, pp. 897-914.
- TRIPATHY T, GIL-ALANA L & SAHO D. 2015. The effect of intellectual capital on firms' financial performance: an empirical investigation in India. International Journal of Learning and Intellectual Capital 12(4):342–357.
- Turkish, Sunni Kazim: The effect of intellectual capital in the dimensions of commodity quality: An analytical study in Al-Zawra Company, Journal of Baghdad College of Economic Sciences, University, Issue 48.
- Uddin, M.A., Ali, M.H. and Masih, M. (2020), "Institutions, human capital and economic growth in developing countries", Studies in Economics and Finance, Vol. ahead-of-print No. ahead-of-print.
- URBAN B & GREYLING BC. 2015. Open source software adoption and links to performance. International Journal of Technology Learning; Innovation and Development 7(3):261–278.
- Vairinhos, Valter (2020) Reporting of Intellectual Capital Management Using a Scoring Model, Sustainability 2020, 12, 8086; doi:10.3390/su12198086
- Voight BF, Kudaravalli S, Wen X, Pritchard JK (2006) Correction: A Map of Recent Positive Selection in the Human Genome. PLOS Biology 4(4): e154. <a href="https://doi.org/10.1371/journal.pbio.0040154">https://doi.org/10.1371/journal.pbio.0040154</a>
- Wang, Qiankun (2021) The Effect of Relational Capital on Organizational Performance in Supply Chain: The Mediating Role of Explicit and Tacit Knowledge Sharing, Sustainability 2021, 13, 10635. https://doi.org/10.3390/su13190635

- Webb, J. K., Flambaum, V. V., Churchill, C. W., Drinkwater, M. J., & Barrow, J. D. (1999). Search for time variation of the fine structure constant. *Physical review letters*, 82(5), 884.
- Wells, C. S., & Wollack, J. A. (2003). An instructor's guide to understanding test reliability. Testing & Evaluation Services University of Wisconsin.
- Wells, C. S., & Wollack, J. A. (2003). An instructor's guide to understanding test reliability. Testing & Evaluation Services University of Wisconsin.
- Wu, W.Y. and Tsai, H.J. (2005) 'Impact of social capital and business operation mode on intellectual capital and knowledge management', International Journal of Technology Management, Vol. 30, No. ½, pp.147–171.
- Yadegari, Samira (2018) Role of intellectual capital on creation of innovation capabilities in HIS and computer units, Journal of Education and Health Promotion | Volume 7 | June 2018
- Yao, H., Haris, M., Tariq, G., Javaid, H.M. and Khan, M.A.S. (2019), "Intellectual capital, profitability, and productivity: evidence from Pakistani financial institutions", Sustainability, Vol. 11 No. 14,p. 3842, doi: 10.3390/su11143842.
- Yıldız, S., (2011). Entelektüel Sermayenin İşletme Performansına Etkisi: Bankacılık Sektöründe Bir Araştırma. Anadolu University Journal of Social Sciences, 11(3), 11–28.
- Zeghal, D. and Maaloul, A., (2010). Analysing value added as an indicator of intellectual capital and its consequences on company performance. Journal of Intellectual capital, 11(1), 39-60.
- Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2013). Business research methods. Cengage Learning.

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**APPENDIX** 

Master's thesis questionnaire

The impact of intellectual capital components on organizational performance

A case study of Islamic banks in Iraq

Dear Participants,

This research aims to study the impact of the components of intellectual capital

on the organizational performance of Islamic banks in Iraq. This research derives its

importance from the subject itself, as it is a fertile and current topic in the

administrative and accounting field in the context of profit and non-profit

organizations alike. In addition to the importance of the role that knowledge

management practices play in accumulating and enhancing intellectual capital in

organizations, which is positively reflected in strengthening the skills and network of

relationships owned by individuals and groups, which in turn leads to creating an

innovative climate and storing collective knowledge, which helps organizations

achieve their goals.

For the requirements of research completion to obtain a master's degree in

management from the Turkish University of Karabuk, please kindly fill out the

attached questionnaire. Where we inform you that all the information provided will be

used objectively, frankly, and completely in the scientific aspect only, and we also

guarantee to you that the individual privacy of all participants in the survey is

preserved.

Your participation represents a valuable contribution to scientific research and

your valuable time provided is greatly appreciated and respected.

Thank you in advance for your kind and good cooperation.

Rami Gorges Sarges

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### **Demographic Factors**

# Please tick $(\checkmark)$ in the appropriate box:

|                            | □ Male                         |
|----------------------------|--------------------------------|
| ❖ Gender                   | ☐ Female                       |
|                            | ☐ Less than 30                 |
|                            | □ 40-50 years                  |
| <b>❖</b> The age           | □ 50-60 years                  |
|                            | □ 60 years and over            |
|                            | ☐ Intermediate Diploma or less |
|                            | □ Bachelor                     |
| Academic achievement       | ☐ Higher Studies diploma       |
|                            | □ Master                       |
|                            | ☐ Associate Director           |
|                            | ☐ Branch Manager               |
| Career Title               | ☐ Bank Manger                  |
|                            | $\Box$ Other                   |
|                            |                                |
|                            | ☐ From 6 to 10 year            |
| Number of years of service | ☐ From 11 years to 15 years    |
|                            | ☐ 16 years and over            |

### Please put a tick $(\checkmark)$ in front of the phrase you see fit:

| Human Capital   | Strongly disagree    | do not<br>agree |         | I agree | I strongly agree    |
|---|----------------------|-----------------|---------|---------|---------------------|
| IIC1 Our organization has a highly competent management                             | 1                    | 2               | 3       | 4       | 5                   |
| HC1. Our organization has a highly competent management team.                       |                      |                 |         |         |                     |
| HC2. In our organization, employees are motivated and                               |                      |                 |         |         |                     |
| creative.   |                      |                 |         |         |                     |
| HC3. Our employees are experts in their particular jobs and functions.              |                      |                 |         |         |                     |
| HC4. Our employees are able to develop new ideas.                                   |                      |                 |         |         |                     |
| HC5. Our organization takes initiative to launch new                                |                      |                 |         |         |                     |
| products.   |                      |                 |         |         |                     |
| HC6. Our organization encourages the sharing of ideas, knowledge and practices.     |                      |                 |         |         |                     |
| HC7. Our employees generally understand the target markets and customer profiles.   |                      |                 |         |         |                     |
| HC8. Our organization recognizes the importance of knowledge as a strategic asset.  |                      |                 |         |         |                     |
| HC9. Our employees are willing to work overtime                                     |                      |                 |         |         |                     |
| HC10. Our organization encourages and supports research and development activities. |                      |                 |         |         |                     |
| HC11. Our employees are unique to our organization.                                 |                      |                 |         |         |                     |
| HC12. Our employees are satisfied with the performance evaluation system            |                      |                 |         |         |                     |
| HC13. Our employees are satisfied with the remuneration scheme                      |                      |                 |         |         |                     |
| HC14. In our organization, employees are satisfied with the top management.         |                      |                 |         |         |                     |
| Relational Capital (CC)   | Strongly<br>disagree | do not agree    | Neutral | I agree | I strongly<br>agree |
|   | 1                    | 2               | 3       | 4       | 5                   |
| CC1. Our organization is aware of customer's complaints.                            |                      |                 |         |         |                     |
| CC2. Our customers increasingly select our product or services.                     |                      |                 |         |         |                     |

| CC3. Our customers have loyalty toward our organization.   |                      |                 |         |         |                     |
|--|----------------------|-----------------|---------|---------|---------------------|
| CC4. Customer are satisfied with timeliness of our product or service delivery.  |                      |                 |         |         |                     |
| CC5. Our suppliers constantly do business with our organization.   |                      |                 |         |         |                     |
| CC6. Our organization cares about what the customer thinks and demands from us.  |                      |                 |         |         |                     |
| CC7. Our organization distributes customer's data to all relevant departments.   |                      |                 |         |         |                     |
| CC8. Collaboration with international organizations can enhance our performance.   |                      |                 |         |         |                     |
| CC9. Our organization has enough distribution channels for the satisfaction of our customers.  |                      |                 |         |         |                     |
| CC10. Government's agencies provide support to our organization to meet the challenges and serve the customers better.   |                      |                 |         |         |                     |
| CC11. Our products or services are based on market and customer information.   |                      |                 |         |         |                     |
| Structural Capital (Organizational Structure)  | Strongly<br>disagree | do not<br>agree | Neutral | I agree | I strongly<br>agree |
|  | 1                    | 2               | 3       | 4       | 5                   |
| SC1. In our organization, information is always available.   |                      |                 |         |         |                     |
| SC2. Our organization uses the best and most integrated management system to serve the customers.  |                      |                 |         |         |                     |
|  |                      |                 |         |         |                     |
| SC3. In our organization, knowledge is embedded in the structures, systems and procedures.   |                      |                 |         |         |                     |
|  |                      |                 |         |         |                     |
| structures, systems and procedures.  SC4. Our organization uses patents and licenses as a way to   |                      |                 |         |         |                     |
| structures, systems and procedures.  SC4. Our organization uses patents and licenses as a way to store knowledge.  SC5. Our organizational structure keeps employees close to  |                      |                 |         |         |                     |
| structures, systems and procedures.  SC4. Our organization uses patents and licenses as a way to store knowledge.  SC5. Our organizational structure keeps employees close to each other.  SC6. Our organizational system and procedures support |                      |                 |         |         |                     |

| SC9. Our organization encourage creative ideas by employees.  |                      |                 |         |         |                     |
|---|----------------------|-----------------|---------|---------|---------------------|
| SC10. Our organization provides opportunities to upgrade the education level of employees.  |                      |                 |         |         |                     |
| SC11. Our organization's policies, procedures, databases, and networks are up-to-date.  |                      |                 |         |         |                     |
| SC12. Our organization encourages employees to speak their minds.   |                      |                 |         |         |                     |
| SC13. Our employees are involved in the organization's decision-making.   |                      |                 |         |         |                     |
| SC14. A lot of vital knowledge and information would be lost if key people leave the organization.  |                      |                 |         |         |                     |
| Social Capital  | Strongly<br>disagree | do not<br>agree | Neutral | I agree | I strongly<br>agree |
|   | 1                    | 2               | 3       | 4       | 5                   |
| SO1. Our organization makes efforts to create and sustain organizational culture in the market.   |                      |                 |         |         |                     |
| SO2. Our organization always considers environmental health & public social benefits in any planning, development & implementation of projects. |                      |                 |         |         |                     |
| SO3. Our employees are skillful and collaborating with each other to diagnose and solve the problems.   |                      |                 |         |         |                     |
| SO4. In general, in our organization employees are sincere and honest.  |                      |                 |         |         |                     |
| SO5. Our employees like to share information and learn from each other.   |                      |                 |         |         |                     |
| SO6. Our employees have good relationship with each other in performing their duties.   |                      |                 |         |         |                     |
| SO7. Our employees exchange ideas with people from different areas of the organization.   |                      |                 |         |         |                     |
| SO8. Our employees have good relationship with customers, suppliers, alliance partners and friends to develop solutions for organization.       |                      |                 |         |         |                     |
| SO9. Our employees share organizational myths or stories from each other.   |                      |                 |         |         |                     |
| SO10. Our employees have strong internal relationship e.g. respect, friendship, communication, etc.   |                      |                 |         |         |                     |
| SO11. Our employees co-operate with each other's to   |                      |                 |         |         |                     |

| accomplish team tasks   |                      |                 |           |           |                     |
|---|----------------------|-----------------|-----------|-----------|---------------------|
| SO12. Our employees exchange experiences with people from different departments of the organization.              |                      |                 |           |           |                     |
| Technical capital   | Strongly disagree    | do not agree    | ω Neutral | 4 I agree | J strongly agree    |
| TC1. In our organization, technological knowledge is easy to understand, transfer and use.                        |                      |                 |           |           |                     |
| TC2. Our organization has had a leading role in the market for a long time on the basis of technological capital. |                      |                 |           |           |                     |
| TC3. Our organization has a large number of technological concepts which are useful for innovation.               |                      |                 |           |           |                     |
| TC4. Our organization has coordination among different departments which is vital for technological innovation.   |                      |                 |           |           |                     |
| TC5. Our organization knows innovation depends on the control of various technologies.                            |                      |                 |           |           |                     |
| TC6. Our organization use latest and high-tech equipment & technology to remain competitive.                      |                      |                 |           |           |                     |
| TC7. Our organization has good research and development infrastructure.   |                      |                 |           |           |                     |
| TC8. Our organization has sufficient budget for technological development.  |                      |                 |           |           |                     |
| TC9. Our organization improves technological knowledge by using technologies from external sources.               |                      |                 |           |           |                     |
| TC10. Our organization has professional skillful employees which are necessary for technological innovation.      |                      |                 |           |           |                     |
| TC11. Our organization has good systems to secure our intellectual property.                                      |                      |                 |           |           |                     |
| TC12. Our organization has good systems to protect our industrial property.                                       |                      |                 |           |           |                     |
| Organizational Performance  | Strongly<br>disagree | do not<br>agree | Neutral   | I agree   | I strongly<br>agree |
|   | 1                    | 2               | 3         | 4         | 5                   |
| IP1. Our organization's revenue is continuously increasing growth.  |                      |                 |           |           |                     |
| IP2. Our organization's profit is continuously increasing   |                      |                 |           |           |                     |

| growth.   |  |  |
|---|--|--|
| IP3. Our organization has been continuously reducing cost per revenue unit.                             |  |  |
| IP4. Our organization's net return on assets has been increasing.                                       |  |  |
| IP5. Our organization's net return on sales has been increasing.  |  |  |
| IP6. Due to organizational performance, customer loyalty level is increasing.                           |  |  |
| IP7. Our customers are satisfied with our products or services.   |  |  |
| IP8. Our customers believe that our organization offers high value-added products and services to them. |  |  |
| IP9. Our market share is continuously increasing.   |  |  |
| IP10. Our organization achieves a high success rate in new products/services launched.                  |  |  |
| IP11. Our organization practices 'On Time Delivery' of its products and services to customers.          |  |  |
| IP12. Our organization is very responsive to local & international market needs.                        |  |  |
| IP13. Our employee turnover is the lowest among others in the market.                                   |  |  |
| IP14. Our organization always able to achieve and maintain superior performance.                        |  |  |
| IP15. Our organization has good overall performance and success.  |  |  |

#### **CURRICULUM VITAE**

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