

**University of Liverpool**  
**Doctor of Business Administration**

**Managing Human Capital and Associated Risks in Organisations**  
**(A Saudi Company Case Study)**

**Thesis submitted in accordance with the requirements of the University of Liverpool for  
the degree of Doctor of Business Administration**

**By**  
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## Declaration

I hereby declare that this thesis represents my own work which has been done after registration for the degree of Doctorate of Business Administration DBA at The university of Liverpool y, and has not been previously included in a thesis or dissertation submitted to this or any other institution for a degree, Master or other qualifications. I have read the University's current research ethics guidelines, and accept responsibility for the conduct of the procedures in accordance with the University's guidelines. I have attempted to identify all the risks related to this research that may arise in conducting this research, obtained the relevant ethical and/or safety approval (where applicable), and acknowledged my obligations and the rights of the participants.

Signature:

A handwritten signature in black ink, appearing to be 'Abdullah A. Alzahrany', written in a cursive style.

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## Abstract

This study explored human capital management and associated risks in an organisation. The researcher reviewed salient literature on human capital and related risks, human capital management and other relevant concepts. The research adopted qualitative mixed-methods research (QUAL-qual design) by selecting two samples for this study: human capital experts and ICE's managers' samples. Semi-structured interviews were conducted into these two samples to identify drivers of human capital and risks associated with human capital within an organisation. The qualitative mixed-methods research (QUAL-qual design) in two samples were found to be appropriate as the study's objectives and research questions have an exploratory nature, and the analysis of the reality of Human Capital Management (HCM) is subjective in nature. The used methodology to analyse the data was the rapid identification of themes from audio recordings (RITA). The thematic analysis method was adopted to analyse the collected data from the case study by identifying secondary and initial cycles categories, codes pattern map, and themes.

Regarding drivers of human capital management, it was found that it can start from raising three key questions: Are our employees willing to support our vision? Are our employees enabled to confront and struggle with problems? Are our employees enabled them to do their jobs? Furthermore, it is worth mentioning that managing human capital sounds cultural-based, so it might include different drivers or components in various organisations as it depends on their working environment. Consequently, adopting a particular framework for human capital drivers might not be effective in different cultures or contexts.

The importance of some drivers might vary from one culture to another. Hence, it is recommended to raise these three questions and define human capital drivers within the community and culture of that organisation/company in order to assess the credibility of the framework to a particular culture or society. The findings showed that there are ten drivers of human capital management within the managerial practice of Saudi Arabia. Nonetheless, the drivers extracted from literature in chapter two do not match the findings in terms of categorising and grouping—for example,

managing the six stages of the employee life cycle was not mentioned exactly in chapter two. However, these stages were categorised under diverse groups like human capital development and career management drivers.

Moreover, it sounds that developing human capital management effectively by managing its risk is considered more effective than following a strategic approach. It will give strong buy-in by the top management of human capital importance and criticality. Therefore, it is recommended to use human capital risks as a nudging strategy to guarantee sustainable support from top management to enhance human capital management. As regards the risks of human capital, the findings showed that there are thirteen risks associated with human capital management. However, the human capital risks extracted from the literature in chapter two do not match the findings precisely as there are unknown human capital risks. The variation between the literature and the findings of this study might be attributed to two reasons. The first reason might be that human resource management and risk management has received limited attention from academics and practitioners in the management literature, which shows a gap in the literature and calls for further studies in this subject. Second, human capital management's risks register is cultural and context-based, requiring a standalone risk assessment to identify, prioritise, and manage risks.

Finally, the researcher attempted to diagnose the current human capital management situation of ICE, along with associated risks. Findings showed that there are 15 areas of development to improve human capital management within ICE. These areas of development relate to great extant drivers of human capital management. Likewise, findings showed that 14 potential risks need to be managed within ICE. Based on the current situation, a set of actions were proposed to enhance and improve human capital management and mitigate potential risks.

## CHAPTER ONE

### THE INTRODUCTION

#### 1.1 Introduction

Human beings live healthier, longer, and happier lives and are experiencing increasing levels of knowledge diffusion and gain, higher levels of training and education, improved health, migration, fertility change, and demographic transitions. Such change has led to nations and organisations declaring that their people are their greatest asset. Despite the same, the strategic study of people from an organisation context has relatively evolved as a new concept to understand the definition of human capital. The writer thinks there is an insisting need to understand human capital significantly when technology and automation promises change labour definition. There is a dramatic shift in the horizon being labelled as the “Fourth Industrial Revolution”, which is going to create an impact across all fields and industries such as restructuring production, consumption, transportation and delivery systems, among other factors. Simultaneously, the very nature of work is changing due to new technologies and their consequent influence on business models, and in part because of new platforms that allow talent to connect to markets in entirely new ways (Xu, J.M. and S.H., 2018). Managing these transitions to arrive at optimum consequences for societies will necessitate visionary leadership and a wide range of new knowledge and skills. The development of relevant talent will decide whether we all participate in the imminent opportunities or experience disruptions.

Consequently, it explains why a real focus on understanding and deploying Human Capital is of immense significance in the current scenario. In the same context, having a deep understanding of human capital drivers and components would qualify managers to monitor and manage it more efficiently and the financial capital to enhance the overall performance. In the other side, human capital's drivers and components' poor performance might be considered human capital risks that

need to be monitored and mitigated (Torres et al., 2018). Recent research in behavioural economics and nudging theory, particularly the concept of loss aversion, indicates that people tend to care more about what they might lose than gain (Schmidt and Zank, 2005). In other words, managers and executives might prefer avoiding losses which might be caused by neglecting human capital risks rather than acquiring equivalent gains in human capital management. Hence, such a tendency might be behaved by managers when they compare growth strategy and risk management. It is envisioned that managing human capital from the two perspectives, strategy and risk management, would enable managers to grow sustainably in the current competitive business environment.

## **1.2 Identifying the problem**

As an entrepreneur and CEO, the researcher noticed that success and excellent performance in organisations and companies usually strongly correlate with their employees' human capital. In the same context, academics and practitioners have a solid consensus about the importance of the human factor in any organisation or a company's performance. Furthermore, employees are increasingly considered assets, like other assets and resources within companies and organisations worldwide. In fact, in the business world, employees and workers are considered another capital besides the financial capital, which has many generally accepted frameworks and tools to assess its efficiencies such as financial budgets, financial statements, financial ratios analysis, and financial KPIs. However, CEOs, shareholders, entrepreneurs, and executives can evaluate their corporate and organisation's financial performance, but they cannot use generally accepted frameworks and tools to assess human capital's efficiency and performance. Although there are suggested frameworks and tools for measuring HC in the literature such as (Baron, 2011; Charlwood, Stuart, and Trusson, ,2017; Mubarik, Chandran and Devadason, 2018; and Koziol and Mikos, 2020), they are not generally accepted by CEOs, shareholders, entrepreneurs, and executives as financial capital. Furthermore, there is a disagreement between the existing frameworks about the drivers of human capital and its components which need to be measured and human capital risks has received limited attention from academic and practitioners in the management literature (Becker and Smidt, 2016). In other words, there are well-established practices for evaluating, monitoring, managing financial capital within companies/organisations,

which we do not have similar generally accepted practices for human capital as they might be contextually based. Although some findings, including drivers and risks of human capital mentioned in the literature, can be applicable across most of the countries, the priority and importance ranking of these drivers might vary from culture to culture, country to country, and market to market.

Likewise, the researcher found it difficult to evaluate his ventures' human capital based on the existing frameworks, which he believes is the cornerstone of future success and achievement. Therefore, the researcher raised some questions, namely, what is human capital? What are the drivers of efficient human capital within my culture? What are the potential risks associated with managing human capital? Finally, what are actions need to be taken to enhance human capital within research ventures and companies? The researcher started his journey to answer the above questions by immersing himself in Human Resource Management's daily work in order to enhance his knowledge and experience. It is worth mentioning that the researcher used to have limited knowledge and background about Human Resource Management (HRM) as he did not get any degree or training courses in this regard. During the HRM sense-making process, one of the observations was that Human Resource Management in Saudi Arabia is mainly considered and perceived as an operational work, including HR operations, and ignores its strategic dimension. Although strategic HRM is a well-established research topic and is practiced in organisations around the world (Jiang and Messersmith,2018; Boon, Hartog, and Lepak, 2019), it is embarked to enable an organization to achieve its strategic goals in the four quadrants of balanced scorecard but not to make HC as the fifth quadrant to gain and maintain a sustainable competitive advantage. Despite there is an Organisational Development Department (ODD) in some companies/organisations which is supposed to manage the strategic perspective of HRM, it seems to focus on corporate design and restructuring jobs more than providing a holistic umbrella for managing human capital across its organisation/company. Therefore, executives and top management believe HRM practices' operational nature is believed to be one reason for ignoring human capital's strategic and comprehensive perspective.

In the same context, the researcher attended several training courses in HRM in order to enhance his knowledge and qualify himself to pursue answers to his questions about human capital. During the last three years, the researcher was certified in two psychometric assessments, Birkman and TALEXES assessments, which are vital for managing human capital. Furthermore, the researcher enrolled on crash courses to enhance his knowledge of human capital and strategic human resource (HR) management. He attended 18 online modules on human capital and strategic human resource (HR) management through Mercer learning platform. These modules have expanded his horizon to understand HR's knowledge in several regards, including business partnering, driving employee engagement and productivity, recruitment and EVP fundamentals, talent management fundamentals, hiring and on-boarding strategies, and effective utilisation of hiring assessment tools. In other words, training courses undertaken have enhanced the researcher's understanding and reflective capability of human capital management. Besides, the researcher read several international reports on the measurement of micro and macro levels of human capital, including competitiveness reports published by GEF and Global Talent Competitiveness Index and (GTCI) talent report issued by INSEAD. It is worth mentioning that talent management is a key components of human capital management and deeply interlocked with HCM's practices as mentioned in sections 2.3 and 2.12. Overall, the above helped the researcher identify the research's problems and articulate them in the next section's aim, objectives, and questions.

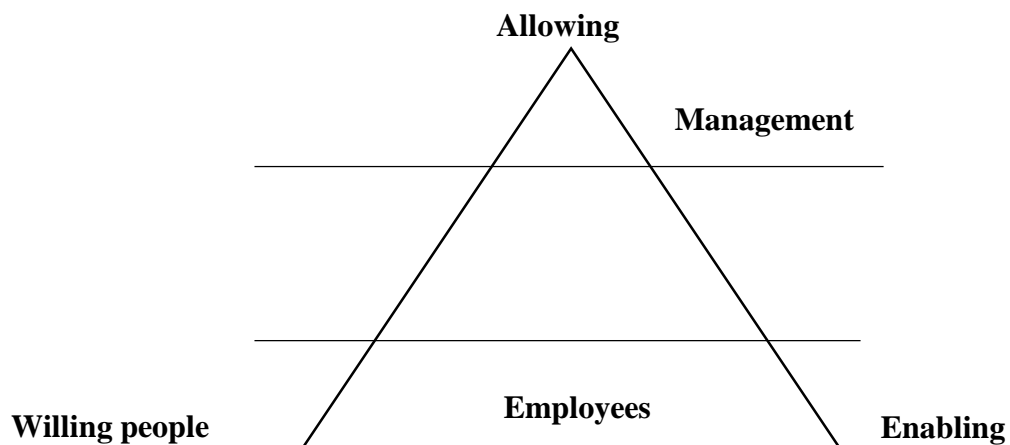
### **1.3 Aim, objectives and research questions**

The research problem is that in order to strengthen HC in ICE we need to identify HC drivers and HC risks associated with HCM in order to evaluate them qualitatively within ICE and propose actions to enhance HC's drivers and to avoid or manage and mitigate human capital risks. By doing so, the researcher can enhance human capital management practices in ICE. Therefore, the study aims to identify drivers and components of human capital within an organisation/company and develop a human capital risk management framework. Having a deep understanding of human capital drivers and components would empower managers to observe, manage, and control it more efficiently to enhance the overall performance and financial capital. In the same context, human capital's drivers and components' poor performance might be considered human capital risks that need to be monitored and mitigated. In the same context, the management problem is to find factors



that would enable employees to work and also factors that would affect the willingness of employees to perform. The figure 1-1 illustrates this relationship in a triangle between management and employees who should be enabled and have adequate willingness to perform.

Figure 1-1 The theoretical framework of the management problem



Source: Developed by the author.

Regarding research objectives, the writer will attempt to transfer the above research questions into particular research objectives that would lead to achieving them to answer the above research questions. Therefore, the thesis aimed at achieving the following research objectives: -

1. Study the evolution of 'Human Capital' and its context within an organisation/company.
2. Identify human capital drivers and components within an organisation/company.
3. Identify risks associated with human capital within an organisation/company.
4. Propose and implement actions to avoid or manage and mitigate human capital risks to enhance human capital management practices in ICE.

As regards research questions, such an aim poses several questions that need to be addressed in this thesis. The writer thinks it is crucial to highlight human capital's nature by addressing a research question about human capital in its micro-level form. Furthermore, a research question about available lenses (risks management or strategic management) for managing human capital would be raised as so to conclude the more efficient lance. Overall, the thesis key research questions are as follows: -

1. What is human capital within its micro-level (company and organisation)?
2. What are the drivers and components of human capital within a company and organisation?
3. What are the potential risks that might be crystallised in the human capital of a company/organisation?
4. How can these human capital risks be avoided or managed, and mitigated when they occur?

#### **1.4 My role in the research**

As a founder and CEO of International Competitiveness Establishment ([www.ice.sa](http://www.ice.sa)), I kept thinking and wondering how to assess and manage human capital in organisations. As a matter of fact, International Competitiveness Establishment, or only ICE, is a group of companies consulting businesses and trading in various fields. ICE has six companies (Competitiveness consultancy Co., Dimensions Co. for PR, ICESLE for medical trading, ICEWEB for IT, Hospitality Gate HG for hospitality trading and Meltblown Plant for Industries for nonwoven fabric manufacturing) and three emerging strategic business units. In the corporate world, it is believed that there are two critical success factors in any organisation, namely money and people. Needless to say, people performance (Human Capital) is going to be reflected in the financial performance of any organisation. However, the writer thinks that there is an insisting need for executives to assess human capital efficiency, which will enable them to manage it in their organisations and increase its efficiency. This proposal aims to blueprint the thesis, which is going to explore both the theory related to Human Capital and its application to the management of Human Capital in today's context.

Therefore, the writer imagines he will be able to examine the current position of HCM within ICE and identify weaknesses and strengths of the HCM practices. Furthermore, he will develop actions to address current situation review results and construct an overarching strategy to enhance the position of human capital management. To do so, the writer thinks that three principles/approaches need to be considered and deployed during the stages of this research. Ramsey (2014) has stated these three approaches, including engagement with ideas, a practice of inquiry, and the navigation of relations. For that reason, the researcher will endeavour to engage himself in the daily activities of ICE, bearing in mind these three principles and take necessary actions and reflect on their outcomes. Moreover, Austin (2013) suggests a set of technics to succeed in change management in an organisation community during the three critical moments of the change process, which are (1) creating a new mind-set, (2) transforming ideas into sustained actions, and (3) shifting context. Hence, the researcher is going to observe these moments, recognise their characteristics, consider their obstacles, main challenges, and develop actions to overcome and mitigate them.

## **1.5 Human capital management concept and definition**

Human Capital Management (HCM) has been highlighted in the literature from two perspectives, growth strategy and risks management. There are many definitions of HC within organisations but the researcher extracted a definition from the summary of studies that adopted Organisational Human Capital (OHC) as illustrated in table 2.2. Therefore, HC can be defined for the purpose of this thesis as a combination of intangible resources that human capital plays a significant role in utilising them to create value for a company, leading to gain and sustain competitive advantages. Likewise, HCM can be defined as managing HC's drivers and components such as organisational culture, employees' engagement, leadership practices, knowledge accessibility, workforce optimisation and learning capacities in order to create value for a company/organisation, leading to gain and sustain competitive advantages. In the following lines, an attempt has been made to highlight literature from the two views.

### **1.5.1 Human Capital from a strategic perspective**

Since the inception of the human capital concept, classical economists have elaborated and developed it in the 18<sup>th</sup> century as a scientific theory. Classical economists such as Schultz (1961) concluded that there is a positive relationship between human capital development and national economic growth. In fact, the literature has classified the concept of human capital into three categories, namely, human capital from an individual perspective, labour force perspective, and productive capacity perspective. However, the writer concludes that Human Capital Management (HCM) within an organisation/company consists of various elements such as organisational culture, employees' engagement, leadership practices, knowledge accessibility, workforce optimisation and learning capacities. Therefore, these HCM's drivers should be assessed with their substances and practices to enhance human capital management performance within micro units such as organisations/companies. It is worth mentioning that this study aims to find out the drivers for managing human capital and associated risks in an organisation/company in order to improve human capital management in ICE. Hence, it must review management literature to identify human capital drivers and practices from a micro perspective.

The literature characterises human capital as an intangible asset and considers it a branch of Intellectual capital (IC). Phillips and Phillips (2015) advocated a broad grouping of assets into three categories - financial capital, intellectual capital, and tangible assets. Hence, it is important to highlight the main branches of IC in order to narrow the research to HC as elaborated in chapter 2. Pedro, Leitao, and Alves (2018) define Intellectual Capital (IC) from the results obtained in their systemic literature review as a combination of intangible resources represented by all types of knowledge, information, intellectual property, among others, deriving from human and technological resources, which are sources for the generation of value-added for a country, a region, an organisation or even for an individual, forming a renewable source of competitive advantage. Their literature review includes 777 articles of impartial studies and leads to the conclusion that there are only two distinct clusters. One corresponds to the triad formed of human capital, structural capital (i.e., organisational or process) and relational capital (i.e., client, social or business or cognitive), and the other related to the remaining components.

It is also essential to consider human capital strategy (HCS). HCS refers to the mode of operations of a firm in terms of its ranks' human resources, adjusted to fit the company's objectives, strategy, and vision. An organisation should coordinate, manage and motivate its workforce to achieve the desired objectives (Budisusetio et al., 2019). A firm's human capital strategy would be influenced by its organisational culture and ecosystem (Boon et al., 2018; Eneh and Awara, 2016). To understand how well organisations, operate and why some organisations failed to achieve their objectives, it is crucial to consider the world's human capital trends as a single entity. This perspective would assist us to appreciate the ecosystem impact on the development of the human capital strategy. The primary purpose of HCS is to transform human capital into a valuable asset to enhance the value of an organisation and enhance its performance (Boon et al., 2018; Eneh and Awara, 2016). The human capital strategy encompasses end-to-end people's overall strategy (Budisusetio, Sule and Febrian, 2019; Boon et al., 2018). Tasks that involved people (including labour law, benefits, and payroll) fall under HRM, but HCS focused on management's strategy. Huselid, Becker and Beatty (2005) highlighted the relationship between organisation strategy, HRM and HCS.

Pedro, Leitao, and Alves (2018) classified several human capital drivers or components within organisational dimensions. These drivers and components are Staff's knowledge (competencies, skills, and know-how), number of employees, human capital efficiency, motivation and attitude at work, capacity for teamwork, capacity for innovation and creativity, entrepreneurial capacity, leadership capacity, response, and problem-solving capacity, and expenditure on staff. Nonetheless, the literature highlights the concept of human capital from accounting perspectives such as (Newman 1999), who suggests measuring a company/organisation's workforce in financial terms in order to estimate its produced value and its impact on the financial performance. Moreover, Khemani (2013) concludes the importance of human capital accounting and suggests including the value of human capital as an asset within an organisation/company's balance sheet. However, there is an agreement among researchers that quantifying human capital drivers in

financial terms seems to be difficult, and there is no holistic and solid framework that has been developed for assessing human capital drivers in economic terms.

In the same context, Kucharcikova (2013) concluded that there are five major categories of human capital management drivers: leadership practices, employee engagement, knowledge accessibility, workforce optimisation, and learning capacity. Moreover, Mubarik, Chandran, and Devadason (2017) develop the Human Capital Index (HCI), which can be best represented by nine dimensions and 35 sub-dimensions of HC. The core dimensions are experience, skills, education, abilities, and training needs; within the experience, the main sub-dimensions are work-related experience and organisational tenure.

### **1.5.2 Human Capital risk management**

According to International Organisation for Standardization (ISO) 31000 (2009), risk can be defined as the effect of uncertainty on objectives that may be positive, negative, or a deviation from the expected and crystallised in an event, change in circumstances or a consequence. Additionally, ISO 31000 suggests 11 principles for managing risks and recommends considering capabilities, perceptions, and even intentions of external and internal people who can affect the achievement of organisations' objectives. In other words, risk management should be adopted from different perspectives such as people, organisational culture, performance management, HR policies, training, organisational development, and stockholder's management. Meyer, Roodt and Robbins (2011) stated that the purpose of managing risk is to ensure the effectiveness and efficiency of operations, to enforce compliance with regulations, to support business sustainability, to ensure reliable reporting to stakeholders and to ensure responsible behaviour. The same authors developed an HR risk management framework. They found that lacking a proper understanding of risk management by the HR executive is a critical challenge in the business community. The study identifies several HR risks such as employees' disengagement, fraud, corruption, theft, unethical practices, poor talent management, diversity problems, poor leadership management, lack of succession planning and poor information management.

Furthermore, Evans and Royal (2014) find out that there is confusion in identifying human capital risk and highlighting the importance of identifying, managing, and monitoring human capital risks as a driver to other risks, not just a risk by itself. Moreover, Melhem (2016) stated that recent studies consider human resources as the most important source that has a significant impact on company performance. In particular, it studies the effect of some factors (education, skilled, cultural differences, and expert human) on risk management and performance. As a matter of fact, cultural differences, as an example, can be a driver of human capital risks. According to Olajide (2014), culture and lifestyle influence consumption patterns, negotiations, communications, and interactions.

Due to the importance of managing human capital risks, scholars and practitioners developed models and frameworks for human capital risks management. Flouris and Yilmaz (2010) have developed a new human Factor Risk Management in which it enables managers to manage human resources and risk management. To do so, a new set of risk shaping/ influencing factors (RSF/RIF) has been developed and weighted by the nautical hierarchy process (AHP). Moreover, Irinja and Raimo (2012) conducted a more practical study to identify human capital risks into insurable and uninsurable risks in SMEs. Furthermore, the study suggests that a set of questions needs to be asked to identify risk shaping/influencing factors (RSF/RIF). For example, what human-based risks that an organisation will not accept? What human-based risks an organisation will take as a new initiative (e.g., innovation) and what risks an organisation will accept for competing for objectives (e.g., creativity and non-conformity). Although the human risk management framework HRMF provides insights to manage human risks, HFRM is still in the investigation process.

In the same context, Ardakani and Ganjali (2014) developed a model for human capital risk management, which includes a structured process for identifying, assessing, and classifying human capital risks into the risk register to make sure that all potential risks are going to be handled within a proper order. The first step in the model aims to set the rules for distinguishing between the three contexts of risk management: human risk, organisational context, and business operational context.

The second step is to develop a probability/ impact matrix for assessment and ranking risks. The final step is to monitor, review, and incorporate feedback to improve human capital risk management. Nonetheless, the study does not address the insisting human capital risks such as disengagement, poor organisational culture, and poor talent management. This problem aligns with the literature findings regarding human capital risks as a drive to other risks.

Additionally, Benzoni and Chyruk (2015) have conducted a comprehensive literature review (for the period between January 2000 to July 2015) and found 81 articles since they are relevant to HRM and risk management. Such a literature review identified eight risks and their measures relating to human resource factors. These eight risks are; Health and wellbeing, poor productivity, poor financial performance, high labour turnover, high absenteeism rate, poor reputation, legal cases (such as sexual harassment, racial discrimination), and poor innovation. However, it sounds to some extent that these eight risks are symptoms of hidden risks. As a way of example, employees' disengagement highly contributes to high absenteeism rate, weak innovation, reduced productivity, high labour turnover, and poor reputation. Hence, the writer thinks the employees' disengagement is the fundamental drive that causes a number of mentioned risks in this literature. It is noteworthy that the literature review insists on the need to shift the existing paradigm of identifying human capital risks by human resource/capital managers/practitioners, not by risk management manager /practitioners, to determine the potential human capital risks in organisations that align with the objectives of this thesis.

Wenli and Ling (2016) have done a case study on the intercontinental hotel to assess human resources outsourcing potential risks. Seventeen risk factors that have been identified in the literature and industry reports have been evaluated for their severity (probability of occurrence \* degree of impact). The study shows five leading risk factors assessed by using expert scoring methods (Delphi method). The risk of the hotel's information security and lack of monitoring outsourcing were graded C and D risks, which, in case of occurrence, an enterprise will face severe damages. However, the study has not highlighted the validity of the 17 factors and whether other risk factors have not been identified in the literature.



From another perspective, Govender and Jasson (2018) have conducted an empirical study to identify risks associated with investments in human capital development. A qualitative mixed-method methodology was adopted with human capital managers in selected organisations, and their responses were analysed thematically as so to find the common patterns. The study found five key risks: poor staff retention, lack of teaching transfer, misaligned training needs, disengaged employees, and limited budget. Nonetheless, this study concentrates on human capital development, and it does not include other human capital management functions such as leadership, organisational culture, human capital planning, and human capital acquisition. On the contrary, Mitrofanova et al. (2017) developed HR risks by adopting a qualitative analysis for identifying internal factors from various sources, namely, intra-organisational documentation (job description, staffing table, code of conduct ... etc.), and expert assessments (such as observations, questionnaire, HR surveys).

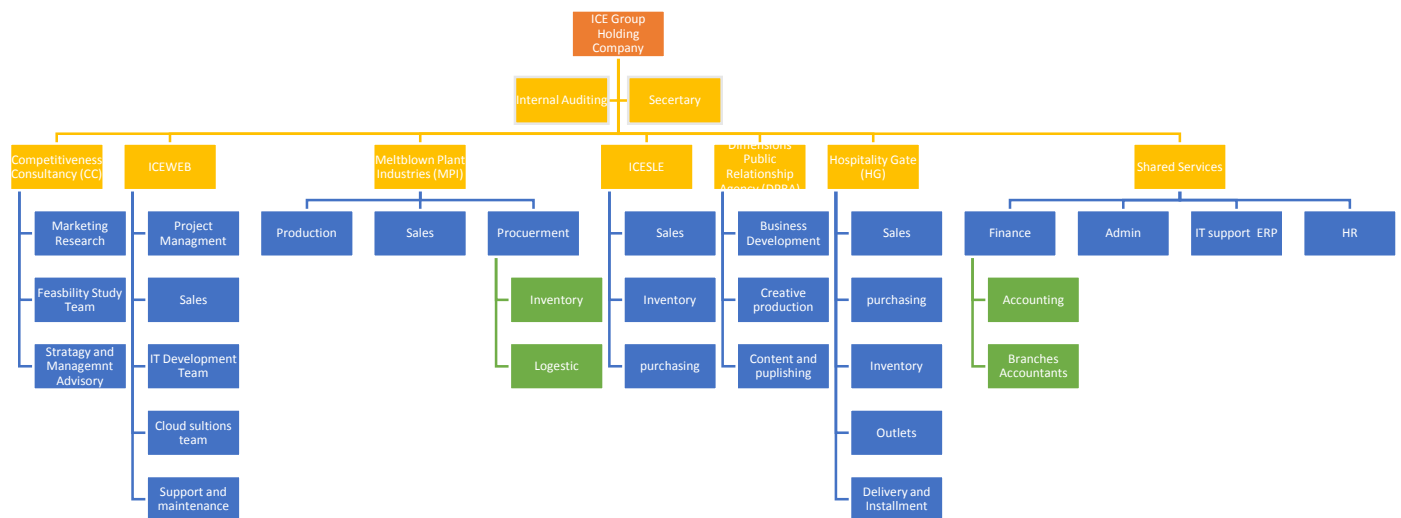
Overall, most of the literature on human capital risk management falls under the same paradigm of identifying human capital risks by risk management managers and practitioners. Therefore, the writer thinks that considering the risks management lens by human capital managers/practitioners is the right paradigm to identify real risks in human capital, such as disengagement, poor talent management, poor organisational culture, and infirm leadership practices.

## **1.6 International Competitiveness Establishment (ICE)**

ICE is a group of companies that are doing business in various fields, namely, Competitiveness Consultancy (CC), ICEWEB, Meltblown Plant Industries (MPI), Hospitality Gate (HG), Dimensions Public Relationship Agency (DPRA), and ICESLE. Regarding Competitiveness Consultancy, it was established in 2008, and it provides consultancy services on manufacturing project development, business planning, marketing research, and financial services. ICEWEB is an IT company that develops cloud solutions, mobile apps, web applications, and resellers for several companies such as Google and Amazon business solutions. As regards Meltblown Plant Industries MPI, it is a factory for producing non-woven fabric that can be used in various

applications such as respiratory mask filters, which are used by Personal Protective Equipment (PPE) manufacturers in Saudi Arabia and other countries in the Middle East. Hospitality Gate (HG) is another subsidiary of ICE working in the hospitality sector, including installation, procurement, architectural fit-out, and supplying operating supplies and equipment (OS and E) for hotels and resorts. ICESLE is another subsidiary of ICE group that provides medical and laboratory products and devices to hospitals and research centres. Finally, the DPRA is another branch of the ICE group that provides public relationships services, including managing media campaigns, creating media content, and developing a communication strategy for companies and organisations. All six subsidiaries are managed using shared services in terms of human resource management, finance, administration, logistics, and IT. In other words, each subsidiary manages its core business and outsources its shared services to the ICE group, which manages human resource functions among other shared services. The current number of employees of ICE group, including full-time and part-time, is 78 employees. The number of employees might increase due to newly contracted projects that one subsidiary might have. The ICE group provides shared services, including recruiting and managing human resources. Figure 1.1 below is the organisational structure of ICE group.

Figure 1-2 Organisational structure of ICE group



## **1.7 Structure of the thesis**

The thesis is structured into nine chapters that aim to present steps of action research conducted to fulfil the research objectives. The following sections show a glimpse of the content of each chapter.

### **1.7.1 Chapter 1 Introduction**

In this chapter, the researcher highlighted the rationale behind selecting this topic and the research problem besides the circumstances that made him to raise his questions about human capital management. Furthermore, aims, questions, and research objectives were illustrated to identify drivers and components of human capital within an organisation/company and develop a human capital risk management framework. Moreover, the researcher's role as an insider researcher was presented and discussed, along with potential challenges that might take place during the research process. Finally, a glimpse about International Competitiveness Establishment ( [www.ice.sa](http://www.ice.sa)), which is the case study, was illustrated in section 1.6.

### **1.7.2 Chapter 2 Literature review**

In this chapter, the researcher reviewed salient literature on human capital and related risks, human capital management and other relevant concepts. Human capital plays a vital role in product development and service delivery. Such a fact can be understood as the workforce that constitutes human capital that can promote creativity and innovation necessary for organisations' growth and expansion. The chapter is divided into twelve sections consisting of discussion which include: human capital as capital or resources; human capital; measurement of human capital; human capital context; organisational intellectual capital; HC as a competitive advantage; measurement of human capital; drivers of human capital; enablers and parameters of human capital drivers; and human capital and associated risks. The literature revealed that there are four core categories of HC drivers. Generally, HC may be categorised into four core drivers and eight enablers. The implication for practice is that the collective effective adoption and implementation of the 43 parameters and practices of HC drivers would translate into a strong and resourceful workforce

(HC). Each driver of HC consists of several parameters and practices that management should identify and strengthen to effective position employees (HC) within an organisation to maximise shareholders' wealth and improve a firm's value.

Furthermore, the risks associated with human capital management were illustrated in this chapter which identified 21 risks associated with HC in the literature, including employees' disengagement; unethical practice; poor talent management; diversity problems; poor leadership; lack of succession planning; poor information management; cultural differences; health and wellbeing; poor productivity; high employees' turnover; high absenteeism rate; poor reputation; high in-job legal cases; poor innovation; lack of knowledge transfer; misaligned training need; low level of trust; fraud; corruption and theft.

### **1.7.3 Chapter 3 Methodology and method of inquiry**

The methodology and method of inquiry used for this study are discussed in this chapter. This chapter aims to illustrate my action research approach and techniques adopted for my research and describe its cycle. The action research process consists of four steps: (1) constructing, (2) planning action, (3) taking action, and (4) evaluating action, i.e. evaluation of actions to ensure reflection and assessment of the research process. This chapter commenced with a description of the researcher's epistemological perspective. Based on action research, the epistemological perspective assumes that knowledge is evolving and dynamic, thereby ensuring continuous development and the emergence of new understandings. The research design and methodological perspective are also highlighted in the chapter. The researcher used an inductive approach and engaged in the research from specific to the general to ensure that themes constructed from the data collected and used for the study.

The researcher discussed the research plan (research planning) and how the action research was conducted - from general to specific actions plan. Generally, the researcher considered questions regarding the current practice of managing human capital in Saudi Arabia. The researcher

attempted to answer specific questions on human capital management to enable the researcher to know the current situation and development regarding actions evaluation of human capital management in Saudi Arabia. This chapter's remaining parts consist of six major parts focusing on my epistemological position, my approach and plan; action research cycle one: construction; action research cycle two: planning; action research cycle three: taking action, and action research cycle four: evaluating action.

#### **1.7.4 Chapter 4 Taking Action**

Having completing the literature review and methodology stage, taking action is the next stage of my action research process. Action research cycle three, taking action, included using qualitative mixed-method methods to conduct my action research. The researcher aims to plan and do action research to identify human capital drivers and associated risks in order to manage, avoid, or mitigate d human capital risks and enhance human capital management practices in ICE. the researcher had raised questions about the current practice of managing human capital such as is human capital a vital asset within ICE that need keep an eye on it and devise a management framework to enhance its conditions, what are the current activities to manage human capital?. As long as human capital management has a significant contribution to successful performance, what are its drivers and components that need to be addressed collectively in order to achieve a robust human capital position? What are the risks associated with human capital? What actions need to be taken to manage and mitigate them? How can I assess my actions on managing human capital and its associated risks? These questions were articulated in this study's research objectives, and a specific action plan of the action research took place during data collection, analysis, findings, and conclusion stages. Therefore, this chapter aims to highlight the case study and the adopted concept of shared services, which include managing the group's human capital. Moreover, it explains the course of actions taken to select the two participants' samples and conduct in-depth interviews.

### **1.7.5 Chapter 5 Data Analysis**

In this chapter, the researcher aimed to present the analysis of the collected data from qualitative data and semi-structured interview data. The first section is about adopting Rapid Identification of Themes from Audio/videos recordings (RITA) in analysing themes. The second section highlighted the researcher illustrated the codes masters of the evaluation foci Importance of human capital in the national and organisational context. Thirdly, the themes of the human capital management framework and human capital drivers were discussed. In the fourth section, the analysis dimension focused on identifying the human capital management associated risks to conduct risk management actions. Other sections were dedicated to illustrating the findings on the separate evaluations dimensions and areas of development for human capital management in ICE, human capital risks within ICE and risks management, and proposed actions to enhance human capital management and mitigate associated risks.

### **1.7.6 Chapter 6 Findings and results**

In this chapter, the researcher aimed to present the qualitative study's findings and compare them with the literature chapter results. By doing so, key themes were identified and discussed in relationship with the literature review results. The first section is about the findings regarding human capital within an organisational context and its importance as a sustainable competitive advantage. The second section highlighted human capital management drivers and a suggested framework for identifying them. Each found driver was presented and discussed compared to the literature review results in chapter two. Thirdly, the results of human capital risks were illustrated and discussed in comparison with the literature review results in chapter two. Furthermore, in the last section, the researcher attempted to diagnose the current human capital management situation of ICE, along with associated risks and propose recommendations to enhance human capital management and mitigate its risks. The themed and discussion were organised to address the last three research objectives: identifying human capital drivers, identifying risks associated with human capital, and proposing actions to avoid or manage and mitigate human capital risks.

### **1.7.7 Chapter 7 Conclusion**

In the conclusion chapter, the overall conclusions of key chapters of this study are highlighted and discussed. The chapter presented the researcher's attempt to diagnose the current human capital management situation of ICE, along with associated risks. Moreover, it showed the final conclusion regarding fulfilling the objectives of this study. For example, the conclusion about identifying 15 areas of development was presented, aiming to improve human capital management within ICE. These areas of development relate to great extant drivers of human capital management. Likewise, it showed the conclusion about identifying 14 potential risks that need to be managed within ICE. Based on the above current situation analysis, a set of actions were proposed to enhance and improve human capital management and mitigate potential risks.

### **1.7.8 Reflections, Limitations and Future studies chapters**

In these three chapters, the researchers discussed key reflections about this study's findings, which are contextually based. Although some findings, including drivers and risks of human capital mentioned in the literature, can be applicable across most of the countries, the priority and importance ranking of these drivers might vary from culture to culture, country to country, and market to market. Therefore, the variation between the literature and findings of this study might be attributed to two reasons. The first reason might be that human resource management and risk management has received limited attention from academics and practitioners in the management literature, which shows a gap in the literature and calls for further studies in this subject. Second, human capital management's risks register is cultural and context-based, requiring a standalone risk assessment to identify, prioritise, and manage risks. Furthermore, future studies and limitations of this thesis were highlighted and discussed regarding its cultural characteristics and Saudi Arabia's labour market's local ecosystem.

## 1.8 Conclusion

In conclusion, this chapter highlighted the rationale behind selecting this topic and the research problem besides the circumstances that made him to raise his questions about human capital management. Furthermore, aims, questions, and research objectives were illustrated to identify drivers and components of human capital within an organisation/company and develop a human capital risk management framework. Moreover, the researcher's role as an insider researcher was presented and discussed, along with potential challenges that might take place during the research process. Finally, a glimpse about International Competitiveness Establishment ( [www.ice.sa](http://www.ice.sa)), which is the case study, was illustrated. As a matter of fact, International Competitiveness Establishment, or only ICE, is a group of companies consulting businesses and trading in various fields. ICE has six companies (Competitiveness consultancy Co., Dimensions Co. for PR, ICESLE for medical trading, ICEWEB for IT, Hospitality Gate HG for hospitality trading and Meltblown Plant for Industries for nonwoven fabric manufacturing) and three emerging strategic business units. Having reviewed the research questions, objectives and chapters in this chapter, the literature review is discussed in the next chapter (Chapter 2).



## CHAPTER TWO

### THE LITERATURE REVIEW

#### 2.1 Introduction

Human capital plays an important role in product development and service delivery. This is because the human capital workforce can promote creativity and innovation necessary for organisations' growth and expansion. Both financial capital and human capital are essential to an organisation. The financial capital of an organisation consists of its assets quantifiable in financial terms, while human capital consists of the employees' value. A corporation (including an organisation) is a legal entity, but an organisation cannot operate with individuals who constitute its workforce or employees. The workforce or employees of an organisation is referred to as human capital. To achieve the organisational desired objectives, human capital's performance should adequately be managed, coordinated, and monitored by the management. Hence, the need for a robust framework for managing, monitoring, and measuring human capital within organisations. This study explored human capital management and associated risks in an organisation.

The remaining parts of the chapter consist of ten sections which focus on discussion on human capital as capital or resources; human capital; measurement of human capital; human capital context; organisational intellectual capital; HC as a competitive advantage; measurement of human capital; drivers of human capital; enablers and parameters of human capital drivers; and human capital and associated risks.

#### 2.2 Search Strategy

The literature on HC and HC risk management was screened for inclusion - screening for inclusion. Screening for inclusion was undertaken by searching the literature using three keywords: (1)

intellectual capital and HCM; (2) HCM; (3) risks management in HCM. EPSCO database (Business Source Ultimate) mainly was used for searching for these three keywords. However, the researcher used google scholar to search for some sub-keywords that had found among the main three. For example, some drivers on human capital such as trust, empowerment, and employee engagement were searched on google scholar to find relevant literature. The search criteria included journals from academic and practitioner literature. Figure 3.2 in chapter 3 summarises the literature search and evaluation for inclusion. In all, 195 records of related keywords were identified during the database search (Figure 3.2). The screening was undertaken to filter records based on specific criteria, as illustrated in Figure 3.2. Eventually, the total numbers of 317 resources were included in the literature (Figure 3.2).

### **2.3 Is Human a Capital or Resources?**

An asset is a resource that can be utilised and exhausted. Capital is a form of wealth that can be used to produce more wealth. If prudently invested, capital investment can be used to improve available capital assets. In essence, an asset might decrease over time, depending on its usage, but capital can be used and enhanced for continuous and sustainable growth. In France, the term resources were first used in the 17th century (Britannica, 2019). In his study entitled 'The causes and nature of nations wealth,' Adam Smith asserted that labour is part of a production process (Smith, 1776). According to Smith (1776), talents acquisition through the acquirer's maintenance during the process of apprenticeship, study, or education no doubt costs actual expenses, which are the realised and fixed capital, like in the person himself. His fortune is made partially with such talents, and similarly, such talents contribute to his society as well (Smith, 1776). Hence, a workman's efficient dexterity might be recognised in the same context as a trade's instrument or machine, which abridges and facilitates working, though it is expensive but pays back with gains (Smith, 1776).

The debate on the meaning and definition of capital has been enormous. The capital was described broadly by Fisher (1896) as a 'material' body or entity that developed an income's flow over some

specific time. Hobson (1926) asserted that the capital's meaning is disrupted by economists, all the while not paying attention to the fair and constant meaning that the word possesses in the world of businesses. Hobson (1926) emphasised that capital is referred to as money or credit in the world of businesses. Additionally, Knight (1934, 1935) and Von Hayek (1936, 1935, and 1934) debated on the topic of capital in a broad context.

Some scholars have asserted that human is not a resource (McGaughey, 2018; Fortier and Albery, 2015); while some scholars have argued that human is a valuable resource to organisations (Hewett, Shantz, Mundy and Alfes, 2018; Marchington, 2015; Van De Voorde and Beijer, 2015). Oxford Dictionary defined resources as 'the supply or stock of staff, materials, money, and other values capable of utilising a company or person to function effectively' (Lexico, 2020a). Meanwhile, recent studies have proposed a conceptual change from human resources, described as person management (Ying Wang, Alannah and Karin, 2020; Fortier and Albery, 2015; Radhakrishna and Satya-Raju, 2015; Pirson and Lawrence, 2010). Hence, this study viewed humans as an essential resource for business organisations.

## **2.4 Human Capital**

An organisation's assets are parts of the firm's production resources. Although Adam Smith (Smith, 1776) did not use the word 'human capital', he emphasised that it plays a vital role in understanding that the word represents not only humans but things as well. Through the extension of capital's notion to the labour and people, its meaning was changed by Smith to productive resources rather than money values or money. An organisation's assets include plants, machineries, patent rights and human resources (personnel). Hence, human is an important asset to business organisations. In view of a conceptual change from human resources, human resources management is now being referred to as personnel or people management (Ying Wang, Alannah and Karin, 2020; Fortier and Albery, 2015; Radhakrishna and Satya Raju, 2015; Pirson and Lawrence, 2010). Moreover, the Oxford dictionary defined human resources as 'the personnel of a business or organisation, regarded as a significant asset in terms of skills and abilities' (Lexico, 2020b).

The term 'human capital' first appeared in economics' prominent journal (Clark and Fisher, 1985). Irving Fisher also wrote an article and proposed that capital must refer to all the elements of labour, land, and machines (Tobin, 2005). Schultz (1971) described human capital as a productive capacity's embodiment within individuals. Hence, human capital is the overall sum of fortitudes, motivations, attributes, knowledge, and skills of people, allowing them to offer value to a product, organisation, or company by performing duties. Although it can be rented or given to others for a short period; but, as far as its ownership is concerned, it cannot be transferred.

Similarly, management of human capital consists of a network or system for the improvement of individuals' performance with strong authorities-those affecting the core competencies (Ying Wang, Alannah and Karin, 2020; Fortier and Albery, 2015; Marchington, 2015; Van-De and Beijer, 2015; Hall, 2008). Hall (2008) explained that the requirement for a new way to expand human capital through (1) describing the efficient human capital clearly and how it is linked with the outcomes of a business, (2) managing and measuring human capital similar to the financial capital's discipline, and (3) allowing managers to gain efficiency from experience to improve decisions of human capital. There are also other human capital's definitions which entail (1) the bundle of energy, knowledge, life experience, and attributes that individuals decide to use in their duties, (2) the effect of management practices of people and (3) investments of people in the form of non-financial and financial reward on contribution and value creation to an organisation's performance that is bottom-line (Fitz-enz, 2009; Hall, 2008; Weatherly, 2003). Bounfour (2009, p. 399), however, noted that 'in terms of the value of an organisation, an unclear picture is provided by balance sheets... specifically in a service-oriented economy and to the corporate assets' measurement, the physical paradigm is not adapted'. Lev (2001) here represented the context of "intangibles" for explaining a company's assets, which are not illustrated in finance's current reporting.

Human capital should be managed effectively to enhance the value of a business organisation. Hence, the need for sound human capital management (HCM) ensures an improved performance

of the organisation. It is, therefore, essential to understand organisational theories to ensure effective human resources management. An important question that comes to mind is - it is possible to quantify human capital? This question is addressed in the next section.

## **2.5 Measurement of Human Capital**

Over the recent fifteen years, definitions of human capital focused on measurability's concept. The issue of the measurement of human capital is important to investors. Stallworth and Digregorio (2014) noted that the financial disclosure's absenteeism is complained by investors concerning assets that are intangible, and often, managers find it quite tough to use and measure intangibles for gaining a competitive advantage. However, in the business environment at present, intangibles' concept has extended to involve intellectual or theoretical capital, involving the critical contributions which have been made by people and innovations - human capital. According to Kaplan and Norton (2004), intangibles are substantial resources of sustainable competitive advantage, and their replication is robust as well. Additionally, they illustrate that managers scoot away from the measurement of tangible assets because of their subjective nature (Kaplan and Norton, 2004). their perception, it is recognised by executives that intangibles are substantial resources of sustainable competitive advantage, and their replication is robust as well.

Scholars have attempted to explore the quantitative aspect of human capital (Koziol and Mikos, 2020; Koziol, 2018; Martin-Sardesai and Guthrie, 2018; Lim et al., 2018; Hanushuk, 2015; Folloni and Vittadini, 2010; Hai-Ming and Ku-Jun, 2003). There are two main approaches to measuring human capital – direct and indirect approaches (United Nations - UN, 2016). Direct approaches estimate human capital based on its components, including skill and expertise (UN, 2016; Barro and Jong, 2013; OECD, 2011); while, indirect approaches measure human capital based on the residual value of a human capital (UN, 2016; Li et al., 2010, 2013; Liu, 2011; World Bank, 2011). There are three conventional approaches to measuring human capital: cost-based, income-based, and indicators-based (UN, 2016). The cost-based approach measures human capital based on the costs invested in the human capital (UN, 2016; Thamma-Apiroam, 2015; Boarini, Mira and Liu, 2012). The income-based approach measures human capital based on the income earned from the labour market (UN, 2016; Thamma-Apiroam, 2015; Boarini, Mira and Liu, 2012). The indicators-

based approach measures human capital based on educational output indicators (UN, 2016; Thamma-Apiroam, 2015; Barro and Jong, 2013; Boarini, Mira and Liu, 2012). However, the context in which human capital is viewed would influence approaches engaged in the measurement of human capital. Having established that human capital can be measured, we now proceed to explore the human capital context in the next section.

## **2.6 Human Capital Context**

For evaluating 'how' human capital mainstream has become, it is essential to consider a concept on how to integrate HCM into the macro-economy and the organisation's spheres. This section discusses human capital in two contexts – nation and organisation.

### **2.6.1 Human Capital in a Nations' Context**

Human capital is required for a nation's development and economic growth. Phillips and Phillips (2015) emphasised that the economy has metamorphosed from agricultural-based and industrial-based economies to a knowledge-based economy. In the era of an agricultural-based economy, production activity focused on land availability to increase production. For an industrial-based economy, which spanned over the 20<sup>th</sup> century's first half, production activity aimed to ensure profitability and efficiency through the use of machineries. Within the knowledge-based economy, the production focuses on the human mind and how knowledge is used to build an efficient and productive economy. According to Phillips and Phillips (2015), we are in the era of the knowledge-based economy. Hence, it is reasonable to assert that the human mind is the most significant asset in the knowledge-based economy era (Martin 2014).

National planning and investment in human capital development are necessary to ensure national growth and development. Moreover, investment in human capital is essential as it facilitates political leadership to avoid negligible competition and develop a workforce for countering challenges at the present day (World Economic Forum, 2016). In view of worldwide migration

and mobility, it is good to adopt an approach that would ensure an effective HCM to maximise opportunities and minimise threats.

A nation with a high working-age and young populations would have an energetic workforce. The 2016 report on human capital (World Economic Forum, 2016) considered the context of human capital among countries. The report showed how various regions had managed human capital's elevation (World Economic Forum, 2016). The human capital index measures the next generation of workers' productivity based on good education and good health (UNDP, 2019; World Economic Forum, 2017). The Global Human Capital Report (2017, p. 3) defines human capital as 'skills and knowledge possessed by individuals who permit them to develop value in the global economic system. The primary purpose of an index is to quantify key concepts and provide a practical instrument to business leaders and policy-makers. A human-centric perspective is formulated concerning the work that understands individuals' skills, creativity, talents, and knowledge as a good economy's drivers. The Global Human Capital Report (2017) ranks 130 countries on how well they are developing their human capital on a scale from 0 (worst) to 100 (best) across the above four thematic sub-indexes. It shows that North America only passes the threshold of 80% which is considered to be in a better position of developing their human capital. Central Asia, Eastern and Western Europe scored between 80 to 70% among three others, North Africa and the Middle East, the Caribbean and Latin America, and Pacific and East Asia between 70 to 60 per cent. Sub-Saharan Africa and South Asia did not pass the 60 % threshold. Nevertheless, there is also an effective utilisation of human capital's wide variety in every other region with underperforming regions and success stories in each place.

The Global Human Capital Report (2017) stated by the report that concentration upon human capital will be controlled by the government's initiative in their specific regions. Suppose Middle East's data is analysed, for instance. In that case, it can be observed that (87<sup>1</sup>) KSA is capable of improving human capital immensely by only leveraging and learning initiatives of human capital

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<sup>1</sup> Ranked 87 in the Human Development Index out of 130 countries

from (46) Bahrain, (69) UAE, and (66) Qatar. All of these reach a higher ranking and the same region's part. In the region, a smaller economy is boasted Bahrain (46) with \$26 billion GDP compared to KSA (87) with a \$633 billion GDP. Notwithstanding these issues, they focus on human capital, regulating investments sustained in education and training to create a future workforce. This is the initial marketing element of Bahrain for getting the attention of foreign businesses, and they have been successful in attracting western companies and organisations. Therefore, the Global Human Capital Report (2017) has highlighted the importance of human capital development at a global or national level. Human capital development within nations would positively impact human capital capabilities within organisations.

### **2.6.2 Human Capital in Organisations' Context**

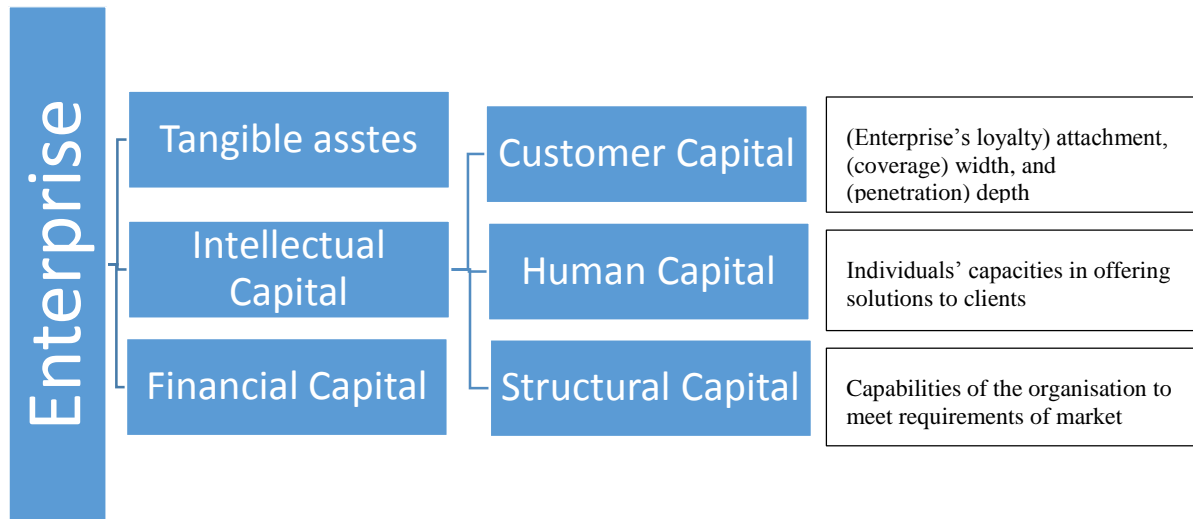
This study focused on managing human capital risks in organisations. Human capital is a valuable asset to a firm because organisations require employees and the workforce to plan and achieve their objectives. Hence, human capital impacts, positively or negatively, on the performance of an organisation. The tracking or quantification of this intangible asset is robust through the old practices of accounting. Federal Reserve Board's former chairman, Evan Alan Greenspan, stated that the tracking of intellectual assets' investments was not being performed by business accounting and the methods of financial reporting that every other organisation uses (Financial Accounting Standards Board FASB) were actually offering a wrong image to needs of accounting profession and corporations' actual comparative value for adjusting to the new economy (Phillips and Phillips, 2015). Though the assets may be categorised in different ways, Phillips and Phillips (2015) advocated a broad grouping of assets into three categories - financial capital, intellectual capital, and tangible assets.

Human capital may be classified under the third category of organisations assets. Such classification is reasonable because human capital is dynamic and intelligent, as opposed to financial capital and tangible assets managed by employees that are part of human capital. For the



purpose of this study, it is beneficial to consider human capital in an organisational context, according to Phillips and Phillips (2015) – see Figure 2.1.

Figure 2-1: Intellectual capital's relationships and categories



Source: Phillips and Phillips (2015)

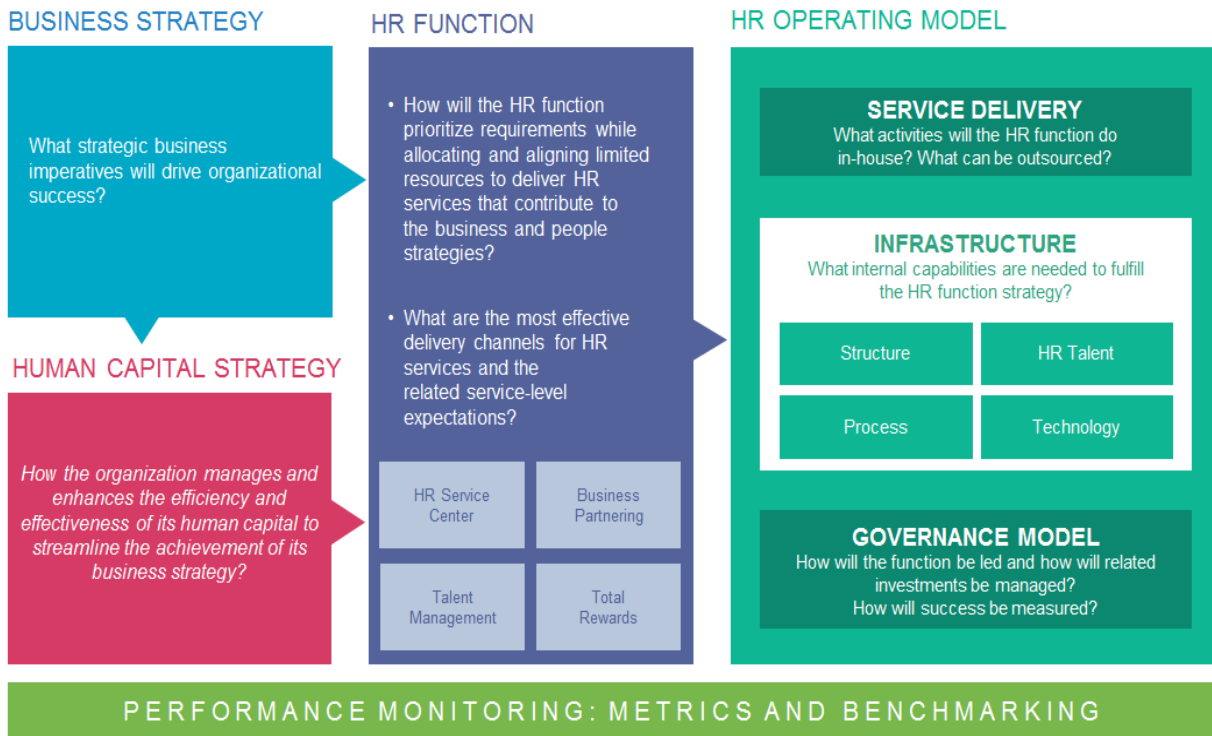
Figure 2.1 presents three types of capitals: tangible assets, intellectual capital, and financial capital. Intellectual capital is divided into structural capital and customer capital, as shown in Figure 2.1. Intellectual capital consists of customer, human, and structural capital (Phillips and Phillips, 2015). Phillips and Phillips (2015) also emphasised that customer loyalty and customers' penetration are essential aspects of customer capital. This implies that human capital entails employees' capacities in offering solutions to a company's clients, while structural capital represents the organisational capabilities to meet market requirements.

It is also essential to consider human capital strategy (HCS). HCS refers to the mode of operations of a firm in terms of its ranks' human resources, adjusted to fit the company's objectives, strategy, and vision. An organisation should coordinate, manage and motivate its workforce to achieve the desired objectives (Budisusetio et al., 2019). A firm's human capital strategy would be influenced

by its organisational culture and ecosystem (Boon et al., 2018; Eneh and Awara, 2016). To understand how well organisations, operate and why some organisations failed to achieve their objectives, it is crucial to consider the world's human capital trends as a single entity. This perspective would assist us to appreciate the ecosystem impact on the development of the human capital strategy. The primary purpose of HCS is to transform human capital into a valuable asset to enhance the value of an organisation and enhance its performance (Boon et al., 2018; Eneh and Awara, 2016).

HCS is beneficial as it helps an organisation effectively manage human resources' investment as it pertains to all employees' categories within an organisation. HCS addresses the lifecycle's end-to-end considerations of every worker in the organisation to ensure that qualified and competent staff are employed (Huselid, Becker and Beatty, 2005). However, HCS is not like HRM or Human Resource Management which was engaged first in the 18<sup>th</sup> century during the Industrial Revolution in Europe. The human capital strategy encompasses end-to-end people's overall strategy (Budisusetio, Sule and Febrian, 2019; Boon et al., 2018). Tasks that involved people (including labour law, benefits, and payroll) fall under HRM, but HCS focused on management's strategy. Huselid, Becker and Beatty (2005) highlighted the relationship between organisation strategy, HRM and HCS, as shown in Figure 2.2.

Figure 2-2: Framework for HC strategy, HR Function and Operating Model



Adapted from Huselid, Becker and Beatty (2005).

As illustrated in Figure 2.2, HCS works as a connection between the organisation's strategy and HR function. To understand the content of Figure 2.2, let us consider that employees' training and hiring require more resources than the retention of resourceful staff. Though tightening the budget may be beneficial to an organisation, it is essential to increase efficiency and retain resourceful staff. When the organisation loses a resourceful staff, additional resources would be utilised to find and engage the staff's replacement. The effect will be enormous if the left employee is a key staff. Time is required to hire and train the new staff to meet the organisation's required expectations. Moreover, a minimum of six months may need new staff to fully integrate into an organisation. Considering the cost and time needed to replace a resourceful staff who left an organisation, it is paramount for organisations to effectively manage human capital and the investment in human capital strategy (HCS). Hence, it is essential for an organisation to formulate and implement a holistic HCS, thereby ensuring a good HCM. However, several dimensions of HCS (including

policies, technology, culture, and framework) are critical to providing a conducive environment, resourceful workforce, and effective business strategy. In the next section, we discuss organisational intellectual capital (IC).

## **2.7 Organisational Intellectual Capital (IC)**

The literature revealed that the concept of intellectual capital (IC) had been explored for several years. Still, there is no consensus regarding IC's definition and importance (especially in the era of the knowledge-based economy) (Asiaei and Jusoh, 2015). There is, however, a general agreement that IC consist of three main elements: human capital (HC), structural capital (SC), and relational capital (Appuhami and Bhuyan, 2015; Sumedrea, 2013; Alipour, 2012; Molodchik, Shakina and Bykova, 2012). Pedro, Leitao and Alves (2018) described IC as a combination of intangible resources that characterised some features, including types of knowledge, information, and intellectual properties. Organisational IC should be developed based on the available human and technological resources to ensure that a good value is added to a firm, region and nation to ensure a comparable competitive advantage. Pedro, Leitao and Alves (2018) also argued that the three components of IC (human capital, structural capital and relational capital) could be applied on three dimensions - organisational, regional, and national. Table 2.1 illustrates the components of IC in three dimensions: organisational, regional, and national.

Table 2.1: Components of IC - Organisational, Regional and National Dimensions

Dimension	Human capital	Structural capital	Relational capital
<b>Organisational IC (OIC)</b>	<ul style="list-style-type: none"> <li>- Staff's knowledge (competencies, skills, and know-how);</li> <li>- Number of employees;</li> <li>- Human capital efficiency;</li> <li>- Motivation and attitude at work;</li> <li>- Capacity for teamwork;</li> <li>- Capacity for innovation and creativity;</li> <li>- Entrepreneurial capacity;</li> <li>- Leadership capacity;</li> <li>- Response and problem-solving ability; and</li> <li>- Expenditure on staff.</li> </ul>	<ul style="list-style-type: none"> <li>- Knowledge management (databases, software programs, archives, processes, administrative practices, methods, routines, policies, procedures, rules);</li> <li>- Organisational learning;</li> <li>- Organisational structures;</li> <li>- Information technology systems;</li> <li>- Efficiency of structural capital;</li> <li>- Innovation capacity;</li> <li>- Organisational culture;</li> <li>- Environmental protection and management;</li> <li>- Attracting and retaining staff; and</li> <li>- Checking results.</li> </ul>	<ul style="list-style-type: none"> <li>- Relationship with all internal and external stakeholders;</li> <li>- Business networks and strategic alliances;</li> <li>- Collaboration networks, contracts and agreements;</li> <li>- Social networks;</li> <li>- Customer Loyalty Image and brand;</li> <li>- Organisational climate;</li> <li>- Social and environmental commitment;</li> <li>- Sales growth; and</li> <li>- Efficiency of structural capital.</li> </ul>

<b>Regional IC (RIC)</b>	<ul style="list-style-type: none"> <li>- Total resident population;</li> <li>- Population's level of education;</li> <li>- Individuals' competencies and capacities;</li> <li>- Number of dwellings per m2;</li> <li>- Average price of dwellings;</li> <li>- Number of students in higher education;</li> <li>- Average number of people per family; and</li> <li>- Human resources fit for work.</li> </ul>	<ul style="list-style-type: none"> <li>- Information technology systems;</li> <li>- Organisational systems and production levels;</li> <li>- Systems to develop new products;</li> <li>- Organisational structures</li> <li>-</li> <li>- Knowledge flow mechanisms; and</li> <li>- Green areas</li> </ul>	<ul style="list-style-type: none"> <li>- Public safety;</li> <li>- Socio-economic;</li> <li>- Development;</li> <li>- Reputation and brand value;</li> <li>- Networks and partnerships;</li> <li>- Number of employees in the region's companies; and</li> <li>- Health and social networks.</li> </ul>
<b>National IC (NIC)</b>	<ul style="list-style-type: none"> <li>- Expenditure on staff;</li> <li>- Expenditure on training;</li> <li>- Public expenditure on education and health;</li> <li>- Individuals' knowledge;</li> <li>- Personal development;</li> <li>- Rate of literacy;</li> <li>- Proportion of students/ teachers;</li> <li>- Number of enrolments in education (primary, secondary, higher);</li> <li>- Number of students in higher education;</li> <li>- Number of internet subscribers; and –</li> <li>- Average salary</li> </ul>	<ul style="list-style-type: none"> <li>- Actions related to the environment;</li> <li>- Sustainable development;</li> <li>- New firms opened;</li> <li>- Firms' ethical conduct;</li> <li>- Production processes;</li> <li>- Computers per capita;</li> <li>- Organisational structures;</li> <li>- Competitive business environment and government efficiency;</li> <li>- Information technology; and</li> <li>- R and D and innovation.</li> </ul>	<ul style="list-style-type: none"> <li>- Brand value;</li> <li>- Expenditure on publicity and market research;</li> <li>- Expenditure on R and D;</li> <li>- Organisational confidence;</li> <li>- Social and environmental responsibility;</li> <li>- Tax incentives; and</li> <li>- Relations with stakeholders and other interested parties.</li> </ul>

Pedro, Leitao and Alves (2018); Appuhami and Bhuyan, 2015; Sumedrea, 2013; Alipour, 2012; Molodchik, Shakina and Bykova, 2012; Mouritsen and Roslender (2009); Mouritsen (2006); European Commission (2006); Chatzkel (2004); Youndt and Snell (2004); Youndt et al. (2004); Lev (2001); Bontis (1998 and 2001); Brooking (1997); Edvinsson and Malone (1997); Roos and Roos (1997); Stewart (1997).

Source: Developed by the researcher (2020)

Table 2.2 illustrates the interrelationship between IC components (human capital, structural capital and relational capital) and dimensions of IC (organisational, regional, and national). Components and dimensions of IC are valuable tools in improving HCM within local, national and regional organisations. The implication is that IC and intellectual resources (including knowledge, information, intellectual property and experience) are essential in creating wealth and maximising organisational value.

Edvinsson and Malone (1997) and Brooking (1997) replaced the term “wealth” with “value” that can be generated with human resources to ensure improved performance and secure competitive advantages over a competitor. Likewise, Dumay (2016) described IC as a source of value creation and wealth generation to increase investors wealth and maximise a firm's value. Pedro, Leitão, and Alves (2018) identified a number of HC components or drivers within the organisational dimension relevant to this thesis's objective as its focus on human capital in organisations. One of this study's objectives is to identify drivers and components of human capital within an organisation and develop a framework for human capital risk management. Components and drivers of human capital (HC) within an organisational dimension include employees' knowledge (including their skills, competencies, and know-how); capability of teamwork; innovation and creativity capacities; leadership capabilities; entrepreneurial capabilities; motivation and professional attitude at work; problem-solving ability; and investment in staff training and development (Cikova and Micah, 2018; Pedro, Leitão, and Alves, 2018; Price, 2017; Odhan'g and Omolo, 2015; Ehnert, Harry and Zink, 2014; Holienka and Pilkova 2014; Iveta, 2012). Table 2.2

shows some studies which are adopted the concept of organisational intellectual capital (OIC), including organisational human capital OHC, in their studies. The summary of studies illustrated in table 2.2 relates to the concept of HC in organisations and two questions of this research which are what is human capital within its micro-level (company and organisation)? and what are the drivers and components of human capital within a company and organisation?

Table 2.2: Summary of Studies that adopted Organisational Human Capital OHC

<b>Authors</b>	<b>OHC concepts adopted</b>	<b>OHC broad definition</b>
Brooking (1997)	It is some elements that, when integrated, would enhance the performance of a company	It is a combination of intangible resources that human capital plays a significant role in utilising them to create value for a company, leading to gain and sustain competitive advantages.
Edvinsson and Malone (1997)	It is intangible factors that generate a competitive advantage derived from a company's employees, such as knowledge, skills, motivation, and experience.	
Roos and Roos (1997)	It is intangible assets generated from the employees of a company.	
Stewart (1997)	It is an accumulation of knowledge, experiences, information and intellectual property which lead to creating value-added output and wealth for an organisation.	
Bontis (1998 and 2001)	It is intangible resources that contribute to creating added value for a company.	



<b>Authors</b>	<b>OHC concepts adopted</b>	<b>OHC broad definition</b>
Lev (2001)	It is intangible assets generated to create value that benefits an organisation's future.	
Youndt et al. (2004) and Youndt and Snell (2004)	It is an accumulation of knowledge within an organisation that helps to gain and sustain a competitive advantage.	
European Commission (2006)	It is an amalgamation of intangible assets that contribute to generate value added to a company.	
Chatzkel (2004)	It is a combination of intangible resources that human capital will transform into a competitive advantage.	
Mouritsen and Roslender (2009); and Mouritsen (2006)	It is a mixture of intangible assets such as knowledge and talented employees that would help to gain a competitive advantage.	

Source: Developed by the researcher (2020)

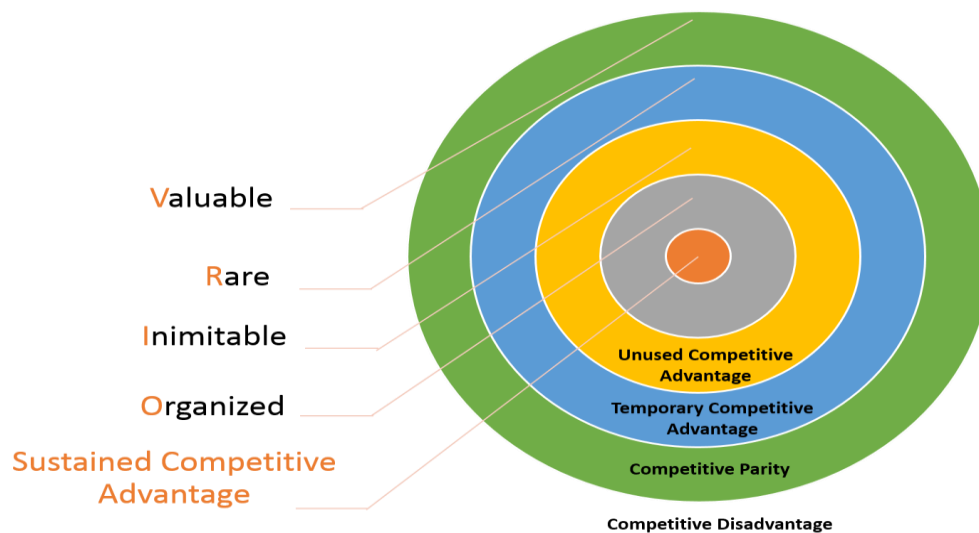
## **2.8 HC as a Competitive Advantage**

HC is a positive value-added asset to an organisation to gain and sustain a competitive advantage over its competitors (Azzahra, 2018; Torres, Ferraz and Santos-Rodrigues, 2018; Lin et al., 2017; Mouritsen and Roslender, 2009; European Commission, 2006; Mouritsen, 2006; Chatzkel, 2004;

Teece, 1998). This is because HC may influence a firm's competitive advantage positively or negatively. For instance, Azzahra (2018) study revealed that a firm's instability and poor performance might result from the weakness of its human resources. Likewise, Torres et al. (2018) argued that HC impacts an organisation's performance – both financial and customer's dimensions.

Resource-based perspective is a framework to evaluate a firm's resources to ensure superior performance and competitive advantage. The resource-based perspective advocates a firm's need to secure and sustain a competitive advantage over its competitor, which shows that a firm may be at a competitive disadvantage. Evaluation of organisational resources depends on the feature and structure of an individual organisation. VRIO framework is a good strategic analysis tool for an organisation's resources and capabilities and evaluates a firm's competitive advantage (Smith, 2020; Hill and Jones, 2016; Barney and Hesterly, 2010; Barney and Hesterly, 2005; Barney, 1991). VIRO is an acronym based on a four-question framework (consisting of value, rarity, inimitability and organisation) to ensure that an organisation achieves sustained competitive advantage. VRIO for sustainable competitive advantage framework is presented in Figure 2.3.

Figure 2-3: VRIO Framework For Sustainable Competitive Advantage



Sources: Smith (2020)

As shown in Figure 2.3, the four-question framework of VIRO (Smith, 2020; Hill and Jones, 2016; Barney and Hesterly, 2010; Barney and Hesterly, 2005) may be summarised as follows: (1) Value – Does the organisation offers a resource that adds value for customers? (2) Ratify – Does the organisation effectively manage its resources or capabilities? (3) Imitability – Is it expensive to duplicate the organisation’s resources or capabilities? And (4) Organisation – Does the company have well-organised management systems, processes, structures, and culture to maximise its resources and capabilities? This implies that an organisation should add good value to all stakeholders - its customers, investors, employees, and society to attain a competitive advantage. If a firm fail to achieve a competitive advantage, it would be competitively disadvantaged, as shown in Figure 2.3.

Furthermore, it is crucial to narrow down the discussion of HC to identify its drivers, which can amalgamate to gain competitive advantages. In this context, Lepak and Snell (2002) developed a framework for human resource management based on the resource-based value RBV. They suggested that a company’s employees should be categorised based on two dimensions - (1) value of employees’ skills and (2) uniqueness of employees’ competencies. Hence, having valuable human capital requires unique competencies in terms of capabilities, knowledge, and abilities. Organisations should strike a balance between the two dimensions (value of employees’ skills and uniqueness of their competencies) to ensure that resourceful and suitable employees’ are employed. Therefore, it is essential to encourage employees to cultivate a positive attitude and competencies essential to improving organisations’ value. Training and mentorship can improve staff competencies (Hanaysha, 2016; Hill and Jones, 2016; Dahlgaard-Park, 2012). Hence, the need for employees to develop personal core competencies, which are indispensable capabilities to motivate human capital (employees and workforce) intellectually to enhance their productivity and improve the firm’s value (Torres, Ferraz and Santos-Rodrigues, 2018; Dahlgaard-Park, 2012; Ulrich et al., 2008).

Moreover, other important factors might impact a firm's ability to attain competitive advantages, including the working environment and organisational culture. For instance, Asiaei and Jusoh (2015) argued that organisational culture influences a company's performance by encouraging and motivating human capital to gain and sustain competitive advantage. Similarly, O'Reilly and Chatman (2016) noted that organisational culture acts as a social control system to shape employees' attitudes and behaviours. Having considered HC as a competitive advantage in this section, we now proceed to discuss the measurement of HC and its reporting.

## **2.9 Evaluating of Human Capital (HC)**

Measurement and evaluation of HC is a complex and controversial subject among scholars. Some studies have considered a measurement of HC for the purpose of reporting and measurement of HC value in financial terms (Koziol and Mikos, 2020; Kopia et al., 2017; Hanushuk, 2015; Hai-Ming and Ku-Jun, 2003); and some studies have also explored of HC to measure drivers of HC and their impacts on organisations' performance (Koziol, 2018; Martin-Sardesai and Guthrie, 2018; Folloni and Vittadini, 2010; Bontis, 1998).

According to Milost (2014), evaluating and measuring human capital models may be classified into two categories: non-monetary and monetary models. Non-monetary models suitable for evaluating and measuring HC include the Michigan model (1969), Flamholtz model (1972), and Ogan model (1976). Similarly, monetary models suitable for evaluating and measuring HC include replacement costs model; opportunity costs model; discounted wages and salaries model; designed initially dynamic model; and net value-added model (Mubarik, Chandran and Devadason, 2018; Lim et al., 2018; Milost, 2014; Boarini, Mira and Liu, 2012; Eszter Toth and Jonas, 2012; Baron, 2011; Folloni and Vittadini, 2010).

Those mentioned above, three non-monetary models - i.e., Michigan model (1969), Flamholtz model (1972), and Ogan model (1976) – take into consideration both organisational and behavioural variables. The Michigan model, which was developed by researchers at the University

of Michigan in 1969, aims to identify and measure HC's value by evaluating variables that could influence employees' effectiveness. Flamholtz's (1972) model focuses on the historical cost of indirect costs, including recruitment process, selection, orientation, placement, training and development. This model is relevant because HR value can be assessed based on the value of positions held by specified employees subject to the outcome of their present and future appraisal. Lastly, the Ogan (1976) model consists of monetary and non-monetary measures that seek to measure the value of a firm's employees' long-term benefits (Das, Topno, and Commerce, 2012).

Regarding monetary models, the five models as mentioned above (including replacement costs model; opportunity costs model; discounted wages and salaries model; designed initially dynamic model; and net value-added model) can be used for specific purposes. For instance, the replacement cost model can be used to estimate the cost of replacing a firm's existing human capital by calculating the cost of recruiting, hiring, training and development for an employee to estimate the cost of replacement (Milost, 2014). Furthermore, the Net value added (NVA) model is the most recent model for measuring human capital's value to ascertain the value of a company's employees. For the NVA model, human capital's value depends on the present value of its expected future services. Al-Musali and Ismail (2016) conducted a study to calculate the IC's value-added in the banking sector across GCC states where human resources expenses are treated as an investment, not as a cost.

Furthermore, the study concluded that there is a strong positive relationship between HC and financial performance. This shows that HC creates value, and HC is a significant contributor to value-added in an organisation (Lev, 2001). However, how monetary and nonmonetary models can be used to measure HC is limited depending on the nature of evaluation and measurement being undertaken (Milost, 2014). Moreover, HC should be well-managed to enhance an organisation's performance – internally and externally. There are many data sources helpful in measuring HC within an organisation that can be used to identify and evaluate key performance indicators (KPIs) for HCM (Baron, 2011). KPIs can be used to measure and manage HC performance. Table 2.3 shows the list of measures/KPIs derived from different areas of human

capital functions. Based on (Baron, 2011) study, Table 2.3 shows seven areas of HCM that should be measured and KPIs, which can be used to assess human capital functions' efficiency.

Table 2.3: Measures/KPIs derived from a different area of human capital functions.

Area of measurement	Examples of data collected	Example outcome measures
<b>Acquisition</b>	<ul style="list-style-type: none"> <li>- Time taken to recruit</li> <li>- Strength of brand recognition</li> <li>- Number of applications in response to Ads</li> <li>- Number of unsolicited applications</li> <li>- Time is taken for new employees to reach optimum competence levels</li> <li>- Number of trying to fill posts</li> <li>- Feedback from recruiters on ease of use of selection tools</li> <li>- Data from equal opportunities monitoring</li> </ul>	<ul style="list-style-type: none"> <li>- Resources adequate for optimum customer service</li> <li>- Successfully attracting high-calibre applicants</li> <li>- The organisation not experiencing significant skills shortages</li> </ul>
<b>Development/Talent Management</b>	<ul style="list-style-type: none"> <li>- Training spend/days training provided talent management</li> <li>- Number of names appearing against roles for succession plan.</li> <li>- Number of staff on development programs or acquiring professional</li> </ul>	<ul style="list-style-type: none"> <li>- Can demonstrate agility and capability to cope with changing</li> <li>- Circumstances?</li> <li>- Can demonstrate that new knowledge is being learned</li> </ul>

Area of measurement	Examples of data collected	Example outcome measures
	<ul style="list-style-type: none"> <li>qualifications</li> <li>- Results of skills audits</li> <li>- Identified skills gaps</li> <li>- Feedback from training</li> </ul>	and embedded?
<b>Reward</b>	<ul style="list-style-type: none"> <li>- Achieving performance bonus or increments</li> <li>- Comparability or reward package with other employers</li> <li>- Satisfaction with reward</li> </ul>	-Compensation tied to business success
<b>Retention</b>	<ul style="list-style-type: none"> <li>- Turnover/attrition rates</li> <li>- Number of people with transferable skills</li> <li>- Percentage of staff with a development plan</li> <li>- Number of internal promotions</li> </ul>	<ul style="list-style-type: none"> <li>- Can demonstrate effective talent planning and succession planning?</li> <li>- Can confirm that the organisation is successfully retaining vital skills?</li> </ul>
<b>Exiting</b>	<ul style="list-style-type: none"> <li>- Feedback from exit interviews</li> <li>- Demo. Info. on age and gender profile</li> </ul>	<ul style="list-style-type: none"> <li>- Demographic issues effectively managed</li> <li>- Vital skills and knowledge Effectively retained</li> </ul>
<b>Motivation</b>	<ul style="list-style-type: none"> <li>- Engagement scores</li> <li>- Absence rates</li> <li>- Productivity data such as</li> </ul>	- An organisation can track the relationships between engagement and

Area of measurement	Examples of data collected	Example outcome measures
	sales/employee	commitment and effort. - The organisation understands and demonstrates the impact of high engagement on business factors such as customer retention.
<b>Performance</b>	<ul style="list-style-type: none"> <li>- Numbers achieving high-performance ratings</li> <li>- Numbers of instances of poor performance</li> <li>- Numbers of achieved objectives</li> </ul>	<ul style="list-style-type: none"> <li>- Organisational capability</li> <li>- Ability to innovate</li> </ul>

Source: Adapted from Baron (2011)

The seven areas of HCM highlighted in Table 2.3 are acquisition, talent management, reward, retention, exiting, motivation and performance. For instance, Baron (2011) asserted that three sets of data could be used to assess the extent of motivation within an organisation, namely: (1) engagement score; (2) absence rate; and (3) productivity data such as sales per employee. Pasban and Nojehdeh (2016) stated that the ability to quantify HC assets' value is essential in making good decisions on HCM to maximise the return rate on HC investments. Pasban and Nojehdeh (2016) also highlighted indices for measuring HC, including employment of new staff; rotation and dismissal; reward; competence and training; diagram of human force; utilisation criteria; and some activities HC activities as shown in Table 2.4.



Table 2.4: The indices of measuring human capital.

<b>The activities of human capital</b>	<b>Possible measurement</b>
Employment of new staff	Cost, time, quantity, quality and compatibility with strategic criteria
Rotation and dismissal	The reasons for quitting a job
Reward - compensating the service	Level of payments, differences, evaluating justice, customer's satisfaction, employees' satisfaction, variety.
Competence and training	Measuring competence, skills, the distance between competence and investment in training.
Diagram of human force	Age, rate of promotion, cooperation in management activities, knowledge, variety
Utilisation criteria	Per capita income, operating expenses, real value-added.

Source: Pasban and Nojedehe (2016)

In the same context, some management system standards (MSS) such as TQM, EFQM and ISO make provision for measuring human capital within their system frameworks. It is worth mentioning that organisations widely adopt MSS and quality systems to manage quality across their structure, including HCM. According to Kopia et al. (2017), some MSS (including TQM, EFQM, ISO, and Six Sigma) make provision for indicators at operational and strategic levels which include HC (people), operational, customer and financial indicators. Furthermore, Nuryanto (2015) stated that HCM is a crucial element in implementing the ISO 9001 quality management system as it enables firms to enhance quality within their organisations and minimise threats to the attainment of desired objectives.

Furthermore, the European Foundation for Quality Management (EFQM) model can be used to identify and assess HC elements to enhance organisations' performance. EFQM model is a good tool for measuring and managing HC with other intellectual capital within the organisation (Eszter and Jonas, 2012). EFQM framework entails valuable HC management practices which can be adopted to enhance a firm's performance. Moreover, Barzegari (2016) argued that the EFQM model is a valuable HC measurement tool. It entails nine dimensions that are suitable for identifying gaps and assessing the current situation of HC with an organisation. Specifically, the nine dimensions EFQM model include leadership, policy and strategy, people, programming, process, customers, people management, society, and critical performance result (Barzegari, 2016; Eszter and Jonas, 2012). In this section, we have established that it is possible to measure HC and tools suitable for measuring HC have also been considered. Although there are suggested frameworks and tools for measuring HC in the literature such as (Baron, 2011; Charlwood, Stuart, and Trusson, 2017; Mubarik, Chandran and Devadason, 2018; and Koziol and Mikos, 2020), they are not generally accepted by CEOs, shareholders, entrepreneurs, and executives as financial capital. Furthermore, there is a disagreement between the existing frameworks about the drivers of human capital and its components which need to be measured and human capital risks has received limited attention from academic and practitioners in the management literature (Becker and Smidt, 2016). In other words, there are well-established practices for evaluating, monitoring, managing financial capital within companies/organisations, which we do not have similar generally accepted practices for human capital as they might be contextually based. Although some findings, including drivers and risks of human capital mentioned in the literature, can be applicable across most of the countries, the priority and importance ranking of these drivers might vary from culture to culture, country to country, and market to market. Drivers of HC are discussed in the next section.

## **2.10 Drivers of Human Capital (HC)**

The two key dimensions of HC investment are attraction and development (Cikova and Micah, 2018; Lin et al., 2017; Kucharpikova, Tokarpikova and Blaskova, 2015). HC enhancement consists

of deployment and retention strategies. An organisation's HC (workforce) can be improved by developing their behavioural competencies through on the job training, career planning, leadership training, and talent management (Lin et al., 2017). This implies that HC drivers are job training, career planning, leadership training, and talent management. Other drivers of HC include employees' loyalty, organisational commitment and trust, such as cultivating a positive working environment and positive organisational culture (Permana et al., 2015; Bedarkar and Pandita, 2014).

Furthermore, Ulrich et al. (2008) identified four processes involved in HC management: acquisition, development, engagement, and retention. Kucharcikova (2013) also identified the purpose of HC management activities as processes for enhancing an organisation's performance and its staff. Generally speaking, making HC a source of competitive advantage requires attracting and maintaining the relevant talented people along with organising and managing them efficiently. An organisation should adopt suitable frameworks and indices to ensure a sound HCM.

Human capital managers should focus on developing metrics and indices to evaluate HCM and assess its efficiency within their organisations. Human resources management and human capital management (HCM) are related but not the same. For instance, Human resources management perceived an employee as a cost (Barzegari, 2016; Barzegari, 2016; Iveta, 2012); but HCM perceived employees as an asset (Cikova and Micah, 2018; Lin et al., 2017; Lantu, 2015; Wadhwa and Parimoo, 2015). Kucharpikova, Tokarþikova and Blaskova (2015) argued that human resources management which perceives an employee as a cost, should be replaced with HCM, which perceives employees as an asset. Therefore, managers of human capital should focus on developing metrics and indices to evaluate HCM and assess its efficiency within their organisations. In this context, Mubarik, Chandran and Devadason (2018) developed the 'Human Capital Index (HCI), which consists of nine dimensions and 35 sub-dimensions. The HCI framework's core nine dimensions include experience, skills, education, abilities, attitude, stability, compliance, training, and personal attributes. It is worth emphasising that the HCI framework can be applied to a specific industry. Table 2.5 shows the core dimensions and sub-dimensions of HCI.

## 2.5: Human Capital Index (HCI) and its core dimensions and sub-dimensions

<b>Human Capital Index HCI</b>	<b>Core Dimensions</b>	<b>Sub-Dimensions</b>
	<b>Education</b>	<ul style="list-style-type: none"> <li>• Level of Education</li> <li>• Quality of Education</li> <li>• Technical Education</li> </ul>
	<b>Skills</b>	<ul style="list-style-type: none"> <li>• Communication</li> <li>• Entrepreneurial</li> <li>• Work-related</li> <li>• Problem-solving</li> <li>• Technical</li> </ul>
	<b>Experience</b>	<ul style="list-style-type: none"> <li>• Organisational tenancy</li> <li>• Experience of Similar industry</li> <li>• Work-related experience</li> </ul>
	<b>Training</b>	<ul style="list-style-type: none"> <li>• On the job training</li> <li>• Receptive training</li> <li>• Interpersonal training</li> <li>• Training expenditure</li> <li>• Hours of training per employee</li> <li>• Technical training</li> </ul>
	<b>Attitude</b>	<ul style="list-style-type: none"> <li>• Satisfaction</li> <li>• Engagement</li> <li>• Motivation</li> </ul>

		<ul style="list-style-type: none"> <li>• Cooperation</li> <li>• Commitment</li> </ul>
	<b>Personal attribute</b>	<ul style="list-style-type: none"> <li>• Creativity</li> <li>• Risk-taking</li> <li>• Diversity</li> <li>• Leadership</li> <li>• Intelligence</li> </ul>
	<b>Stability</b>	<ul style="list-style-type: none"> <li>• Permanence</li> <li>• Employees Turnover</li> <li>• Absenteeism</li> </ul>
	<b>Health</b>	<ul style="list-style-type: none"> <li>• Physically strong</li> <li>• Age of employee</li> <li>• Disease-free</li> </ul>
	<b>Compliance</b>	<ul style="list-style-type: none"> <li>• Charges and Litigation</li> <li>• Safety issues</li> <li>• Complaints</li> </ul>

Source: Mubarik, Chandran and Devadason (2018)

Five categories of HCM drivers have also been identified by scholars, including leadership practices, employee engagement, knowledge accessibility, workforce optimisation and learning capacity (Wadhwa and Parimoo, 2015; Kucharcikova, 2013; Bassi and McMurrer (2007). Each of these categories consists of several practices suitable for cultivating and improving organisational culture. In my opinion, the enhancement of HCI, its core dimensions, and sub-dimensions would

enhance human capital performance. The discussion so far in this section revealed that there are several drivers or factors influencing HC, but seven drivers of HC were considered relevant to this study, namely: leadership practices, employee engagement, knowledge accessibility, workforce optimisation, learning capacity, empowerment and trust. These seven drivers of HC are discussed in the remaining parts of this chapter 2.10.1 to 2.10.7.

### 2.10.1 Leadership Practices

Adopting leadership practices across all levels of an organisation is a vital driver of HC to ensure a robust HCM. Raelin (2003) highlighted the type of leaderful practices (referred to as the four C model) which may be adopted to enhance organisational culture and ensure a robust HCM with an organisation. Raelin (2003) four C's model of leaderful practices consist of concurrent, collective, collaborative, and compassionate. Table 2.6 shows Raelin (2003) four C's leaderful practices model.

Table 2.6: Four C's Leaderful Practices Model

<b>Four C's Leaderful Dimensions</b>	<b>Practices</b>
Concurrent	<ul style="list-style-type: none"> <li>- Situational management</li> <li>- Team facilitation</li> </ul>
Collective	<ul style="list-style-type: none"> <li>- Stewardship</li> <li>- Learner</li> <li>- Meaning maker</li> </ul>
Collaborative	<ul style="list-style-type: none"> <li>- Change agent</li> <li>- Mutual influence</li> <li>- Dialogue</li> </ul>
Compassionate	<ul style="list-style-type: none"> <li>- Non-charismatic</li> <li>- Conscience</li> <li>- Social caretaker</li> </ul>

Source: Raelin (2003)

Top-down communication is an essential part of a leadership practice to ensure that employees understand the organisation's vision and objectives, thereby motivating employees to support the company's management. Truss et al. (2013) highlighted strategies for engaging leadership that include employee motivation through social activities, creating a forum of intellectual debate, and managing a team's emotional landscape. This implies that leadership practices are a crucial driver of HC because there is a positive correlation between leadership and HCM (Lantu, 2015). Hence, the amalgamation of HCM and servant leadership would assist in ensuring a robust HCM to promote a cordial relationship between managers, employees and their organisations.

### **2.10.2 Employee Engagement**

Engaged employees are emotionally connected to the organisation and cognitively attentive (Da Costa and Loureiro, 2019; Motyka, 2018; Osborne and Hammoud, 2017; Gupta and Sharma, 2016; Dajani, 2015). The theory of employee engagement evolved from previous concepts such as job satisfaction, employee commitment, and organisational citizenship behaviours (Markos and Sridevi, 2010). It might, however, be difficult to ignite and maintain a sound employees' engagement within an organisation (Albercht et al., 2015; Blattner and Walter, 2015; Eldor and Harpaz, 2015; Farndale and Murrer, 2015; Anitha, 2014; Berens, 2013; Andrew and Sofian, 2012). Meanwhile, Seijts and Crim (2006) asserted ten techniques (i.e., 10 C's) that an organisation's management could adopt to create and maintain employee engagement. Seijts and Crim (2006) developed ten employee engagement techniques: connect, career, clarity, convey, congratulate, contribute, control, credibility, and confidence – as shown in Table 2.7.

Table 2.7: Ten C's of Employees' Engagement Techniques

<b>Engagement actions</b>	<b>Definition</b>
Connect	Managers must show that they value employees. Employee engagement directly reflects how employees feel about their relationship with the boss.
Career	Managers should provide challenging and meaningful work with opportunities for career advancement.
Clarity	Managers must communicate a clear vision. People want to understand senior leadership's vision for the organisation and the goals leaders or departmental heads have for the division, unit, or team.
Convey	Managers clarify their expectations about employees and provide feedback on their functioning in the organisation. Good leaders establish processes and procedures that help people master essential tasks and facilitate goal achievement.
Congratulate	Managers should give recognition as they provide feedback when performance is reduced.
Contribute	People want to know that their input matters and that they are contributing to the organisation's success in a meaningful way.
Control	Employees value control over their jobs' flow and pace, and leaders can create opportunities for employees to exercise this control.
Collaborate	Employees work in teams and have the trust and cooperation of their team members; they outperform individuals and teams which lack good relationships.



<b>Engagement actions</b>	<b>Definition</b>
Credibility	Leaders should strive to maintain a company's reputation and demonstrate high ethical standards. People want to be proud of their jobs, their performance, and their organisation.
Confidence	Managers help create confidence in a company by being examples of high ethical and performance standards.

Source: Seijts and Crim (2006)

Similar to the 10 C's employees' engagement techniques developed by Seijts and Crim (2006), Bedarkar and Pandita (2014) identified three critical drivers of HC, which consist of communication, work-life balance and leadership. These drivers of HC are relevant to the focus of this research work. Confidence, credibility, collaboration, control enabling, and recognition are related to leadership driver as a broad concept; whereas, connecting, clarity, convey are related to communication driver as a more general concept. Nonetheless, a set of strategies need to be adopted for each driver of HC to ensure a sound employee engagement, thereby linking the 10 C's employees' engagement techniques developed by Seijts and Crim (2006) and the three drivers of HC identified by Bedarkar and Pandita (2014). Additionally, Bedarkar and Pandita (2014) identified some employee engagement drivers, which include communication, work-life balance, and leadership. However, employee engagement is a continuous process of learning and improvement that should be integrated into an organisation to ensure a sound organisational culture and improved performance. Although many drivers of employee engagement and HC are non-financial; but, their adoption and effective implementation would assist an organisation in ensuring high levels of engagement with low cost.

### **2.10.3 Knowledge Accessibility**

Ensuring that employees have reasonable access to knowledge is necessary to a sound HCM practice within an organisation. Employees access to knowledge may entail easy access to employees' handbooks, guidelines, manuals and job-related resources. Furthermore, a company can structure a knowledge management system that enables employees to easily access necessary information and resources. Additionally, management should encourage knowledge sharing among employees and practise it with their colleagues and subordinates. Collective work within teams can be a method that managers should encourage in order to motivate knowledge and experience sharing among employees (Kucharcikova, 2013).

### **2.10.4 Workforce Optimisation**

Workforce optimisation is the core element of HCM because it aims to improve employees' efficiency (Weborg, 2016; Napierski, 2014). A good workforce optimisation framework should clearly articulate a work process and operations to entrench good working conditions, fair accountability of individuals, design an efficient and robust hiring process (Salau et al., 2016). Moreover, talent acquisition and management should be well-managed to ensure that suitable candidates are employed and effectively integrated into the organisation. Employee Value Proposition (EVP) should also be effectively managed to attract and retain resourceful employees. According to Browne (2012), EVP is a statement that identifies why the work experience at an organisation is superior to that at other organisations in terms of career management, policies, training development programs and the working environment. Hence, workforce optimisation is a key driver of HC.

### **2.10.5 Learning Capacity**

Innovation is essential in the knowledge-based economy era, and learning is the primary source of innovation (Mitrofanova et al., 2017; Jimenez-Jimenez and Sanz-Valle, 2011). Bowen, Rose and Ware (2006) argued that learning is a competitive advantage that helps to bring about positive

changes in organisations. For an organisation that promotes learning, learning would constitute a competitive advantage tool that fuels positive change, evolution and innovation (Torres, Ferraz and Santos-Rodrigues, 2018; Lin et al., 2017; Saadat and Saadat, 2016; Albercht et al., 2015; Eldor and Harpaz, 2015). Organisational learning is beneficial as it enables an organisation to develop its capabilities and competencies to enhance innovation and improve performance (Azzahra, 2018; Iveta, 2012; Jimenez-Jimenez and Sanz-Valle, 2011; Barney and Hesterly, 2010; Barney and Hesterly, 2005).

Organisational learning is the process through which a firm develops new knowledge and insights from people's collective experiences (Jimenez-Jimenez and Sanz-Valle, 2011). Moreover, learning has the potential to influence behaviours and increase the firm's capabilities and competencies (Azzahra, 2018; Iveta, 2012). Learning may take place in three levels within an organisation – individual, group and organisational levels (Lin et al., 2017; Saadat and Saadat, 2016; Barney and Hesterly, 2005). Learning at the individual level depends on the intuition and interpretation of new information or science that the person can derive through conceptual and cognitive processes, which results in changes in attitude and behaviour (Pasban and Nojedeh, 2016; Saadat and Saadat, 2016). Learning at the group level can occur when individual learning is shared with others and develops a shared understanding and assumption through communication and discussion (Chatman and O'Reilly, 2016; Eldor and Harpaz, 2015; Bedarkar and Pandita, 2014; Andrew and Sofian, 2012). The third level of learning within an organisation is organisational learning, which constitutes shared assumptions and values within a group level, system, behavioural frames, methods and information that is accessible to everyone in the organisation (Chatman and O'Reilly, 2016; Eldor and Harpaz, 2015; Bedarkar and Pandita, 2014; Andrew and Sofian, 2012).

Considering the importance of learning in an organisation, each organisation should embrace learning to drive innovation and maintain a competitive advantage over its competitor. Organisational learning activities that promote innovation include openness to new ideas, research and development (R and D), accelerated implementation, and profitable commercialisation. In addition, a rewarding and recognition system for innovativeness should be effectively formulated

and implemented to reward employees' innovative capabilities for improved organisational performance. Management should encourage personal development through employees' assessment and personal development plan (PDP) to improve employees' innovative capabilities. PDP would enable an organisation to identify and address areas that require improvement at individual, group and organisational levels.

### **2.10.6 Empowerment**

Empowerment is fundamental in achieving organisational objectives to ensure growth and improved turnover. Employee empowerment refers to the extent to which employees are authorised to judiciously utilise a firm's resources to handle an identified problem to achieve organisational desired goals (Permana et al., 2015). Empowerment would enhance employees' innovative capabilities to add good value to an organisation, thereby improving organisational performance and increasing productivity (Hanaysha, 2016). An excellent innovative rewarding system is also necessary to encourage employee innovativeness within an organisation. Abualoush et al. (2018) argued that allowing employees to contribute to decision-making would improve their innovative capacities and morals. Hence, employees' empowerment would encourage innovativeness and increase employees sense of belonging within an organisation. Empowerment will obviously impact positively on HC (employees), their innovative capabilities and productivity. Permana et al. (2015) identified four valuable drivers of empowerment, which are (1) willingness to delegate duties, (2) clearly articulated roles and responsibilities, (3) transformational leadership, and (4) psychological capital and support. Moreover, four positive-organisational-behaviour capacities are also essential to drive employees' empowerment. These include self-efficacy (confidence), hope, optimism, and resiliency (Malik, 2013; Luthans, 2002).

### **2.10.7 Trust**

Trust is a vital driver of HC because of the most crucial business asset which can deliver economic value (Hakanen, Kossou and Takala, 2016; Pirson, Martins and Parmar, 2016; Mouzas, Henneberg and Naude, 2007; Covey, 2006). Trust among stakeholders would increase the speed of work and

reduce overhead costs. Trust promotes productive collaboration to achieve organisational objectives and improved performance (Alaaraj et al., 2018; Ceyhan et al., 2018; Ajmal et al., 2017; Niazi and Hassan, 2016). In a high trust environment, organisations can enjoy numerous cooperative behaviours, consistent collaboration, and high-performance outcomes (Thanetsunthorn and Wuthisatian, 2019). Though there is no agreement about the element of trust or a unified model for trust management, Covey's (2006) can assist in managing aspects of trust as a driver of HC.

Covey (2006) asserted that there are five waves of trust within a business environment which include: self-trust, relationship, organisational, market, and societal trust. Self-trust can be achieved through credibility. Covey (2006) noted that there are four sources of credibility, which are: integrity (walking the talk), direct intent (no hidden agenda); capabilities (skills and knowledge); and results (track record of achieving and delivering). Covey (2006) also identified thirteen qualities that a person should practice consistently to gain trust in a relationship which includes: (1) talking straight, (2) showing respect, (3) transparency, (4) righting wrongs (acknowledging being wrong and fix it), (5) loyalty, (6) deliver-oriented, (7) learner, (8) confronting reality, (9) stating expectations, (10) being accountable, (11) good listener, (12) fulfilling commitments, and (13) extending trust and love to others. According to Covey (2006), the third wave of trust is organisational, which represents a collective impact of the self-trust and relationship within an organisation. Self-trust and good relationships thrive in an organisation that has an objective reward system. The last two waves are market and societal trust (Covey, 2006). Market and societal trust are essential in dealing with external communities. It is, therefore, reasonable to state that the five waves of trust identified by Covey (2006) are essential to ensure a sound HCM. This is because all the five waves of trust (i.e., self-trust, relationship, organisational, market and societal trust) are crucial for a sound HCM and effective external relationship management. Hence, trust is an important driver of HC.

## 2.11 Enablers and Parameters of Human Capital (HC) Drivers

The literature revealed (Cikova and Micah, 2018; Lin et al., 2017; Kucharpikova, Tokarpikova and Blaskova, 2015; and Lin et al., 2017) that there are four core categories of HC drivers. Generally, HC may be categorised into four core drivers and eight enablers. The four core categories and enablers of HC drivers is shown in Figure 2.4.

Figure 2-4: Four Core Drivers and Eight Enablers of Human Capital (HC) Drivers



Baron (2011); Bassi and McMurrer (2007); Covey (2006) ; Kucharpiková (2013) ; Kucharpikova, Tokarpikova, and Blaskova (2015); Lin et al. (2017); Mubarik, Chandran and Devadason (2017); Ulrich et al. (2010); and Wadhwa & Parimoo (2015).

**\* Developed by the Author and derived from literature.**

As shown in Figure 2.4, the four core drivers of HC are (1) HC planning, (2) HC acquisition, (3) HC retention, and (4) HC development. On the other hand, the eight HC enablers consist of (1) culture, (2) leadership, (3) organisation design and structure, (4) career management, (5) HR structure and governance, (6) HR capabilities, (7) trust management, and (8) HR technology – Figure 2.4. Furthermore, each core driver of HC consists of 43 parameters and practices that management of business organisations should adopt and enhance to ensure a sound HCM and resourceful employees (HC). Figure 2.5 shows the 43 parameters and practices of HC drivers extracted from the literature below the figure.

Figure 2-5 : Parameters and practices of HC drivers

**Each driver consists of parameters and practices totaling 43 parameters and practices**

Dimensions	Drivers	Parameters and Practices				
Core HC Drivers	HC Planning	Workforce Planning	Talent Strategy			
	HC Acquisition	Hiring Practice	Talent Attraction			
	HC Retention	Coaching & Mentoring	Recognition	Internal Mobility	Wellness	Succession Planning
	HC Development	Training & Development	Performance Management	Productivity		
Enabling HC Drivers	Culture	Employee Engagement	Communication	Cultural Alignment	Knowledge Management	Empowerment
	Leadership	Concurrent	Collective	Collaborative	Compassionate	Leadership Development
	Trust Management	Self trust	Relationship Trust	Organisational Trust	Market Trust	Societal Trust
	Organisation Design & Structure	Organization Design	JDs, Roles & Responsibilities			
	Career Management	Career Path	Competency Model			
	HR Structure & Governance	HR Function Strategy	HR Function Structure	HR Roles & Responsibilities	HR Governance	
	HR Capability	HR Strategic Partnering	HR Leadership	HR Work Enabling	HR Functional Technical	
	HR Tech., Systems & Processes	HR Systems, Data & Usage	HR Technology Integration	HR Analytics	HR Process Automation	

Baron (2011); Bassi and McMurrer (2007); Browne (2012); Covey (2006); Kucharčíková (2013); Kucharčíková, Tokarpikova, and Blaskova (2015); Lin et al. (2017); Mubarik, Chandran and Devadason (2017); Permana et al. (2015). Raelin (2003); Seijts and Crim (2006); Ulrich et al. (2010); and Wadhwa & Parimoo (2015).

\* Developed by the Author and derived from the literature.

Figure 2.2 shows the core drivers of HC and their parameters and practices - totalling 43. Each driver of HC consists of several parameters and practices that management should identify and strengthen to effective position employees (HC) within an organisation to maximise shareholders' wealth and improve the firm's value - Figures 2.4 and 2.5. For example, culture as a driver of HC consists of five parameters and practices: employee engagement, communication, cultural alignment, knowledge management, and empowerment – Figure 2.5. Similarly, retention as a driver of HC consists of five parameters and practices: coaching and monitoring, recognition, internal mobility, wellness and succession plan - Figure 2.5. Enhancing and developing performance on these five parameters and practices (i.e., employee engagement, communication, cultural alignment, knowledge management, and empowerment) would assist an organisation in improving its workforce (HC), thereby ensuring a resourceful HC and improved organisational performance. Considering the fact that HCM perceived employees as an asset (Cikova and Micah, 2018; Lin et al., 2017; Lantu, 2015; Wadhwa and Parimoo, 2015); a sound HCM will assist an organisation in securing competitive advantage by integrating the 43 parameters and practices of HCM shown in Figure 2.5. The implication for practice is that the collective effective adoption and implementation of the 43 parameters and practices of HC drivers would translate into a robust and resourceful workforce (HC).

## **2.12 Human Capital (HC) and Associated Risks**

International Organisation for Standardization - ISO 31000 (2009) described the risk as uncertainty's effect on objectives or deviation from the expected and crystallised of an event, change in circumstances or a consequence. ISO 31000 (2009) highlighted 11 principles for managing risks and emphasised the critical analysis of external and internal stakeholders' capabilities, perceptions, and intentions (including HC, employees). Risk management should be holistically implemented within an organisation. Holistic risk management is commonly referred to as enterprise risk management (ERM), organisational risk management (ORM) and enterprise-wide risk management (ERM) (Fadun, 2013a, 2013b). Hence, it is beneficial for a firm to adopt ERM. It will enable the organisation to manage its risk exposures holistically, including



organisational culture, performance management, HR policies, training, organisational development, and stockholders' management. Fadin (2013b) argued that ERM requires an interdisciplinary approach; hence, ERM can be adapted depending on a business organisation's risk appetite and risk culture. However, it has been argued that human resource management and risk management has received limited attention from academic and practitioners in the management literature (Becker and Smidt, 2016).

The purpose of managing organisational risk is to: ensure effective and efficient operations; enforce compliance with regulations; support business sustainability; ensure reliable reporting to stakeholders; and ensure responsible behaviour (Fadun, 2018; Robbins, Roodt, and Meyer, 2011). Robbins, Roodt, and Meyer (2011) study on HR risk management revealed that the lack of a proper understanding of risk management by the HR executive is a significant challenge faced by business organisations. Similarly, Fadun (2018b) has a good understanding that ERM is a critical success factor of a business organisation (Fadun, 2018b; Li and Ren, 2016; Robbins, Roodt, and Meyer, 2011).

Melhem (2016) noted factors that impact on organisational risk management and performance include: education, skilled, cultural differences, and expert human. Each organisation is peculiar; hence, enterprise risk management (ERM) or organisational risks management (ORM) should be adopted to suit each organisation. For instance, cultural difference differs from organisation to organisation. This implies that factors such as culture, lifestyle, influence, patterns of consumption, negotiations, communications and interactions would impact on the way an organisation manages its HC risks. It is, therefore, necessary for an organisation to identify, manage and monitor risk associated with HC (Fadun, 2018a; Evans and Royal, 2014; Flouris and Yilmaz, 2010). Availability and effective management of an organisation's resources is essential to ensure a sound human capital management (HRM).

Maenpaa and Voutilainen (2012) classified human capital risks into insurable and uninsurable risks. Anaraki and Ganjali (2014) developed a model for human capital risk management, which

entails a structured process for identifying, assessing, and classifying human capital risks. This model is relevant as it would enable an organisation to develop a risk register and systematic management of risks associated with HC. Benzoni and Chyruk (2015) study on HRM and risk management identified eight risks associated with HC. According to Benzoni and Chyruk (2015), HR risks include health and wellbeing, reduced productivity, poor financial performance, high labour turnover, high absenteeism rate, poor reputation, legal cases (such as sexual harassment, racial discrimination), and weak innovation. Furthermore, Govender and Jasson (2018) conducted an empirical study to identify risks associated with investments in human capital development; and they identified five key HC risks, including inadequate staff retention, lack of teaching transfer, misaligned training need, disengaged employees, and limited budget. Thanetsunthorn and Wuthisatian (2019) study also revealed that a low level of trust is a significant risk associated with HC within an organisation. Similarly, Robbins, Roodt, and Meyer (2011) study identified nine HC risks within business organisations, namely: (1) employees' disengagement, (2) fraud, (3) corruption, (4) theft, (5) unethical practices, (6) poor talent management, (6) diversity problems, (7) poor leadership management, (8) lack of succession planning and (9) poor information management.

Generally, much of the literature that focuses on human capital risks management falls under the same paradigm of identifying and managing human capital risks by risk management managers and practitioners. I am, therefore, of the opinion that human capital managers/practitioners should also be more involved in the management of HC risks. This would significantly improve HC risks management because human capital managers/practitioners would be able to understand better and manage HR risks (HR risk management) using the prevailing HRM paradigm depending on the peculiarity of each organisation. The summary of HC risks discussed is presented in Table 2.8.

Table 2.8: Human capital risks.

<b>Authors</b>	<b>Mentioned risks</b>	<b>List of Human Capital Risks</b>
Robbins, Roodt, and Meyer (2011)	employees' disengagement, fraud, corruption, theft, unethical practices, poor talent management, diversity problems, poor leadership management, lack of succession planning, and poor information management.	1- Employees' disengagement. 2- Unethical practice. 3- Poor talent management. 4- Diversity problems. 5- Poor leadership. 6- Lack of succession planning. 7- Poor information Mang. 8- Cultural differences.
Fadun (2014)	cultural differences	9- Health and wellbeing.
Benzoni and Chyruk (2015)	Health and wellbeing, reduced productivity, poor financial performance, high labour turnover, high absenteeism rate, poor reputation, legal cases (such as sexual harassment, racial discrimination), and weak innovation	10- Poor productivity. 11- High employees' turnover. 12- High absenteeism rate. 13- Poor reputation. 14- High in-job legal cases. 15- Poor innovation. 16- Lack of knowledge transfer. 17- Misaligned training need. 18- Low level of trust.
Govender and Jasson (2018)	poor staff retention, lack of teaching transfer, misaligned training need, disengaged employees, and limited budget	19- Fraud. 20- Corruption. 21- Theft.
Thanetsunthorn and Wuthisatian (2019)	Low level of trust	

Source: Developed by the researcher (2020)

Overall, twenty-one risks associated with HC were identified in the literature, as shown in Table 2.8. It is, therefore, reasonable to conclude that HC risks can crystallise or manifest due to neglecting or poor management of the 12 drivers of human capital and their parameters and practices - see Figures 2.4 and 2.5. Nonetheless, I discovered a significant gap in the literature regarding HC risk management. For instance, the literature revealed factors influencing employees' disengagement include high absenteeism rate, lacking innovation, low productivity, high labour turnover and poor reputation (Benzoni and Chyruk, 2015; Maenpaa and Voutilainen, 2012; Roodt and Robbins, 2011).

Furthermore, most of the literature on HC risk management falls under the dominant paradigm of identifying HC risks by risk management managers and practitioners (Thanetsunthorn and Wuthisatian, 2019; Govender and Jasson, 2018; Anaraki and Ganjali, 2014; Fadun, 2014). Such a paradigm would produce superficial results and identify symptoms of hidden risks instead of real risks that need to be mitigated. HC managers and practitioners should, therefore, engage an appropriate risk management lens to identify risks associated with HCM, such as disengagement, poor talent management, poor organisational culture, and destitute of leadership practices. Having a deep understanding of the drivers and components of human capital would empower managers to observe, manage, and control HCM more efficiently to enhance the overall organisational performance. Similarly, the poor performance of human capital's drivers and components might be considered HC risks that should be monitored and mitigated within organisations in Saudi Arabia.

### **2.13 Conclusion**

This study explored human capital management and associated risks in the organisation. In this chapter, the researcher reviewed salient literature on human capital and related risks, human capital management and other relevant concepts. Human capital plays an important role in product development and service delivery. This is because the human capital workforce can promote creativity and innovation necessary for organisations' growth and expansion. The chapter is

divided into twelve sections consisting of discussion which include: human capital as capital or resources; human capital; measurement of human capital; human capital context; organisational intellectual capital; HC as a competitive advantage; measurement of human capital; drivers of human capital; enablers and parameters of human capital drivers; and human capital and associated risks.

The overview of the themes which emerged from this chapter during the literature review is highlighted in the remaining parts of this section. The literature revealed that HC is an asset to an organisation. Human capital is a valuable asset to a firm because organisations require employees and the workforce to plan and achieve their objectives. Hence, human capital impacts, positively or negatively, on the performance of an organisation. Human capital strategy (HCS) is necessary to ensure effective HC development. The primary purpose of HCS is to transform human capital into a valuable asset to enhance the value of an organisation and enhance its performance. HCS is beneficial as it assists an organisation in effectively managing human resources' investment as it pertains to all categories of employees within an organisation. There are several dimensions of HCS (including policies, technology, culture, and framework) critical to ensuring a conducive environment, resourceful workforce, and effective business strategy. A resources HC is a source of competitive advantage to an organisation that can be measured and evaluated. HC can be assessed and measured using both monetary and non-monetary models. Non-monetary models suitable for evaluating and measuring HC include the Michigan model (1969), Flamholtz model (1972), and Ogan model (1976). Monetary models suitable for evaluating and measuring HC have replacement costs model; opportunity costs model; discounted wages and salaries model; designed initially dynamic model; and net value-added model. The literature also revealed that there are several drivers or factors influencing HC, but seven drivers of HC were considered relevant to this study, namely: leadership practices, employee engagement, knowledge accessibility, workforce optimization, learning capacity, empowerment and trust. Lastly, we identified 21 risks associated with HC in the literature, including employees' disengagement; unethical practice; poor talent management; diversity problems; poor leadership; lack of succession planning; poor information management; cultural differences; health and wellbeing; poor productivity; high employees'

turnover; high absenteeism rate; poor reputation; high in-job legal cases; poor innovation; lack of knowledge transfer; misaligned training need; low level of trust; fraud; corruption and theft.

Overall, the researcher thinks that a part of research problem has been addressed in this chapter because identifying HC drivers and HC risks associated with HCM would enable the researcher to propose actions to enhance HC's drivers and to avoid or manage and mitigate human capital risks within ICE. Having reviewed the literature in this chapter, the research methodology is discussed in the next chapter (Chapter 3).

## CHAPTER THREE

### METHODOLOGY AND METHOD OF INQUIRY

#### 3.1 Introduction

The methodology and method of inquiry used for this study are discussed in this chapter. The objective of this chapter is to illustrate my action research approach and techniques adopted for my research and describe the research's cycle. The action research process consists of four steps: (1) constructing, (2) planning action, (3) taking action, and (4) evaluating action, i.e. evaluation of actions to ensure reflection and assessment of the research process. This chapter commenced with a description of the researcher's epistemological perspective. Based on action research, the epistemological perspective assumes that knowledge is evolving and dynamic, thereby ensuring continuous development and emergence of new understandings. The research design and methodological perspective are also highlighted in the chapter. The researcher used an inductive approach and engaged in the research from specific to the general to ensure that themes constructed from the data collected and used for the study.

The researcher discussed the research plan (research planning) and the way the action research was conducted - from general to specific cations plan. Generally, the researcher considered questions regarding the current human capital management practice in Saudi Arabia. The researcher attempted to answer specific questions on human capital management to enable the researcher to know the current situation and development, in light of actions evaluation, on the management of human capital in Saudi Arabia. This chapter's remaining parts consist of six major parts focusing on my epistemological position, my approach and plan; action research cycle one: construction; action research cycle two: planning; action research cycle three: taking action, and action research cycle four: evaluating action.

### **3.2 My ontological, epistemological, and axiological position**

My ontological position and definition of the nature of reality is based on the fact that the world is complex, dynamic and constructed. In the same context, such a world is interpreted and experienced by people in their interactions with each other and with broader social systems. According to Girod-Seville and Perret (2001), there are three questions that a researcher needs to pose to establish the legitimacy of his work by examining his research approach. First, what is the nature of the knowledge we can generate through our research; second, how can we create scientific knowledge? and third, what is the value and status of this knowledge? (Girod-Seville and Perret, 2001). Paradigms are models, intellectual frameworks, frames of reference or a rational lens that a researcher can adopt in organisational science (Cohen, Manion and Morrison, 2013; Creswell, 2013; Kuhn, 1970). There are three significant paradigms that are associated with critical epistemological approaches in organisational science: positivist, interpretative and constructivist (Bell, Bryman and Harley, 2018; Saunders, Lewis and Thornhill, 2016; Sekaran and Bougie, 2016). However, McNiff (2013) emphasised that action researchers perceive knowledge as a living process and something they do as they generate their culture from their experiences of living and learning. Hence, action research from an epistemological perspective assumes that knowledge is never static or complete, but it is in a persistent state of development as new understandings emerge. In essence, action researchers view the experience of reality as a process of emergence that tends to be unpredictable and surprising. Regarding axiological perspective, understanding drivers and components of human capital within an organisation/company would lead to achieving ethical goals in providing a better working environment for people. Furthermore, understanding human capital management and its associated risks would bring the attention of managers and executives to humanistic practices to manage and lead employees.

This study attempted to identify drivers and components of human capital within an organisation/company and develop a framework for human capital (HC) risk management. Additionally, the study seeks to understand how human capital drivers and their components construct the meaning of human capital management and associated risks. Therefore, the research paradigm adopted in this study is relativism, which implies that belief, in reality, cannot exist



without perspective (Pessu, 2019). In particular, the Interpretative paradigm is suitable for this type or nature of knowledge. Regarding the question on the nature of knowledge, positivist and constructivist frameworks are not ideal for the research objectives of this thesis. The positivist framework aims to highlight drivers of HC, resulting in emerged of a determinist hypothesis, which is not the case in the research questions of this thesis. The constructivist framework applies if understanding HC drivers and associated risks require inquiry on the construction process and manner of HC drivers. Hence, the interpretative framework is an appropriate approach for this study as it explored drivers of HC and associated risks as well as their impacts on the management of HC from the practice perspective.

As a phenomenological assumption, the researcher believed that the analysis of the reality of human capital management (HCM) and the research questions are subjective in nature. From an epistemological perspective, the researcher studied the concept of human capital risks and examined its impact within ICE to get an insider view and perspective of ICE's managers on human capital risks management. The researcher believed that qualitative research is the right approach for the study, as opposed to quantitative, which tends to study cause and effect relationships (Creswell, 2013; Johnson and Christensen, 2008). Regarding the methodological perspective, the researcher used an inductive approach and engaged in the research from specific to the general to ensure that key themes constructed from collected data (Sekaran and Bougie, 2016; Easterby, Thorpe and Jackson, 2012).

### **3.3 My Approach and Plan**

This study has been developed based on my observation of the importance of human capital management on the performance of companies and organisations. It has been noticed in the business world that success in companies can be significantly attributed to human factors, which makes me question the nature of human capital management and its drivers and components. I took action to explore the concept of human capital management and to know its impact on a company's performance. Furthermore, this action research aims to validate the literature findings with the practical knowledge of human capital experts to evaluate human capital in my company and enable me to construct a holistic framework for managing human capital and its associated risks.

To do so, I have adopted Lewin's model to develop the action research plan. According to Lewin (1947), the research process consists of four major steps, namely, constructing, planning action, taking action, and evaluating action. The four stages are adopted for this study. Hence, my action research consisted of four research cycle: Cycle 1: Constructing; Cycle 2: Planning; Cycle 3: Taking action; and Cycle 4: Evaluation action – as shown in Figure 3.1.

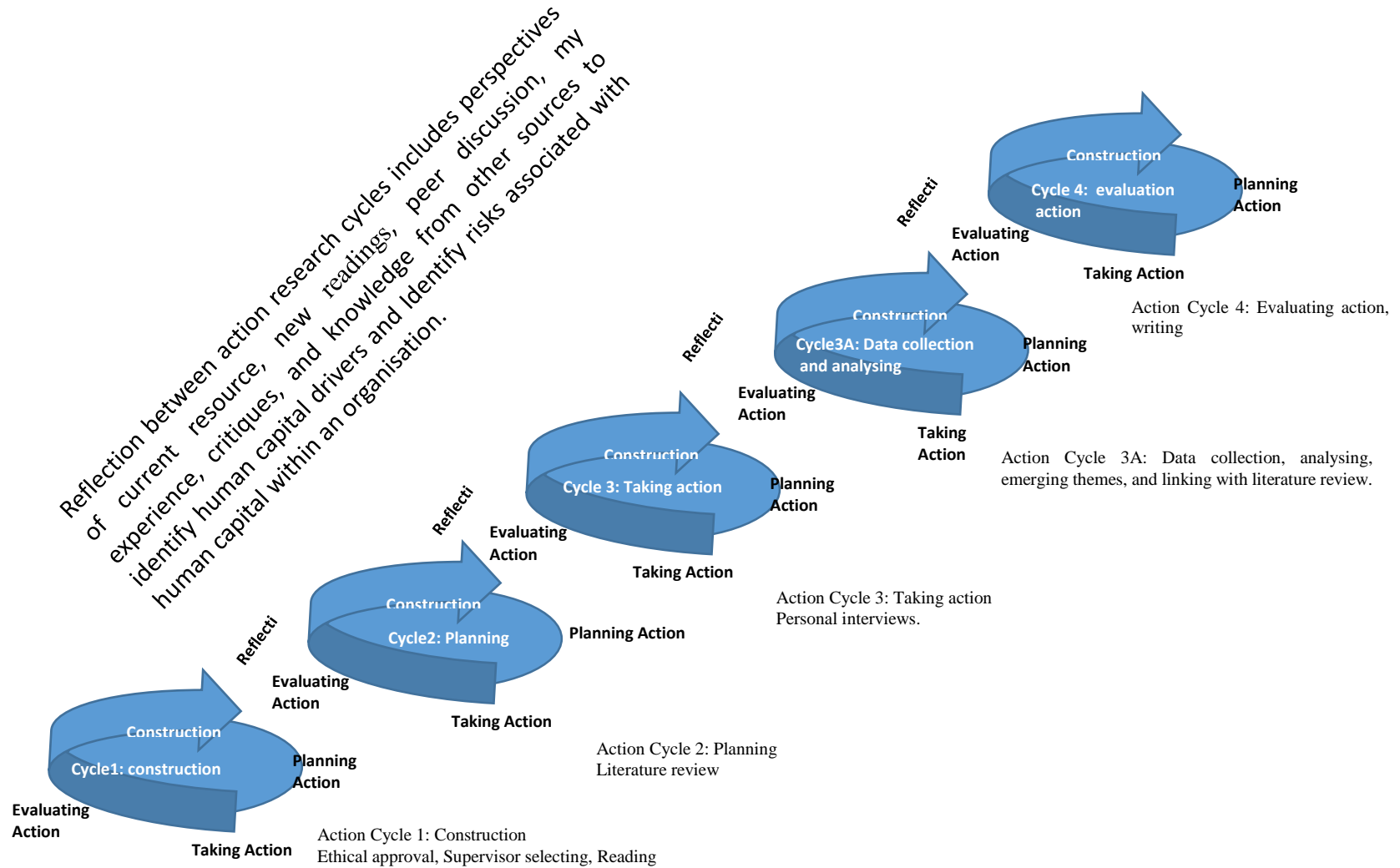


Figure 3-1: Overview of my action cycles

Evaluation of action and reflection are essential techniques in reviewing my actions and making progress. This is beneficial as it helps define areas of development in my understanding to reflect on a suitable course of action. It is worthwhile to state that I have learned a fascinating lesson on sources of knowledge during the HC courses I undertook to develop my knowledge and understanding of HCM. HC courses I undertook assisted me to engage in significant learning activities to enhance my experience and knowledge of HCM. Furthermore, my DBA and especially the thesis aspect also help in improving my knowledge. The four research cycles of my action research are discussed in the remaining parts of this chapter.

### **3.4 Action Research Cycle One: Construction**

Figure 3.1 shows that construction is the first step of my action research cycle. This action research cycle (action research cycle 1) entails the development of a proposal, selection of a topic, supervision matching, and ethical approval. This action started between the period of September 2017 and May 2019. The details of reflection on this action are narrated in subsections 3.4.1 and 3.4.2.

A detailed description of elements of the action research cycle one is presented in this section. As a founder and CEO of the International Competitiveness Establishment (ICE), I kept thinking and wondering how to assess and manage my organisation's human capital. ICE is a group of companies that engage in consulting, manufacturing, and trading in several fields.

ICE consists of five companies, including Competitiveness Consultancy Co., Dimensions Co. for PR, ICESLE for medical trading, ICEWEB for IT and Meltblown plant factory. ICE also has three emerging strategic business units. In the corporate world, it is believed that there are two critical success factors in any organisation, namely money and people (Hill and Jones, 2019; Hooker, 2018; Hosmer, 2018). This is reasonable because people's (human capital) impact significantly on the performance of business organisations. However, executives need to identify indicators for assessing the efficiency of human capital to ensure that human capital is effectively managed to

enhance organisational performance. Hence, I decided to focus on human capital management in Saudi Arabia and explore some relevant theories on human capital and its application in the management of human capital in modern organisations to ensure improved financial performance. The action research cycle consists of four-part: human capital training courses and reading; proposal development; the researcher context; and ethical issues. These four aspects of the research cycle one are discussed in sections 3.4.1 - 3.4.4.

### **3.4.1 Human Capital Training Courses and Reading**

Before commencing my doctoral thesis, I do not have sufficient knowledge of human capital management. As an entrepreneur who is expanding on various ventures and passionate about the development of new businesses at ICE, I considered it necessary to improve my knowledge of HCM. Moreover, it is essential to have excellent HCM to ensure successful business operations. As a matter of fact, I have also observed that a successful business depends significantly on having an excellent HC to complement other organisational resources. Hence, I am motivated to choose this thesis topic on HCM to improve my human capital managerial skill and strategy.

Furthermore, I have accepted a proposal to be the CEO of a Human Capital Centre (HCC), which is a new initiative by the Saudi Arabian government aimed at enhancing human capital management in the public sector. I am, therefore, committed to Saudi's government to establish the HCC centre and develop its vision, mission, strategic objectives, and its services matrix within one year. It has been an excellent experience to understand the state of human capital management in the public sector, thereby enabling me to engage in discussion and sense-making for managing human capital. This experience allowed me to improve my knowledge of human capital management and understand issues relating to the effectiveness of human capital management in organisations.

Furthermore, I have decided to enrol in crash courses to enhance my knowledge of human capital and strategic human resource (HR). I have taken 18 online modules on human capital and strategic

human resource (HR) management through Mercer learning platform. These modules have expanded my horizon to understand HR's knowledge in several regards, including business partnering, driving employee engagement and productivity, recruitment and EVP fundamentals, talent management fundamentals, hiring and on-boarding strategies, and effective utilisation of hiring assessment tools. In other words, the training courses that I have undertaken have enhanced my understanding and reflective capability of human capital management. Besides, I have read several international reports on the measurement of micro and macro levels of human capital, including a competitiveness report published by GEF and the Global Talent Competitiveness Index and (GTCI) talent report issued by INSEAD.

Overall, I have concluded that the drivers of human capital are almost the same in both public and private organisations. Hence, the development of an evaluation process for human capital drivers is a crucial step in this research process. Drivers of human capital management (HCM) have been discussed in the literature review chapter (Chapter 2). It is, however, necessary to establish an assessment and maturity model for HCM drivers. McKinney quarterly presented Health Organizational Index (HOI) developed by Gagnon, John and Theunissen (2017). I believe that HOI is valuable in developing an evaluation process for human capital within business organisations.

### **3.4.2 Proposal Development**

The development of the thesis proposal was a wholesome journey as it evolved with my understanding of HCM. The first thesis proposal that I developed during my thesis work with my previous supervisor was about measuring and enhancing HC in a public sector's organisation. However, my first thesis supervisor left the university, and a new thesis supervisor was allocated to me through a matching process. During the matching process, I agreed with my new supervisor that it is necessary to review the thesis proposal to address the aspect of HC risk management. Consequently, the direction of my thesis work was modified to reflect modern human capital management (HCM) practices in my action research, focusing on the identification of HCM

drivers and suitable HCM resources in Saudi Arabia. My research objectives and questions were reviewed to ensure a holistic approach to HCM from two main perspectives: HCM strategy and HCM risks management.

The study was redesigned, with the support of the new thesis supervisor, to identify drivers and components of HC within organisations to develop a framework for HC risk management in Saudi Arabia. After engaging and discussing what I have done so far with my new supervisor, it was apparent that I have to revisit most of the previous thesis plan, starting from approval of a new proposal, restatement of the aim of the thesis and research objectives, and readjusting of my chapters one and two to reflect HCM risk management perspective.

### **3.4.3 The Researcher Context**

As an insider researcher (the Chief Executive Officer of ICE), I have identified human capital drivers, components, and risks associated with human capital within ICE as a case study in Saudi Arabia. As an insider researcher, I therefore proposed and implemented actions to manage and mitigate HC risks to enhance human capital management practices within ICE. Doing so is reasonable as insider action research can contribute to project-based learning by accuracy, data generation, exploration evaluation through multiple action research cycles (Coghlan, 2014; McNiff, 2013). Moreover, an action learning project is beneficial as it can facilitate individual and organisational learning by employing interventions, thereby implementing appropriate behavioural processes (De Massis and Kotlar, 2014; Cohen, Manion and Morrison, 2013). There are, however, challenges associated with inside manager researcher, including pre-understanding, role duality, and organisational politics factors (Coghlan, 2001, 2014; Cohen, Manion and Morrison, 2013; McNiff, 2013).

Blythe et al. (2013) also highlighted some of the challenges associated with researcher insider position, including analytic objectivity, dealing with emotions, and managing participant's expectations. An insider researcher can ensure analytical objectivity in two significant ways:

researcher reflexivity and outsider researcher's revision (Coghlan, 2014; Blythe et al., 2013; McNiff, 2013). Meanwhile, reflexivity can be constructed as an interactional process that changes over time through repeated awareness, reflections, and actions regarding similarities and differences (Teh and Lek, 2018). Berger (2015) emphasised that reflexivity helps to create an understanding of the existing or potential influence of personal, contextual and circumstantial characteristics of a process and outcomes of an investigation. Hence, Ripamonti et al. (2016) posit that reflexive writing practices should be engaged to establish a basis for dialogue and to enhance researchers/practitioners learning.

The researcher identified potential emotional impact within ICE, and the adverse effects of emotion were avoided when conducting personal interviews. The researcher also adopted a debriefing strategy to overcome potential emotional impact. According to Teh and Lek (2018), debriefing is considered to be an effective strategy to deal with emotional effects to ensure dialogue and enhance future performance. Regarding the management of participants' expectations, the researcher faced a considerable challenge in explaining the impact of this study on participants. There is a risk or possibility that ICE employees might think that the findings of this study may lead to the restructuring of the organisation, and some employees might be a layoff, especially during the economic downturn due to the COVID-19 pandemic. The researcher thoroughly explained to ICE employees/participants the aim of the study and how the findings would enhance HCM within ICE. This is reasonable as it is ethical to present the thesis objectives and the impact of the results to the research participants (Jeanes, 2017; Saunders, Lewis and Thornhill, 2016; Houghton et al., 2010).

It should be noted that there were some difficulties that I faced as an insider researcher. The most obvious one was the reluctance of some participants to criticise the existing human capital management within ICE as the researcher is its CEO. However, I managed to reduce such reluctance by introducing the interview of the importance of the participant's feedback to the company and welcoming their views even if it will target the CEO and management. I thought the results of such action were very satisfying as it gave participants the freedom to talk. Besides that,



I found it is essential to send direct and indirect (gestures and smiles) messages during the interviews to relax and feel free to talk without hesitation.

Furthermore, there were some challenges of managing politics among employees and its impact on the data and eventually on the findings. Therefore, I included within my introduction in each interview of sample No.2 a short discussion about amalgamating ICE's interests with individual interests. In other words, I talked about the benefits of honest and genuine feedback, regardless of short-term participants' interests in achieving the interests of ICE, which will be reflected eventually on the individual interests.

#### **3.4.4 Ethical Issues**

Ethics is not only about conducting research, but it is also applied to action - taking action. The literature revealed that acceptable research ethics practices include avoiding harm to participants, privacy and confidentiality, avoidance of deception, and ethical issues on codes and communities (Hooker, 2018; Jeanes, 2017). Bruno and Haar (2020) emphasised that there are increasing calls for considering cultural differences and accepting cultural norms such as securing a husband's consent for his wife's participation in a research study. Hence, as a researcher, I need to adhere to ethical practices based on cultural differences in light of peculiarity. Adherence to ethics in research help to ensure that research is conducted in a morally justified manner to avoid sins of commission and omission. Sins of the commission include plagiarism, name dropping and pedantry. The researcher has attempted to prevent such issues by reflecting on my supervisor's comments and feedback and using the Turnitin app to avoid academic integrity issues in my thesis.

Nonetheless, there were risks during conducting this study namely potential confirmatory bias and abusing power dynamic of practitioner-researcher studying their own organisation. Regarding confirmatory bias, Stahl (2006) stated that it a tendency for a researcher to look for certain data in order to support a particular position or a certain conclusion. In order to avoid confirmatory bias, the researcher asked open questions to participants in both samples (as illustrated in table 3.2 and 3.3) without reaching any conclusion about theirs answers. of the topic. Moreover, the discussion

guides of both samples include a question if a percipient has further comments or disagree with the researcher about other questions. Letting the participant to feel free to disagree with the questions or commenting on them was a tool to mitigate confirmatory bias. According to Gatlin, Hallock, and Cooley (2017), confirmatory bias can be mitigated by encouraging to disagree with the interviewer and letting him to express his views without any concern.

Besides, this research has political dynamics because it focused on a company (ICE) and the company's CEO is the insider researcher of the action research (Coghlan, 2014). The researcher has adopted number of procedures to mitigate this risk. For example, the researcher emailed the Research Information Sheet (Appendix A) as so to ensure that the research participants had adequate ethical procedures before their interviews. By doing so, participants had given enough time to review the aim, objectives, design, and consequences of involving in the research. The Informed Consent (Appendix A) was presented to and signed by participants before starting each interview. Considering the fact that the researcher is the CEO of the company (ICE) used as the case study of this study, it can be argued that the researcher might abuse his CEO's power towards the participants in the course of the research. To make an acceptable ethical procedure, the researcher included the following statements to the participant information sheet (PIS) in the question:

If I need to complain about this research – who do, I contact? If you remain unhappy, or the problem persists unsolved, or you think you have a perception of a coercive element to participate in this research, then you should contact the Research Governance Officer of the University of Liverpool at [ethics@liverpool.ac.uk](mailto:ethics@liverpool.ac.uk).

The researcher also requested for permission, in writing, from International Competitiveness Establishment (ICE) to conduct this research within the organisation. ICE granted the researcher permission in writing (see Appendix A) to use ICE and its facilities for the research. The researcher clearly educates the ICE employees who participated in the study, the aim, and how the findings would impact HCM within ICE. This is necessary to ensure good research ethics throughout the study (Jeanes, 2017; Saunders, Lewis and Thornhill, 2016; Houghton et al., 2010).

### **3.5 Action Research Cycle Two: Planning**

The action research cycle two (planning) is discussed in this section. Eden and Huxham (1996) asserted that action research could be a problematic research methodology and a real challenge for doctoral students for two reasons. First, the uncertainty and lack of control create anxiety for anyone rather than confident and seasoned researchers (Eden and Huxham, 1996). Second, taking action in action research requires experience and a deep understanding of methods of interventions and consultancy (Eden and Huxham, 1996). The researcher faced these challenges while undertaking this study, especially in understanding the method of interventions. For instance, there was a challenge during data analysis in terms of linking the constructed themes and interviews as interviewees expressed different views, thereby making it difficult to extract a common theme (Burnard, 1991). In the same context, results and actions in this research cannot be generalised as it is a case study within certain boundaries of the ICE group. Hence, the reflexive thinking method was adopted to overcome challenges experienced and mitigate inherent risks. This action started between the period of June 2019 and January 2020. The details of reflection on this action are narrated in subsections 3.5.1 and 3.5.2.

The action research cycle two (planning) commenced with a literature search. The literature search was narrowed down based on the research objectives to ascertain the existing knowledge of human capital. The strategy used for the literature search on HCM in business organisations has been discussed in the literature review chapter (Chapter 2). The literature review served as a basis for the development of this study, including the research methodology, action research design, and data gathering.

### 3.5.1 Literature Review Approach

According to Levy and Ellis (2006), the literature review approach to address literature review should be based on a concrete methodology for selecting, analysing and synthesising findings to ensure new research demonstrates an original contribution to the overall body of knowledge and create a pathway for future studies in the field of knowledge. Finfgeld-Connett and Johnson (2013) stated that qualitative systemic review would enable search strategies in the literature review to emerge as the research investigation takes shape. In other words, searching for the literature will ensure the emergence of new searching strategies and facilitate other research techniques. The literature was explored to find out the meaning of human capital, and it led to emerging new search strategies and a new concept of human capital.

Xiao and Watson (2019) highlighted eight steps to conduct a literature review, including articulating the research problem, developing and validating the review protocol, searching the literature, screening for inclusion, assessing quality, extracting data, analysing and synthesising data, and reporting findings. Xiao and Watson (2019) eight steps to conduct a systemic literature review was adopted for this study. At the beginning of this study, I discussed the research problem. Also, the existing knowledge on HC was identified in the literature; and drivers of human capital within organisations were highlighted. In other words, I was looking for an answer to the question, “What are the drivers and components of HC within a company and organisation?”. The answer to this question is essential in developing an integrated tool to measure, manage and monitor human capital at a micro-level (i.e., within an organisation).

As stated earlier, I had a new thesis supervisor after my first supervisor left the university. After brainstorming with my new supervisor, I realised the importance of risks associated with human capital management. Management literature on HC risks management falls under the dominant paradigm of identifying human capital risks by risk management managers and practitioners (Pasban and Nojehdeh, 2016; Milost, 2014; Baron, 2011). The dominant paradigm might produce superficial results and identify symptoms of hidden risks instead of the real risks that need to be mitigated. Viewing HCM from risk management perspectives (i.e. HC risk management)

necessitates the need to identify, analyse and manage HC risks by human resources managers and practitioners (Thanetsunthorn and Wuthisatian, 2019; Govender and Jasson, 2018; Anaraki and Ganjali, 2014; Fadun, 2014). It is, therefore, reasonable for HC managers/practitioners to explore HC risk management through the right paradigm to identify inherent risks in HC, including disengagement, poor talent management, poor organisational culture, and lacking leadership practices (Benzoni and Chyruk, 2015; Maenpaa and Voutilainen, 2012; Roodt and Robbins, 2011).

The figure 3.2 illustrates the process of literature search and evaluation for inclusion. The literature on HC and HC risk management was screened for inclusion - screening for inclusion. Screening for inclusion was undertaken by searching the literature using three keywords: (1) intellectual capital and HCM; (2) HCM; (3) risks management in HCM. EPSCO database (Business Source Ultimate) mainly was used for searching for these three keywords. However, the researcher used google scholar to search for some sub-keywords that had found among the main three. For example, some drivers on human capital such as trust, empowerment, and employee engagement were searched on google scholar to find relevant literature. The search criteria included journals from academic and practitioner literature. Figure 3.2 in chapter 3 summarises the literature search and evaluation for inclusion. In all, 195 records of related keywords were identified during the database search (Figure 3.2). The screening was undertaken to filter records based on specific criteria, as illustrated in Figure 3.2. Eventually, the total numbers of 317 resources were included in the literature (Figure 3.2).

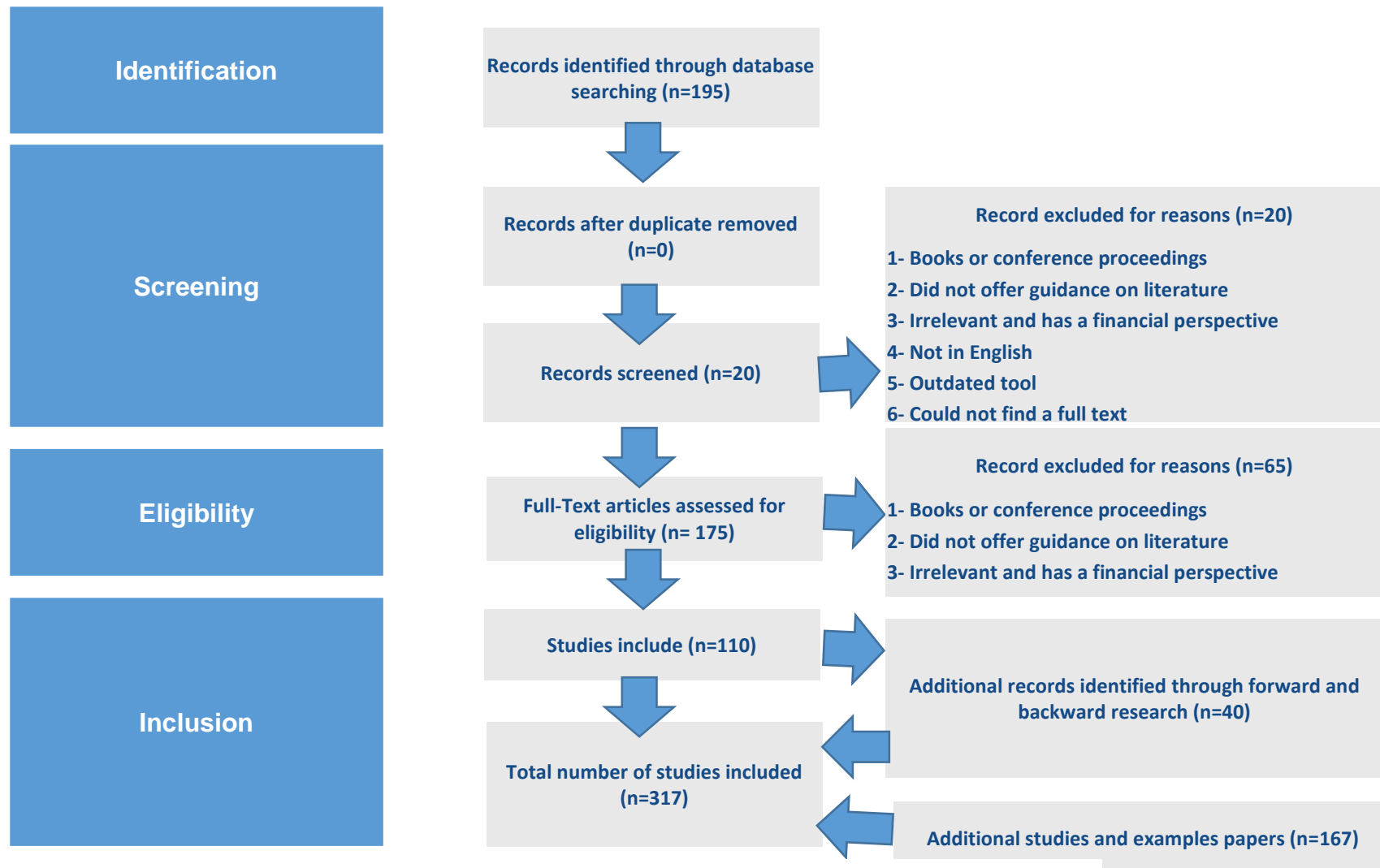


Figure 3-2 Literature search and evaluation for inclusion - Adapted from Xiao and Watson (2019).

Overall, the literature review helped develop interview questions for the two sets of participants, as shown in Figure 2.5 (Parameters and practices of HC drivers) and Table 2.8 (Human capital risks) in chapter 2. In chapter 5, the discussion of the findings is supported by the literature appropriately.

### **3.5.2 Reframing My Plan**

Whilst working with the previous supervisor, the first thesis proposal focused on identifying drivers of HC within organisations. With the second supervisor, the initial thesis proposal and research plan were reviewed appropriately. Specifically, the thesis proposal was reviewed to include the risks associated with HCM. Recent research in behavioural economics and theory, particularly the concept of loss aversion, advocates that people tend to care more about what they might lose than the future growth, and they might prefer avoiding losses to acquiring equivalent gains (Benzoni and Chyruk, 2015; Dimitrov, 2014; Martin, 2014). Hence, the need for business managers to be concerned with growth strategy and risk management in their organisations (Mitrofanova et al., 2017; Melhem, 2016; Meyer, Roodt and Robbins, 2011).

It is beneficial for business managers to view HCM from strategic and risk management perspectives to ensure business sustainability and improved performance in the era of the knowledge-based economy (Ajmal, Helo and Kassem, 2017; Niazi and Hassan, 2016; Pirson, Martins and Parmar, 2016). The organisational strategy should be developed to identify drivers of HC and their components as key performance indicators (KPIs) in an organisation's strategic map and balanced scorecards. It is also paramount that business managers should identify risks associated with HC because most of the literature on HC risk management focuses on identifying, analysing and managing of HC risks within an organisation (Govender and Jasson, 2018; Anaraki and Ganjali, 2014; Fadun, 2014). Hence, this study focused on HC's strategic and risk management aspects.

I am, therefore, of the opinion that HC managers and practitioners should be involved in the management of HC risks. The involvement of HC managers and practitioners in the management of HC risks is good because they would be able to manage HR risks (HR risk management) effectively using the prevailing HRM paradigm depending on the peculiarity of each organisation. The summary of HC risks is presented in chapter 2, Table 2.8.

### **3.6 Action Research Cycle Three: Taking Action**

Action research cycle three (taking action) entails the use of qualitative mixed-methods methods to conduct my action research. Action research is a systemic method of inquiry undertaken by practitioners to enhance and improve the quality of their practices and capability (Ripamonti et al., 2016; McNiff, 2013; Greenwood and Levin, 2006; Eden and Huxham, 1996). Action research is appropriate for this study as it is suitable for linking HC theory to HC practices to generate relevant, readable and persuasive findings for academics and practitioners. Moreover, this study attempted to develop a new approach/lens from themes that constructed from the research and reflexive thereon. Action research cycle three (taking action) is discussed in this section. This action started between the period of February 2020 and October 2020. The details of reflection on this action are narrated in subsection 3.6.1 to 3.6.5.

Theory can be developed through incremental action research consisting of steps ranging from general to specific issues. Critical self-reflection is an integral part of an action research process (Ripamonti et al., 2016; Greenwood and Levin, 2006). McNiff (2013) argued that action research could be undertaken by either an in-house or external researcher within an organisation. For this study, the researcher is an in-house researcher and the CEO of ICE. The researcher carried out action research to identify drivers of HC and associated risks to improve HC management practices in ICE. Planning action research has moved from a general to a specific action plan. In general planning, the researcher considered questions on the current practice of HC management, including Is human capital a vital asset within ICE? And Which aspect of HC management in ICE requires special attention? The research questions are highlighted in the first chapter (Chapter 1).



The research questions are addressed in this study based on the action plan discussed in this chapter.

### **3.6.1 Methodology and Samples**

This study is action research using ICE as a case study. A case study is an exploratory approach to understanding a phenomenon and developing a theory (De Massis and Kotlar, 2014). According to Shah and Corley (2006), a qualitative method can be used to collect data on a phenomenon to build a theory. This study explored the HCM and risks associated with HCM. Ketokivi and Choi (2014) emphasised that a case study can be used to embellish a theory by conducting an in-depth investigation of the relationships among concepts. Hence, the case study is suitable for this study which explores HCM, drivers of HC, and risks associated with HC within ICE in Saudi Arabia.

Moreover, due to the reasons mentioned in section 3.3 (My Approach and Plan), qualitative research would be the appropriate design as a quantitative approach would not fit this study's exploratory nature. However, the significant deficiency of a case study is that the findings of a case study cannot be generalised (McNiff, 2013; Halfpenny, 1979). Inability to generalise is the major criticism. Therefore, the researcher recommended that future research undertake a similar study in a large organisation using quantitative mixed-method research.

In the same context, the research adopted qualitative mixed-methods research (QUAL-qual design) by selecting two samples for this study: human capital experts and ICE's managers' samples. The QUAL-qual design was found to be appropriate for this thesis as it aims to collect data from deferent levels and different perspectives. According to Morse (2016), QUAL-qual design is appropriate in the conditions of obtaining data from two levels or different perspectives about a certain phenomenon. Moreover, using the same data may mean that these two methods will have greater overlap on the phenomena than may be intended or desired by the researcher. It is worth mentioning that QUAL-qual design is an inductive theoretical drive that might be used for a sequential qualitative supplementary component.

Likewise, the research adopted qualitative mixed-methods research (QUAL-qual design) by selecting two samples for this study: human capital experts and ICE's managers' samples. Semi-structured interviews were conducted into these two samples to identify drivers of human capital and risks associated with human capital within an organisation. The qualitative mixed-methods research (QUAL-qual design) in two samples were found to be appropriate as the study's objectives and research questions have an exploratory nature, and the analysis of the reality of Human Capital Management (HCM) is subjective in nature. Data collected from human capital experts were analysed in order to identify secondary and initial cycles categories, codes pattern map, and themes and discussed the findings in light of the literature. It is worthwhile to state that the thesis's first, second, and third objective has been achieved through a literature review in the second chapter of this report (Chapter 2).

Six (6) top ICE managers were also engaged in this study. ICE managers were selected, through a purposeful sampling technique, based on their position within the ICE group. The 6 ICE managers involved in the study include managing directors of the five companies, the ICE group, and the director of shared services (in charge of shared services, including finance and human resources). The 6 ICE managers were interviewed to evaluate human capital management practices to prioritise human capital risks. The results have fulfilled a part of objective four and enable the researcher to propose and implement actions to enhance human capital management practices and manage human capital risks effectively within ICE.

The convenience sampling strategy is a purposeful sampling technique (Suri, 2011). The purposeful sampling technique is suitable for this study as it helps select research participants and data sources to ensure that relevant participants and appropriate data are used for the study. According to Yin (2011), purposeful sampling is recommended based on the researcher's anticipation of the selected participants and their relevance to research objectives. Specifically, the convenience sampling strategy was used to determine the research's participants, consisting of two sets of samples.

Data collected for this study, through in-depth interviews, from two sets of samples (i.e., human capital experts and ICE managers) was recorded in both written and audio forms. Stake (1995) and Gentles et al. (2015) emphasised that sampling applies to selecting cases and data sources that can help understand the phenomenon being studied in the case study approach. Hence, I thought interviewing experts on human capital is reasonable to identify human capital drivers and associated risks. Similarly, the ICE management sample is also helpful in understanding human capital management practices and management of human capital risks with ICE. The collection of data from two sets of samples is beneficial because it facilitated triangulation, thereby enhancing the credibility of the research. Furthermore, triangulation in the samples provided an opportunity to capture drivers of human capital as well as different dimensions of human capital management and associated risks.

### **3.6.2 In-depth Personal Interviews with The Two Samples**

According to Luna- Reyes and Andersen (2003), interviews are the backbone of qualitative data collection because they facilitate interaction between the researcher and respondents. Interviews may be structured or unstructured (Bell, Bryman and Harley, 2018; Gentles et al., 2015). In-depth individual interviews can provide a tool for clarification of definitions, elaboration on topics, and collecting the respondents' views and opinions (Blythe et al., 2013; Creswell, 2013).

The interview is a primary research instrument for qualitative research (Doody and Noonan, 2013; Schultze and Avital, 2011; Ryan, Coughlan and Cronin, 2009; Myers and Newman, 2007; Burnard, 1994). Moreover, the interview can be used to ensure a research-focused interaction between a researcher and participants (Kazmer and Xie, 2008; Oltmann, 2016).

To ensure compelling interviews, the researcher developed discussion guides for the two samples (i.e., human capital experts and ICE managers) to elicit relevant data from the participants to address the research's objectives and research questions. Legard, Keegan, and Ward (2003) asserted that an in-depth interview is a method of conversation with a purpose whereby the interviewer may assume two positions, namely, miner or traveller metaphors. A researcher in a

miner metaphor might see knowledge as given; whereas, knowledge in a traveller metaphor is not given but created and negotiated (Legard, Keegan and Ward, 2003). Both approaches (i.e., miner or traveller metaphors) require establishing trustful relationships with interviewees, which is a significant step in the process of data collection (Legard, Keegan and Ward, 2003).

Boyce and Neale (2006) identified five steps involved in conducting an in-depth interview: planning, developing instruments, collecting data, analysing, and disseminating findings. Two interview research tools were used for the study: interview protocol and interview guide. The interview protocol includes rules and instructions guiding the management and conducting of interviews to ensure consistency of interviews, thereby enhancing the dependability of the findings of this study. Table 3.1 shows the interview protocols of the two sets of samples used for this study.

Table 3.1: Interview protocol

Interview protocol	Rules and things to do
What to say to interviewees when setting up the interview?	You are going to be asked to participate in this research study. You have the full right to decide for being part of this research or not. It is recommended that you understand the nature of your participation in this research. It is worth mentioning that your participation in this research is entirely confidential. Please do not hesitate to ask any questions before, during, or after involving in this research.
What to say to interviewees when beginning the interview?	The main goal is to identify drivers and components of human capital within an organisation/company and develop a framework for human capital risk management. To do so, In-depth individual interviews have been conducted with two samples in this thesis, namely, Human capital experts and ICE's managers' samples. The interviews have been done with critical reflection (reflexivity) during the action research process.

Interview protocol	Rules and things to do
What to say to interviewees in concluding the interview?	Your participation in this research is entirely confidential. Please do not hesitate to ask any questions before, during, or after involving in this research.
What to do during the interview (Example: Take notes? Audiotape? Both?)	Take notes and record audio.
What to do following the interview?	<ul style="list-style-type: none"> <li>- Checking all answers and my notes.</li> <li>- Check audio record for clarity.</li> <li>- Summarise key information for each.</li> </ul>

Source: Adapted from Boyce and Neale (2006)

The researcher developed an interview guide for the study. An interview guide can be defined as a list of questions (Kallio et al. 2016; Krauss et al. 2009; Whiting, 2008) that can lead a discussion during an interview toward research objectives (Cridland et al., 2015; Krauss et al. 2009; Astedt-Kurki and Heikkinen 1994). The interview guide used for the study highlighted interview questions for the two sets of samples —the tables 3.2 and 3.3 show the interview guides of this study.

Table 3.2: The discussion guide for sample 1 (Human capital experts)

<b>Discussion guide for human capital experts sample No. 1</b>	
Questions	<ol style="list-style-type: none"> <li>1. What do you think is the importance of Human Capital Management, and what is its impact on performance?</li> <li>2. Identify human capital drivers and components within an organisation/company that executives need to keep an eye on to manage human capital efficiently?</li> <li>3. Identify risks associated with human capital within an organisation/company?</li> <li>4. What is the perspective or lenses that an organisation/Company should manage human capital? Strategic or risk perspective?</li> <li>5. What actions and strategies that you recommend to be adapted as so to avoid or manage and mitigated human capital risks in order to enhance human capital management practices in an organisation/company?</li> <li>6. Do you have any further comments on human capital management?</li> </ol>
<p>Closing Key Components:</p> <ul style="list-style-type: none"> <li>• Additional comments</li> <li>• Thank you</li> </ul>	Thank you for your participation, and please email me in case you have further comments regarding these questions.

Source: Adapted from Kallio et al. (2016)

Table 3.3: The Discussion guide for sample 2 (ICE managers)

<b>Discussion guide for ICE management sample No.2</b>	
<b>Introduction:</b> This study aims to enhance the human capital of ICE group which is going to benefit its employees at the end of day. So, genuine feedback and honest answers would help to enhance to human capital management and would have a positive impact on each employee of this company.	
Questions	<ol style="list-style-type: none"> <li>1. What is the importance of human capital within ICE?</li> <li>2. What is the impact of having proper human capital management on ICE's performance?</li> <li>3. What is your pain in human capital?</li> <li>4. Identify the key drivers and components of human capital? In other words, what are the drivers and elements that, if we enhance them, we will improve the human capital management of ICE?</li> <li>5. Identify risks associated with human capital within an organisation/company?</li> <li>6. What is the perspective or lenses that an organisation/Company should manage human capital? Strategic or risk perspective?</li> <li>7. Literature has identified 43 parameters and practices of HC drivers (Figure 2.5 in chapter 2); which parameters and practices that you think are important and applicable in Saudi culture for enhancing human capital in ICE?</li> <li>8. What are the actions that we need to take to enhance human capital management within ICE based on your answer in Question No. 7?</li> <li>9. Literature has identified 21 risks associated with human capital (share table No.2.8 in chapter 2); which risks do you think might take place in ICE?</li> <li>10. What are actions that we need to take to avoid, mitigate, or manage risks associated with human capital within ICE based on your answer in Question 9?</li> <li>11. Do you have any further comments on human capital management?</li> </ol>
Closing Key Components:	Thank you for your participation, and please email me in case you have further comments regarding these questions.
<ul style="list-style-type: none"> <li>• Additional comments</li> <li>• Thank you</li> </ul>	

Source: Adapted from Kallio et al. (2016)

### 3.6.3 Data Gathering Process

According to Creswell (2007), the data collection process is best illustrated in a data collection circle of interrelated activities, including locating a site or an individual, gaining access and making rapport, sampling purposefully, collecting data, recording information, and exploring the field issues, and storing data. Hence, the data collection cycle of this study started with the selection of people/participants and ended with storing data, according to Creswell (2007). The research questions highlighted in the first chapter served as a guide in developing interview questions and discussions of findings. As discussed earlier, data was collected through semi-structured interviews from two categories of participants - human capital experts and ICE managers.

Interviewing of participants lasted for about ninety to one hundred minutes to establish trust and rapport with participants. Data was collected through interviews based on the research objectives and research questions. Interviews allowed the researcher to collect necessary data for the study; and observe the participants' (interviewees) gestures, facial expressions, non-verbal gestures, and participants' body language during interviews (Gill et al., 2008; Knapik, 2006). Data collected for the study was coded using a thematic technique, and constructed themes were linked to the research objectives. Interview questions were matched to the research objectives—tables 3.4 and 3.5 show a summary of links between research objectives and interview questions.



Table 3.4: Links between research objectives and interview's questions for Sample 1 (Human capital experts)

Research objectives	Interview Questions
1. Study the evolution of 'Human Capital' and its context within an organisation/company.	1. What do you think is the importance of Human Capital Management, and what is its impact on performance?  6. Do you have any further comments on human capital management?
2. Identify human capital drivers and components within an organisation/company.	2. Identify human capital drivers and components within an organisation/company that executives need to keep an eye on in order to manage human capital efficiently?  6. Do you have any further comments on human capital management?
3. Identify risks associated with human capital within an organisation/company.	3. Identify risks associated with human capital within an organisation/company?  6. Do you have any further comments on risks associated with human capital management?
4. Propose and implement actions to avoid or manage and mitigate human capital risks in order to enhance human Capital management practices in ICE.	4. What is the perspective or lenses that an organisation/Company should manage human capital? Strategic or risk perspective?  5. What actions and strategies that you recommend to be adapted as so to avoid or manage and mitigate human capital risks in order to enhance human capital management practices in an organisation/company?  6. Do you have any further comments on human capital management or managing its associated risk

For human capital experts, Table 3.4 shows that interview question 6 was developed to address research objectives 1, 2, 3 and 4. Similarly, interview question 1 was designed to address research objective 1 (Table 3.4); interview question 3 was developed to address research objective 3 (Table 3.4); and interview questions 4 and 5 were designed to address research objective 4 (Table 3.4).

Table 3.5: Links between research objectives and interview's questions for Sample 2 (ICE Managers)

Research objectives	Interview Questions
1. Study the evolution of 'Human Capital' and its context within an organisation/company.	NA
2. Identify human capital drivers and components within an organisation/company.	<p>1. What is the importance of human capital within ICE?</p> <p>2. What is the impact of having proper human capital management on ICE's performance?</p> <p>3. What is your pain in human capital?</p> <p>4. Identify the key drivers and components of human capital? In other words, what are the drivers and elements that, if we enhance them, we will improve the human capital management of ICE?</p> <p>6. What is the perspective or lenses that an organisation/Company should manage human capital? Strategic or risk perspective?</p> <p>11. Do you have any further comments on human capital management or managing its associated risks?</p>
3. Identify risks associated with human capital within an	3. What is your pain in human capital?

Research objectives	Interview Questions
organisation/company.	<p>5. Identify risks associated with human capital within an organisation/company?</p> <p>11. Do you have any further comments on human capital management or managing its associated risks?</p>
4. Propose and implement actions to avoid or manage and mitigate human capital risks in order to enhance human Capital management practices in ICE.	<p>7. Literature has identified 43 parameters and practices of HC drivers (Figure 2.5 in chapter 2); which parameters and practices that you think are important and applicable in Saudi culture for enhancing human capital in ICE?</p> <p>8. What are the actions that we need to take to enhance human capital management within ICE based on your answer in Question No. 7?</p> <p>9. Literature has identified 21 risks associated with human capital (Table No.2.8 in chapter 2); which risks do you think might take place in ICE?</p> <p>10. What are actions that we need to take to avoid, mitigate, or manage risks associated with human capital within ICE based on your answer in Question 9?</p> <p>11. Do you have any further comments on human capital management or managing its associated risks?</p>

Table 3.5 shows that interview questions 1, 2, 3, 4, 6 and 11 were developed to address research objective 2. Similarly, interview questions 3, 5 and 11 were designed to address research objective 3 (Table 3.5); interview questions 7, 8, 9, 10 and 11 were developed to address research objective 4 (Table 3.5).

The COVID-19 pandemic has forced the Saudi government, like other governments in the world, to impose complete lockdown and stay at home instructions to mitigate the risk of a pandemic

outbreak. Hence, the researcher decided to conduct interviews virtually through virtual meeting platforms, including Zoom, Skype and ezTalks. These virtual personal interviews were held based on the methods and procedures discussed in this chapter.

### **3.6.4 Coding and Data Analysis**

The data collected for the study were analysed in order to construct themes. Thematic analysis facilitates identifying, analysing, and reporting patterns (themes) within the data (Braun and Clarke, 2006). Maguire and Delahunt (2017, p. 3352) stated that ‘thematic analysis is the process of identifying patterns or themes within qualitative data. Burnard (1991) also noted that qualitative research analysis aims to create a comprehensive and systemic record of emerged themes and issues addressed in the interviews to link the emerged themes and research objectives. Thematic analysis is, therefore, suitable for the study as it helps establish themes based on views expressed by the research participants during interviews. The researcher used such technique as a method to analyse data from an exploratory case study and to drive data acquisition activities within and outside the case study. To do so, the researcher thought interviewing experts on human capital is reasonable to identify human capital drivers and associated risks. Similarly, the ICE management sample is also helpful in understanding human capital management practices and management of human capital risks with ICE. The thematic analysis method was adopted to analyse the collected data from the case study by identifying secondary and initial cycles categories, codes pattern maps, and themes (Halaweh, Fidler, and McRobb, 2008).

Furthermore, thematic analysis is helpful in affirming or checking credibility. Burnard (1991) suggested two methods of checking credibility: (1) request a colleague who is not involved in the research to read the script in order to identify a category system; and (2) checking validities by comparing the emerging themes found by a researcher with the emerging themes extracted by three of people interviewed. The two methods of checking credibility, highlighted by Burnard (1991), were used for this study. The first method of credibility aimed at comparing the designated category system with the researcher category system to ascertain credibility (Burnard, 1991).

Comparison between the two category systems helped highlight areas that required improvement to enhance the research categorisation system. The second method of checking credibility was also helpful in comparing the emerging themes found by the researcher with views that had been explored by two of the people interviewed. To apply the second method of checking credibility, the researcher asked two respondents to read the identified themes which constructed from the data collected through interviews and the thematic analysis method. Thereafter, the researcher compared themes identified by the researcher and views of two respondents to check the credibility of the analysis and make necessary adjustments to enhance the data analysis. Besides developing the category system, the researcher also discussed the results in the context of the literature to compare and contrast the findings with previous research and findings.

### **3.6.5 Software Used to Analysing Interviews audio/videos**

The researcher used rapid identification of themes from audio/videos recordings (RITA) to analyse semi-structured interviews. According to Neal et al. (2015), RITA consists of five steps that enable the researcher to obtain rapid results from qualitative and semi-structured interview data. To do so, the researcher started with the step of identifying and specifying key research and evaluation focus. Hence, RITA allowed the researcher to identify six evaluation foci: the importance of human capital, human capital management, human capital risks, areas of development in HC's drivers within ICE, HC risks within ICE, and proposed actions to enhance human capital management and its associated risks. After identifying fundamental research and evaluation focus, the researcher determined themes to include in the code master using Inductive approach. In the third step, the researcher created a coding form which is a grid of themes identified in step two and crossed with columns of times unit segments that enable the return to videos files for referencing and verification. In the fourth and fifth steps, the researcher tested codes masters and coded the six evaluation foci.

NVivo software was also used to organise collected data. NVivo was used to ensure that the data collected is well organised, stored and analysed to save time in generating the findings with valuable pieces of evidence. Furthermore, NVivo enabled the researcher to ask complex questions

about the data to discover more emerging themes and develop courses of action to be taken by the researcher. According to Zamawe (2015), NVivo is one of the emerging Computer Assisted Qualitative Data Analysis Software (CAQDAS) which consider a significant portion of qualitative data analysis. Moreover, NVivo speeds up the review process, saves time, and increases results' accuracy (Zamawe, 2015). Though NVivo is a useful software for analysing qualitative data; but, it is not 100% perfect. Hence, the researcher was cautious while analysing data with NVivo and used Excel to build the master of the code by identifying secondary and initial cycles categories, codes pattern maps, and themes.

### **3.7 Action Research Cycle Four: Evaluating Action**

Action research cycle four (evaluating action) is discussed in this section. This is the fourth action research cycle of this study which focused on the reflection of the earlier research cycles (action research cycles 1 – 3) to ensure the effectiveness of the entire research cycle and enhance the quality of the findings. According to Alvesson, Hardy and Harley (2008), reflexivity contributes to understanding the research process as it encourages insights into the nature of social science and the role of language, power/knowledge connections, social interests, and ideologies and creativity in bringing new perspectives. There are four sets of reflexivity practices: multi-perspective, multi-voicing, positioning and destabilising (Dumay, 2016; Creswell, 2013). Furthermore, the four forms of reflexivity practices can be categorised into two segments, D-Reflexivity and R-Reflexivity (Dumay, 2016; Creswell, 2013). D-Reflexivity includes destabilising and positioning. In contrast, R-Reflexivity consists of multi-perspective and multi-voicing (Dumay, 2016; Creswell, 2013).

I adopted a combination of R and D reflexivity across all previous cycles. For instance, I implemented D-reflexivity on the construction cycle in order to challenge the dominant paradigm of human capital management as it is a business fashion to enhance employees' efficiency. The dominant paradigm adopted sounds to be the positivist framework that aims to highlight drivers of HC, resulting in a determinist hypothesis, which is not the case in the research questions of this thesis. Instead, the constructivist framework applies if understanding HC drivers and associated risks require inquiry on the construction process and manner of HC drivers. Hence, the

interpretative framework is an appropriate approach for this study as it explored drivers of HC and associated risks and their impacts on the management of HC from the practice perspective.

The motive behind the deconstruction of this understanding was my increasing belief that engaging people would make a difference in a company/organisation's performance. Similarly, I used R-reflexivity to develop a new understanding and introduced an alternative paradigm by searching the literature for drivers of robust human capital. As mentioned in chapter 2, the literature revealed that several drivers and factors influence HC. However, seven drivers of HC were considered to be relevant to this study, namely: leadership practices, employee engagement, knowledge accessibility, workforce optimisation, learning capacity, empowerment and trust.

Furthermore, I used D-reflexivity to deconstruct the dominant paradigm and realised the importance of risks associated with human capital management. Management literature in the area of human capital risk management falls under the dominant paradigm of identifying human capital risks by risk management managers and practitioners (Thanetsunthorn and Wuthisatian, 2019; Govender and Jasson, 2018; Anaraki and Ganjali, 2014; Fadun, 2014). Such a paradigm would produce superficial results and identify symptoms of hidden risks instead of real risks that need to be mitigated. HC managers and practitioners should, therefore, engage an appropriate risk management lens to identify risks associated with HCM, such as disengagement, poor talent management, poor organisational culture, and destitute of leadership practices.

For this study, I identified and used 21 risks associated with HC in the literature, including employees' disengagement; unethical practice; poor talent management; diversity problems; insufficient leadership; lack of succession planning; poor information management; cultural differences; health and wellbeing; low productivity; high employees' turnover; high absenteeism rate; underprivileged reputation; high in-job legal cases; insufficient innovation; lack of knowledge transfer; misaligned training need; low level of trust; fraud; corruption and theft. I applied D and R reflexivity across all cycles, especially during the process of conducting personal interviews with the two categories of participants to clarify the orthodox understanding of human capital

management. Overall, the output and findings of reflexivity thinking within each research cycle produced new themes which improved the process, methods and practices to HC risk management within business organisations.

### **3.8 Conclusion**

This chapter has highlighted, justified and developed techniques engaged in addressing the research questions. As regards the methodological perspective, the researcher used an Inductive approach and engaged in the research from specific to the general to ensure that themes constructed for the data collected for the study. Adopting qualitative mixed-methods research (QUAL-qual design) was appropriate as the study's objectives and research questions have an exploratory nature, and the analysis of the reality of Human Capital Management (HCM) is subjective in nature. From an epistemological perspective, the researcher studied the concept of human capital risks and examined its impact within ICE to get an insider view and perspective of ICE's managers on human capital risks management. The researcher believed that qualitative mixed-methods research (QUAL-qual design) is the right approach for the study, as opposed to quantitative, which tends to study cause and effect relationships.

Moreover, this study explored the HC and risks associated with HCM, which a case study can be used to embellish a theory by conducting an in-depth investigation of the relationships among concepts. Hence, the case study is suitable for this study which explores HCM, drivers of HC, and risks associated with HC within ICE in Saudi Arabia. In the same context, the research paradigm adopted in this study is relativism, which implies that belief, in reality, cannot exist without perspective (Pessu, 2019). In particular, the Interpretative paradigm is suitable for this type or nature of knowledge.

Regarding the question on the nature of knowledge, positivist and constructivist frameworks are not ideal for the research objectives of this thesis. The positivist framework aims to highlight drivers of HC, resulting in emerged of a determinist hypothesis, which is not the case in the



research questions of this thesis. Therefore, the interpretative framework is an appropriate approach for this study as it explored drivers of HC and associated risks and their impacts on the management of HC from the practice perspective.

The action research process comprises of four steps: (1) constructing, (2) planning action, (3) taking action, and (4) evaluating action, i.e. evaluation of action to ensure reflection and assessment of the research process. The chapter's discussion focused on my epistemological position, my approach and plan, action research cycle one: construction, action research cycle two: planning, action research cycle three: taking action, and action research cycle four: evaluating action.

In each cycle, I illustrated the actions taken and anticipated potential issues. This was helpful and improved the mechanism of conducting this research and fulfilling the research objectives. However, the development of the thesis proposal was a wholesome journey as it evolved with my understanding of HCM, as discussed in section 3.4. A case study approach was adopted to achieve the thesis's objectives as it explored a bounded system and elaborated the theory of human capital management by conducting an in-depth investigation of the relationships among human capital drivers and their associated risks.

As a phenomenological assumption, the researcher believed that the analysis of the reality of HCM and the research questions are subjective in nature. From an epistemological perspective, the researcher studied the concept of human capital risks and examined its impact within ICE to get an insider view and perspective of ICE's managers on human capital risks management. Qualitative mixed-methods research (QUAL-qual design) as an inductive approach are used for the study. Two samples were used for this study: human capital experts and ICE's managers' samples. The study selected five human capital experts and six (6) top ICE managers through a purposeful sampling technique. The purposeful sampling technique is suitable for this study as it is helpful in selecting research participants and sources of data to ensure that relevant participants and appropriate data are used for the study. Data analysis is discussed in the next chapter 4 and chapter 5.

## CHAPTER FOUR

### TAKING THE ACTION

#### 4.1 Introduction

Having completing the literature review and methodology stage, taking action is the next stage in my action research process. Action Research Cycle Three, Taking Action, included using qualitative mixed-methods methods to conduct my action research. The researcher aims to plan and do action research to identify human capital drivers and associated risks in order to manage, avoid, or mitigate d human capital risks and enhance human capital management practices in ICE. the researcher had raised questions about the current practice of managing human capital such as is human capital a vital asset within ICE that need keep an eye on it and devise a management framework to enhance its conditions, what are the current activities to manage human capital?. As long as human capital management has a significant contribution to successful performance, what are its drivers and components that need to be addressed collectively in order to achieve a robust human capital position? What are the risks associated with human capital? What actions need to be taken to manage and mitigate them? How can I assess my actions on managing human capital and its associated risks? These questions had been articulated in the research objectives of this study, and a specific action plan of the action research had taken place during data collection, analysis, findings, and conclusion stages. Therefore, this chapter aims to highlight the case study and the adopted concept of shared services, which include managing the group's human capital. Moreover, it explains the course of actions been taken to select the two samples of participants and to conduct in-depth interviews.

#### 4.2 The case study

This research was done using a qualitative mixed-methods case study of the International Competitiveness Enterprise ICE based on an exploratory approach and adopting an action learning approach. ICE is a group of companies that are doing business in various fields, namely,

Competitiveness Consultancy, ICEWEB, Meltblown Plant Industries MPI, Hospitality Gate, Dimensions Public Relationship Agency DPRA, and ICESLE. Regarding Competitiveness Consultancy, it was established in 2008, and it provides consultancy services on manufacturing project development, business planning, marketing research, and financial services. ICEWEB is an IT company that develops cloud solutions, mobile apps, web applications, and resellers for several companies, such as Google and Amazon business solutions. As regards Meltblown Plant Industries MPI, it is a factory for producing non-woven fabric that can be used in various applications such as respiratory mask filters, which are used by personal, proactive equipment PPE manufacturers in Saudi Arabia and other countries in the Middle East. Hospitality Gate HG is another subsidiary of ICE that is working in the hospitality sector, including installation, procurement, architectural fit-out, and supplying operating supplies and equipment (OSandE) for hotels and resorts. ICESLE is another subsidiary of ICE group, which provides medical and laboratory products and devices to hospitals and research centres. Finally, DPRA is another branch of the ICE group which provide public relationships services, including managing media campaigns, creating media content, developing a communication strategy for companies and organisations. All six subsidiaries are managed using shared services in terms of human resource management, finance, administration, logistics, and IT. In other words, each subsidiary manages its core business and outsources its shared services to the ICE group, which manages human resource functions among other shared services. The current number of employees of ICE group, including full-time and part-time, is 78 employees. The number of employees might increase due to newly contracted projects that one of the subsidiaries might have. The ICE group will provide shared services, including recruiting and managing human resources.

Human resource shared services that are provided to all subsidiaries includes recruiting, payroll management, HR operations, workforce planning, internal communications, compensations and benefits. ICE has adopted a shared service concept in order to standardise processes and reduce costs. According to Paagman et al. (2015), the shared services concept should be operated as a business. It can help to focus on the internal environment by amalgamating similar processes to reduce operational costs and increase efficiency. Moreover, Soalheira (2020) stated that there are some advantages of shared services, including 1) reducing employee costs; 2) enhancing the

quality of services; 3) increasing efficiency and improving productivity by merging available resources and processes in order to be centralised shared services unit; 4) streamlining internal services and standardise processes; 5) deliberation innovation in supporting services by bringing them together in one location; 6) enabling sharing knowledge and experiences in the area of customer management; 7) increasing IT security and unifying communication tools between subsidiaries; 8) improve control over delivered services; 9) enabling subsidiaries to concentrate on core competences and save the time of management.

### **4.3 Human capital experts' participants**

Stake (1995) and Gentles et al. (2015) stated that sampling applies to selecting cases and selecting data sources that can help understand the case in the case study approach. Therefore, I thought interviewing a sample of experts on human capital is a data source that could help identify the drivers of human capital and its associated risks. Likewise, the sample of ICE management could help to understand the case of managing human capital in the organisation. In other words, purposeful sampling, which aims to select the participants or sources of data used in a study, was the appropriate type to conduct this research. According to Yin (2011), purposeful sampling is recommended based on the researcher's anticipation of the selected participants and their relevance to the research questions of the study. It is worth mentioning that I chose the convenience sampling strategy among the 16 available purposeful sampling strategies (Suri, 2011) as it involves selecting participants in the two samples who are easy to access.

In the sample of human capital experts, qualitative semi-structured interviews with five human capital experts were conducted to identify human capital drivers and risks associated with human capital within the company/organisation. It is to be noted that Participant Information Sheet (PIS) was sent to eight human capital experts (see the table below) who have a good experience in the Saudi workforce and have long experience in managing human capital in Saudi Arabia. However, five candidates (shaded in grey in the table below) agreed to conduct in-depth interviews, representing 56% of the sent invitations. Responses had been analysed thematically to find out prevalent patterns and underpin the results of the literature review, fulfilling the second and third objectives of this thesis.

It was important to include human capital experts who have experience with Saudi culture and Saudi labour law. Peretz, Levi, and Fried (2015) stated that the workforce and its diversity might differ from one country to another because of the variation in national culture and other reasons such as labour legal system, government enforcement, and economic level growth. It is worth mentioning that the thesis's first, second, and third objectives were achieved through literature review and relevant international reports.

Table 4.1: List of human capital experts who were invited to participate among sample No.1

Position	Gender	Length (Minutes)	Note
Human Capital expert	Male	100	Leading Educational organisation
VP of Human Resource in a company	Male	97	Leading company in the Financial sector
Human Resource Advisor	Male	83	Human Capital Consultancy Company
Human Resource Advisor	Male	93	Human Capital Consultancy Company
Director of Human Resource	Male	108	Leading company in the Financial sector
Human Resource Consultant	Male	92	Human Capital Consultancy Company
Human Capital expert	Male	102	Leading petrochemical Company
Human Capital expert	Male	98	Leading Educational organisation
Human Resource Advisor	Male	97	Human Capital Consultancy Company

All five participants (coloured on grey in the table above) were interviewed and extracted insightful data that would help to fulfil the second and third objectives of this thesis besides literature. It is

worth mentioning that the five participants signed the Participant Consent Form (PCF). All five participants have experiences with Saudi culture, so their data were insightful in terms of understanding the law and cultural differences. The designed discussion guide was followed, and the researcher extracted the required data besides encouraging participants to express their views and further comments at the end of each interview.

#### 4.4 ICE management participants

Regarding the sample of ICE's managers, six managers have had In-depth individual interviews to evaluate human capital management practices and prioritise human capital risks. The data collected from these interviews would fulfil objective four and enable the researcher to propose and implement actions to enhance human capital management practices and avoid or mitigate human capital risks within ICE. Therefore, the discussion guide of sample No. 2 required sharing the 43 practices and parameters of enhancing human capital identified in the literature in chapter 2 (See Figure 2.5 Chapter 2). Furthermore, question No.9 in the same discussion guide involves sharing 21 risks that had been identified in the literature and listed in table No.2.8 in chapter 2. Hence, the researcher shared Figure 2.5 and Table No.2.8 with participants to decide which ones are applicable in Saudi culture and propose actions to be implemented within ICE.

Table 4.2: List of ICE's management who were invited to participate among sample No.2

Position	Gender	Length of interview (Minutes)
Head of Shared Services	Male	105
Head of ICESLE	Male	95
Head of MPI	Male	92
CEO of DPRA	Male	72
Head of ICEWEB	Male	89
Head of HG	Male	87

All six participants were interviewed and extracted insightful data that would help to fulfil the fourth objectives of this thesis besides literature. It is worth mentioning that the six participants signed the Participant Consent Form PCF. All six participants have long experience in doing business in Saudi Arabia and around five years of average working experience in the ICE group. Hence, the extracted data were relevant and insightful in terms of understanding previous and existing human capital management within ICE. The designed discussion guide was followed, and the researcher extracted the required data besides encouraging participants to express their views and further comments at the end of each interview.

#### **4.5 Data collection and Analysis**

According to Creswell (2007), the data collection process is best illustrated in a data collection circle of interrelated activities: locating a site or an individual, gaining access and making rapport, sampling purposefully, collecting data, recording information, and exploring the field issues, and storing data. Hence, I followed the data collection cycle starting with selecting people and ending with storing data. The above discussion guides reflected the research questions, which had been started with "what," "why", and "how.". I think my research questions had guided the discussions and had the features of being open-ended, none directional and evolving. Besides that, I focused on my interviews in both samples to capture the effect of Saudi culture and its influence on managing human capital and its associated risks. Data were collected through in-depth individual interviews with ICE management and recorded audio and video of the responses. The responses of ICE management were analysed in detail to incorporate their evaluation of human capital's drivers and components with ICE. The ICE's management sample should include critical positions, namely, managing directors of each company (five companies) the director of shared services.

In sample No. 1, the questions of the interview directed to answer in general the last three research objectives; namely, 1- Identify human capital drivers and components within an organisation/company, 2- Identify risks associated with human capital within an organisation/company and 3- propose and recommend actions to avoid or managed and mitigated human capital risks in order to enhance human capital management practices in

organisation/company. As regards Sample No. 2, the questions of the interview directed to answer in specific the last three research objectives; namely, 1- Identify human capital drivers and components within an organisation/company, 2- Identify risks associated with human capital within an organisation/company and 3- propose and recommend actions to avoid or managed and mitigated human capital risks in order to enhance human capital management practices in ICE. In the context of sample No.2, the researcher introduced the concept of human capital and its associated risks at the beginning of each interview. This step was thought to be very important as most of this sample participants are not experts on human capital management and human resource management.

Data collected for this study, through in-depth interviews, from two sets of samples (i.e., human capital experts and ICE managers) was recorded in both video and audio forms. The collection of data from two sets of samples is useful because it facilitated triangulation, thereby enhancing the credibility of the research. Hence, I thought interviewing experts on human capital is reasonable to identify human capital drivers and associated risks. Similarly, the ICE management sample is also helpful in understanding human capital management practices and management of human capital risks with ICE. Furthermore, triangulation in the samples provided an opportunity to capture drivers of human capital as well as different dimensions of human capital management and associated risks. Interviews of both samples took place through the zoom platform, where the researcher enabled recording the video and audio so he could refer to them once needed. Each in-depth interview took between ninety to one hundred minute as so to break the ice and create trusted bonds with the participant. The researcher took note and observed non-verbal expressions such as gestures, facial expressions, and body language of a participant during all interviews to code them by using the thematic technique and linking the emerging themes with the research questions (Knapik, 2006; Gill et al., 2008). Furthermore, the steps of storing data (Creswell, 2007) had been taken in terms of backing up, tapes should be high-quality, anonymity should be protected by data masking, and a data collection matrix should be developed as a visual of locating and identifying information of study. All interviews were coded using a thematic technique to link emerging themes to the research question through the conceptual framework.



However, the COVID-19 pandemic forced the Saudi government, like other governments in the world, to impose complete to part lockdown and full curfew procedures to mitigate the risk of coronavirus outbreak. Hence, the researcher thought to conduct virtual personal interviews via one of the virtual meeting platforms such as Zoom. These virtual personal interviews were held by following the same steps that are stated in the section of methods of inquiry.

Regarding analysis, the data collected for the study were analysed using thematic analysis. Thematic analysis is suitable for the analysis of qualitative interviews as thematic analysis facilitates the identification, analysing and reporting of patterns (themes) by using Rapid Identification of Themes from Audio/videos recordings (RITA). The next chapter (chapter five) illustrated the data analysis and identified themes.

#### **4.6 Trustworthiness of the findings**

Although the concept of reliability and validity are primarily used in evaluating the quality of quantitative research, they could be applied differently in qualitative studies. According to Golafshani (2003), in qualitative studies, researchers use the concept of dependability which corresponds to the notation of reliability in qualitative research. Furthermore, consistency is another quality criterion of qualitative research that aims to verify through examination of research processes such as interview guidelines, data collections, and data coding. In the same vein, trustworthiness is the quality measure in qualitative research, which correspondences to the notation of reliability and validity in the quantitative paradigm. Data trustworthiness consists of four elements: credibility, confirmability, transferability, and dependability (Connelly, 2016). The researcher thinks this study demonstrates credibility through triangulation as the data is collected from two samples.

Additionally, triangulation in the samples provided an opportunity to capture drivers of human capital as well as different dimensions of human capital management and associated risks. Triangulation also has been viewed as a qualitative research strategy to test credibility through the convergence of information from different sources (Triangulation, 2014). Furthermore, triangulation of the data sources in the study achieved confirmability, which refers to the degree of verification of collected data (Anney, 2014). Hence, the researcher asked two respondents to

read the identified themes which constructed from the data collected through interviews and the thematic analysis method. Thereafter, the researcher compared themes identified by the researcher and views of two respondents to check the credibility of the analysis and make necessary adjustments to enhance the data analysis.

Regarding dependability, Anney (2014) stated that it refers to the degree of stability of findings over time. Besides developing the category system, the researcher also discussed the results in the context of the literature to compare and contrast the findings with previous research and findings. Therefore, it is safe to conclude that the high harmonious degree between the findings of this study and the literature shows an acceptable degree of dependability. However, as transferability element means that the findings can be generalised or transferred to another context, the researcher cannot claim of achieving them as this study was conducted based on a case study of a company in Saudi Arabia which not recommended generalising its results and findings on another case study without considering cultural, sectorial, and working environmental differences.

## **4.7 Conclusion**

Overall, the course of actions taken to address the objectives of this thesis are believed to be adequate in terms of the design of the study, selected samples, and methodology of collecting the data. The case study had been presented in detail, especially the role of shared service in managing human capital in the ICE group. As regards samples, qualitative semi-structured interviews with five human capital experts were conducted to identify human capital drivers and risks associated with human capital within the company/organisation. Additionally, in sample No.2, six managers have had In-depth individual interviews to evaluate human capital management practices and prioritise human capital risks. All participants in both samples were interviewed and signed the Participant Consent Form (PCF). The ICE participants had been given an introduction about the concept of human capital and its associated risks as most of this sample participants are not experts on human capital management and human resource management.

However, due to the COVID-19 pandemic researcher decided to conduct virtual personal interviews via one of the virtual meeting platforms such as Zoom. These virtual personal

interviews were held by following the same steps stated in the section of methods of inquiry. Regarding analysis, the data collected for the study were analysed using thematic analysis as thematic analysis facilitates the identification, analysing and reporting of patterns (themes) within the script data. The researcher asked some respondents to read the script and highlight the main themes which constructed from the data collected through interviews. Thereafter, the researcher compared themes identified by the researcher and themes identified by some respondents to check the credibility of the analysis and make necessary adjustments to enhance the categorisation system. Besides developing the category system, the researcher also discussed the results in the context of the literature to compare and contrast the findings with previous research and findings. Having discussed the step of taking action, the data analysis is discussed in the next chapter (Chapter 5).

## **CHAPTER FIVE**

### **DATA ANALYSIS**

#### **5.1 Introduction**

In this chapter, the researcher aimed to present the analysis of the collected data from qualitative data and semi-structured interview data. The first section is a recap of data collected from semi-structured interviews in two samples. The second section is about adopting Rapid Identification of Themes from Audio/videos recordings (RITA) in analysing themes and themes identification and construction. The third section highlighted the data analysis as the researcher illustrated the codes masters of the evaluation foci Importance of human capital in the national and organisational context. Fourthly, the themes of the human capital management framework and human capital drivers were discussed. In the fifth section, the analysis dimension focused on identifying the human capital management associated risks to conduct risk management actions. Other sections were dedicated to illustrating the findings on the separate evaluations dimensions of areas of development for human capital management in ICE, human capital risks within ICE and risks management, and proposed actions to enhance human capital management and mitigate associated risks.

#### **5.2 Data collected from semi-structured interviews in two samples**

As illustrated in chapter four, the action was taken to conduct semi-structured interviews from two sets of samples (i.e., human capital experts and ICE managers) and recorded in video and audio forms. The thesis aimed at achieving the following research objectives; namely, 1- study the evolution of 'Human Capital' and its context within an organisation/company, identifying human capital drivers and components, 2- Identify human capital drivers and components within an organisation/company, 3- Identify risks associated with human capital within an organisation/company and 4- propose and recommend actions to avoid or managed and mitigated human capital risks in order to enhance human capital management practices in ICE. Regarding the thesis key research questions, they are; namely, what is human capital within its micro-level (company and organisation)?, What are the drivers and components of human capital within a

company and organisation?, What are the potential risks that might be crystallised in the human capital of a company/organisation?, And How can these human capital risks be avoided or managed and mitigated when they take place?.

Hence, the researcher thought interviewing human capital experts is reasonable to identify human capital drivers and associated risks. Similarly, the ICE management sample helps understand human capital management practices and management of human capital risks with ICE. The data collection from two sets of samples helps facilitate triangulation, thereby enhancing the research's credibility. Furthermore, triangulation in the samples provided an opportunity to capture drivers of human capital as well as different dimensions of human capital management and associated risks.

In sample No. 1, the questions of the interview directed to answer in general the last three research objectives; namely, 1- Identify human capital drivers and components within an organisation/company, 2- Identify risks associated with human capital within an organisation/company and 3- propose and recommend actions to avoid or managed and mitigated human capital risks in order to enhance human capital management practices in organisation/company. As regards Sample No. 2, the questions of the interview directed to answer in specific the last three research objectives; namely, 1- Identify human capital drivers and components within an organisation/company, 2- Identify risks associated with human capital within an organisation/company and 3- propose and recommend actions to avoid or managed and mitigated human capital risks in order to enhance human capital management practices in ICE. In the context of sample No.2, the researcher introduced the concept of human capital and its associated risks at the beginning of each interview. This step was thought to be very important as most of this sample participants are not experts on human capital management and human resource management.

### **5.3 Rapid identification of themes from audio/videos recordings (RITA).**

The researcher used rapid identification of themes from audio/videos recordings (RITA) to analyse semi-structured interviews. According to Neal et al. (2015), RITA consists of five steps that enable the researcher to obtain rapid results from qualitative and semi-structured interview data. To do so, the researcher started with the step of identifying and specifying key research and evaluation focus. Hence, RITA allowed the researcher to identify six evaluation foci: the importance of human capital, human capital management, human capital risks, areas of development in HC's drivers within ICE, HC risks within ICE, and proposed actions to enhance human capital management and its associated risks. After identifying fundamental research and evaluation focus, the researcher determined themes to include in the code master using inductive approach. In the third step, the researcher created a coding form which is a grid of themes identified in step two and crossed with columns of times unit segments (See Appendix C) that enable the return to videos files for referencing and verification. In the fourth and fifth steps, the researcher tested codes masters and coded the six evaluation foci.

### **5.4 Thematic analysis and themes identification**

The researcher used thematic analysis to analyse data from an exploratory case study and drive data acquisition activities within and outside the case study. To do so, the researcher thought interviewing experts on human capital is reasonable to identify human capital drivers and associated risks. Similarly, the ICE management sample helps understand human capital management practices and management of human capital risks with ICE. The data collection from two sets of samples helps facilitate triangulation, thereby enhancing the research's credibility. The thematic analysis method was adopted to analyse the case study's collected data by identifying secondary and initial cycles categories, codes, pattern maps, and themes (Halaweh, Fidler, and McRobb, 2008).

Regarding themes identification, it is considered the heart of qualitative data analysis, which a researcher tries to identify before, during, and after data collection (Ryan and Bernard, 2000). Themes can be discovered by adopting different techniques such as word repetitions, which

indicate importance in respondents' minds (D'Andrade, 1995). Overall, other techniques are used in social research to discover themes in collected data. According to Ryan and Bernard (2000), techniques for discovering themes can be classified into four categories, namely word analysis (word repetitions, key-indigenous terms, and key-words-in contexts), reading blocks of texts (compare and contrast social science queries, and searching for missing information), linguistics analysis (metaphors, transitions, connectors), and physical manipulation of texts (unmarked texts, pawing, and cut and sort procedures). The researcher used all three techniques of word analysis together to identify themes.

Regarding word analysis, besides word repetitions, there are two other techniques: critical indigenous terms and key-word- in context. Indigenous terms technique looks for local terms that might sound unaccustomed or used in unacquainted ways, which is almost similar to the Vivo coding technique used in thematic analysis. Additionally, key-word- in context refers to identifying keywords and searching the data to find related words or phrases.

## **5.5 Data analysis**

The analysis showed six evaluation foci: the importance of human capital, human capital management, human capital risks, areas of development in HC's drivers within ICE, HC risks within ICE, and proposed actions to enhance human capital management and its associated risks. The researcher illustrated the codes masters of the six evaluation foci relevant to the research objectives in the following sections.

### **5.5.1 Importance of human capital in the national and organisational context.**

This analysis dimension concentrated on two themes: human capital interconnects between nations' and organisations' contexts to create growth and valuable asset and sustainable competitive advantage. All participants from various sectors and backgrounds supported both themes and confirmed a solid consensus about human capital importance from national and organisational perspectives. One participant in the sample of human capital experts stated “If we analyse any organisation’s success or achievement backward, we would find at minimum 75% of it is attributed to human factor”. Another participant stated “engaged employees are the most valuable assets in

any company”. Likewise, a participant in the sample of ICE’s management stated “passionate employees are the sustainable competitive advantage which is hard to copy by competitors”. Overall, all participants agreed about seeing employees as valuable assets and considering human capital management as a sustainable competitive advantage that needs to be pursued by top management in a company or an organisation.

Table 5.1 illustrates the master of the code, including key themes, codes pattern map, secondary and initial cycles categories. The initial cycle codes were people and human capital, which were elaborated into four categories in the secondary cycle, namely, national human capital, organisational human capital, competitive advantage, and assets. Regarding national human capital, it included description codes such as knowledge-based economy, the human mind, productivity, growth, modern and macro economy. The code knowledge-based economy referred to the new economy era and is a synonym of the code modern based on the human mind, which indicates the importance of human capital in the business world. At the same time, code productivity referred to people's role in increasing productivity on the national level through innovation and creativity in a particular economy. The code growth denoted the role of innovation and creativity of people on creating growth in the macro economy through increasing exports and decreasing imports of innovative products and services.

Organisational human capital consisted of description codes like productivity, growth, competitive advantage, micro-unit interconnection with macroeconomic level. The code productivity and growth referred to the contribution of having strong human capital management on performance in terms of productivity and growth. Regarding the code interconnected, it denoted the relationship between human capital on the macro (national economy) and micro (organisation/company) levels in creating growth and increasing productivity. As regards the competitive advantage category, it incorporated description codes such as performance, sustainability, achieving, financial impact, and strength. The codes performance, financial impact, and strength represented the role of human capital management as a company's competitive advantage that can create a positive financial impact, increase performance, and be considered as a strength in the internal environment. The code achieving described the contribution of human capital management on achieving the strategic



plans. As regards the category assets, the description codes defined human capital assets as intangible, valuable, and irreplaceable. Intangible denoted the nature of human capital as an asset, whereas valuable refers to the preciousness of talents that are usually hard to replace.

Table 5.1 Codes Master of Importance of human capital in the national and organisational context.

<b>Themes</b>			
Human capital interconnect between nations' and organisations' contexts to create growth		Valuable Asset and Sustainable competitive advantage	
<b>Description Codes Pattern Map</b>			
knowledge-based economy	Productivity	Performance	Intangible
Human mind	Growth	Sustainable	Valuable
Productivity	Competitive Advantage	Achieving	irreplaceable
Growth	Interconnected	Financial Impact	
Modern economy	Micro	Strength	
Macro		Management	
<b>Secondary Cycle Categories</b>			
National HC	Organisation HC	Competitive Advantage	Assets
<b>Initial Cycle Codes</b>			
	People		Human Capital

### 5.5.2 Human capital management framework and human capital drivers

This analysis dimension concentrated on identifying human capital drivers that could lead to solid performance in a company working in the Saudi Market. The participants from service sectors such as finance, consultancy, and education were almost agreed on the importance of human capital management and its drivers more than a participant from the manufacturing (petrochemical) sector. One of the key themes in this part was the human capital management framework, which raised three key questions: Are our employees willing to support our vision? Are our employees enabled to confront and struggle with problems? Are our employees enabled to do their jobs? Based on the above questions, one can create an HCM's framework that would fit his organisation, work environment, culture, market and sector. A participant in the sample of human experts stated “answering the above questions would enable me to determine things that would make employees not willing to work so I can remove them”

Regarding drivers, participants identified ten drivers of human capital that are applicable in the Saudi culture, namely human capital strategy, human capital system, employee lifecycle management, culture management, work physical environment, leadership practices by line managers, employees' engagement, empowerment practices, hygiene factors, and knowledge management. These drivers include other practices illustrated in the codes pattern map in the table below and discussed in detail in the next chapter. It is worth mentioning that the non-service sector participant listed fewer drivers that focused on work physical environment, safety requirement, and knowledge management. At the same time, participants from service sectors concentrated more on drivers relevant to their sectors, namely, human capital strategy, employee lifecycle management, culture management, leadership practices, human capital system, employees' engagement, and empowerment practices. The head of shared services in ICE group stated "HC drivers in subsidiaries working on services sector are more sophisticated such as organisational culture, leadership practices, and trust practices". Overall, the importance of some drivers might vary from one sector to another. Hence, it is safe to conclude that raising the above three questions would help develop a standalone human capital management framework that could fit well with a particular sector or industry's characteristics. In other words, the suggested HCM framework can help to identify human capital drivers within a specific industry, community, or culture.

Table 5.2 illustrates the master of the code, including key themes, codes pattern map, secondary and initial cycles categories. The initial cycle codes were human capital management and human capital drivers that were expanded into four categories in the secondary cycle, namely, human capital triangle, employees' experience, hygiene factor, and motivators. Regarding the human capital triangle, it included description codes such as a model or framework for assessing human capital management as it is cultural-based and context-based. The code model and framework referred to the human capital model that can be generated by asking three questions about employees' willingness, employees' enabling and management allowing. The human capital triangle raised three critical questions on employees' willingness, employees' enabling, and management allowing to identify the human capital drivers within an organisation or a company. Managing employees' experience category encompassed description codes that are employee lifecycle, attraction strategies, recruitment process, On-boarding program, career or employee

development, employees retention strategies, employees separation process, human capital strategies, human resources system, work physical environment, leadership practices by line managers, employees' trust, knowledge management process, creating positive employee value proposition EVP, organisational structure, developing skills matrix, creating job profiles, establish key performance indicators KPIs for each an employee within the efficient performance management system, psychometric data for all employees, and storing all above data in an employee profile that include psychometric, KPIs, records to be retrieved, analysed, and utilised into human capital decisions.

The code employee lifecycle described the six stages: attraction, recruitment, on-boarding, development, retention, and separation. A participant from human capital experts' sample stated "managing employees' lifecycle across all stages is very critical as they are connected to each other and can affect each other. For example, methods of managing separation stage with employees would affect the stage of recruitment and attracting talents". The attraction stage includes all HR activities for attracting talents and high performers. The recruitment stage aims to recruit talents and high performers for the right job and in the proper position. The code employee value proposition (EVP) described the values that an employee would appreciate and be attracted to join a particular company. In fact, EVP is the marketing tool that a recruiter can use to attract talents by communicating the potential values of working in a specific company, which is considered an effective tool for facilitating the job in the attraction recruiting stages. The on-boarding stage referred to all activities directed to introduce a new employee across all departments within a company to increase work inclusion and engagement. The development stage includes career development activities, training, coaching, succession plan, and other employee development activities. Code retention means the related activities aimed to maintain talents and top performers to continue working. At the same time, the separation stage described the activities related to managing retirement, farewell or leaving of an employee. The code human capital HC strategy means developing an overarching human capital strategy that aligns and cascade down the business and corporate strategy. Likewise, the HR system code raised the importance of a comprehensive human resource/capital system that enables HR analytics and human capital decisions. Such HR system should include Key Performance Indicators KPIs, psychometric data, employee profile ,employee appraisal ,personal development plan, and 360 assessments and

integrated with other related systems such as the performance management system. The physical environment code talks about the physical work environment that should reflect set values and working philosophy. The code leadership referred to implementing and adopting leaderful practices by line managers and supervisors. The code of trust describes the level of trust in an organisation/company and management by employees. In contrast, the code of knowledge management means practices, policies, and systems that are adopted and used to manage knowledge and learning.

Additionally, the code organisational structure referred to having a clear and compelling organisational design and other related structures such as job profiles, competencies manual, and job descriptions. The job profile is a general outline for each job in the organisational structure. A detailed job description can be developed based on the job profile to include purpose, scope, duties, responsibilities, and KPIs for each job within the structure. Finally, the skills matrix code is a framework used to map desired skills (for job, team, department or the entire company) and employees' levels based on the evaluation.

Regarding the hygiene factor category, it involved codes such as salaries, medical insurance, job security, work conditions, HR policies and work relationships. The hygiene factor refers to factor elements that can be caused to reduce the willingness to work and decrease job satisfaction, which will affect performance and productivity. The hygiene factor includes salary, compensation, security, medical insurance, fairness, respect, equal opportunity, and fair treatment are essential elements of human capital management. Hence, the other codes within this category include vital aspects of the hygiene factor. HR policies code referred to the possibility of being a cause for dissatisfaction along with other factors such as work conditions, the level of job security, and work relationships. Finally, the category of motivators covered codes like organisational culture management, Human capital strategy alignment with business strategy, career development, leadership practices, empowerment practices, employee engagement, organisational trust, and work-life balancing. The code culture means the dominated collection of ethics, values, norms, assumptions, and behaviours that guide and inform all employees' actions in a particular working environment. The code strategy described employees' satisfaction for having a clear strategy and direction for their work, which would motivate performance. The code career development referred to the activities and investment for developing employees and coaching them to progress

in their careers. The leadership code described employees' perception towards their line managers and supervisors, while; trust defined their perception about their managers and supervisors' integrity and authenticity. The code empowerment means spreading practices and issuing policies to support employees in doing their jobs and achieving a set vision and mission. The code engagement indicated the employees' passion for their jobs and willingness to work. Finally, the code of work-life balance refers to policies that a company can implement in order to enhance work-life balance, such as flextime. The Head of ICEWEB stated “flextime is the most important factor that developers and IT employee look for when they are recruited”.

Table 5.2 Codes master of human capital management framework and human capital drivers

<b>Themes</b>					
HCM framework	HC Strategy	HC System	Employee lifecycle management		WP Environment
Leadership practices		Engagement	Empowerment	Hygiene	Knowledge management
<b>Description Codes Pattern Map</b>					
Willingness	Employee lifecycle		HR policy		Culture
Enabling	Attraction		Work conditions		Strategy
Allowing	Recruitment		Salary		Career Develop.
Assessment	On-boarding,		Medical insurance		Leadership
Framework	Development		Job security		Empowerment
Context-based	Retention		Relationships		Engagement
Cultural-based	Separation		Trust		
Model	HC strategy		Work-life Balance		
	HR system				
	Physical environment				
	Leadership				
	Trust				
	Knowledge management				
	EVP				
	Organisational structure				
	Skills matrix				
	Job profile				
	KPIs				
	Psychometric data				
	Employee profile				
<b>Secondary Cycle Categories</b>					
HC triangle	Employees' experience		Hygiene factor		Motivators
<b>Initial Cycle Codes</b>					
HC Management			Human Capital Drivers		

### **5.5.3 Human capital management associated risks**

This dimension of analysis focused on identifying the human capital management associated risks in order to conduct risks management actions. The risks assessment concentrated within the Saudi labour market, which has different characteristics than other markets, cultures, and working environments. All participants from various sectors agreed to adopt human capital risks as a nudging strategy to develop human capital management and get support from top management. However, participants from service sectors such as finance, consultancy, and education were more sensitive about potential risks that might be crystallised than a participant from the manufacturing (petrochemical) sector. In the same context, the identified human capital risks look like the opposite position of human capital drivers. For example, although adopting leadership practices by line managers was considered a human capital driver, lacking leadership practices by line managers or within a company/ organisation was identified as a critical risk. In other words, some human capital drivers would be considered potential risks when they reach lower levels or are not found and practised in a working environment. Furthermore, in case of reflecting some human capital drivers such as engagement, leadership practices or performance management on a scale of one to ten, achieving a low level in their scales (below 4 or 3) would be considered a critical human capital risk.

Regarding drivers, participants identified thirteen human capital risks that are applicable in the Saudi culture, namely high Employee turnover, overtime hours more than 25% of daily working hours, low change resilience among the workforce, distrust, lack of on-boarding program, high sick absenteeism rate, lack of performance management system, lack of leadership practices, the perception of being underpaid, unethical practices, non-engaged employees, new regulations of the labour market or unproductive HR policies, and cultural diversity. A participant from human capital experts' stated "low performance in any human capital driver might lead to have a critical risk that needs to be monitored and manages such as low performance on managing employees' engagement might lead to the risk of non-engaged employees and low performance on trust management might lead to distrust". It is worth mentioning that the non-service sector participant listed a few risks such as distrust and lack of performance management system. In contrast, participants from service sectors concentrated more on risks relevant to their sectors, namely, low

change resilience among the workforce, lack of on-boarding program, high sick absenteeism rate, lack of performance management system, lack of leadership practices, the perception of being underpaid, unethical practices, non-engaged employees, new regulations of the labour market or unproductive HR policies, and cultural diversity.

As regards risks assessment, human capital management's risks register is cultural and context-based, requiring a standalone risk assessment to identify risks, prioritise them, and manage them. One of participants who have worked in different industries stated “priorities of HC’s risks might vary from sector to another. For example, lacking a succession plan would not be a risk in factories with low-skilled employees; nonetheless, same thing would be a critical risk in services sector such as consultancy, health care, finance and insurance sector”. Although some human capital management associated risks mentioned in the literature can be applicable across most countries, these risks' priority and importance ranking might vary from culture to culture, country to country, and market to market. Hence, an independent qualitative risks assessment sounds to be recommended to be conducted continually within a company/organisation to prepare for contingency plans when human capital management associated risks take place or exist.

Table 5.3 illustrates the master of the code, including key themes, codes pattern map, secondary and initial cycles categories. The initial cycle codes were human capital management associated risks and human capital risk management that were extended into four categories in the secondary cycle: indirect human capital risks, direct human capital risks, HC risks as a nudging Strategy to enhance human capital management, and risk assessment. As regards indirect human capital risks, it included description codes such as talents draining, employees' distrust, non-resilience workforce for change, lack of on-boarding activities, non-leadership practices by supervisors, non-engaged employees, ineffective HR policies, perception of being underpaid employee, cultural diversity, perception of injustice and inequality. The code talent draining means resigning talents and top performers from a company. The code employees' distrust referred to the feeling of distrust by employees toward their organisation and management. Non-resilience workforce for change code means the low readiness of change among employees. Lack of on-boarding activities code

described poor work activities, aiming to rotate employees around the organisation's departments to increase their knowledge, experience, engagement, and loyalty. Supervisors' code of non-leadership practices denoted the negative impact on employees due to non-leadership practices by their line managers. The non-engaged employees' code described the risk caused by such a segment on productivity and performance. The code ineffective HR policies referred to risks that might occur due to issuing new HR policies that might negatively impact employees' engagement, satisfaction, and legal ramifications. Head of one ICE's subsidiaries, DPRA, stated "ineffective HR policies would be a risk some time when it leads to draining a company's talents pool. For instance, cutting wages might force a talented employee to look for another job". The code's perception of being an underpaid employee described employees' underpaid feelings compared to the market. The code of cultural diversity means the conflict risk due to cultural differences among employees from different backgrounds. Finally, the perception of injustice and inequality code referred to employees' feelings of inequality and injustice toward management and organisation.

Regarding the direct human capital risks category, it encompassed description codes that are high employee turnover, overtime hours more than 25% of the official working hours, high sick absenteeism rate, labour market regulations, non-leadership practices, percentage of legal cases filed against employees, deception behaviours, among employees, fraud, corruption, thieves and other unethical practices adopted by employees. The code high employee turnover denoted the percentage of leaving or resigned employees, whereas; the overtime hours code referred to the risk of increasing cost and decreasing productivity due to increased overtime hours more than 25% of the official working hours. The high sick absenteeism rate code described the risk of reducing performance and productivity due to abusing sick absenteeism. The Labour market regulations code explained the risk might occur due to new labour regulations that might increase the costs. A head of shared services in ICE's group stated "since 2017 and due to pressures of high unemployment rate, regulations of work market and Saudisation's regulations become a critical risk. For example, in 2018 the fees of working permits for non-Saudi employees increased by 700% which caused tremendous burdens on companies". The code of percentage of legal cases filed against employees referred to the legal cases filed against employees, affecting productivity or hurting their company's image. Finally, employees' deceptive behaviours, fraud, corruption, and



thief's codes denoted the unethical practices that employees might adopt and increase the risk of hurting their company's image and negatively affecting performance. A participant from HC expert's sample stated "dominating unethical practices among employees of a company would impact negatively on the trust from clients and community".

Regarding the category of HC risks, it means utilising them as a nudging Strategy to enhance human capital management. This category involved codes such as catalyst, top management support, strategy, and improving human capital management by showing its associated risks. The code catalyst referred to risks that could attract top management's attention and provoke them to enhance human capital management. Top management support code denoted management's reaction to improve human capital management when they understand the negative impact of human capital risks. A participant from HC experts' sample stated "addressing low performance of some HC drivers as critical risks would grab the attentions of top management and provoke their interventions". The code strategy described the plan that might be developed by top management to mitigate, avoid, or eliminate HC's risks.

Finally, the risk assessment category covered codes like cultural and context-based, prioritising human capital risks and developing a standalone risk assessment and contingency plans. The code cultural-based denoted the variation on risks assessment from culture to culture, while; context-based referred to the variation on assessment due to the differences in the context of a company in terms of its sector, market, and other characteristics. The code standalone risk assessment referred to the need to raise the key questions to identify a company's risks based on its culture, context, sector, and circumstances. The code prioritises risks described as a second stage of the assessment process and then develop contingency plans for each identified HC risk.

Table 5.3 Codes Master of human capital management associated risks.

<b>Themes</b>			
HC risks as a nudging strategy	High Employee turnover	overtime hours < 25%	Non-resilience Workforce
Distrust	Labour market regulations	High sick absent. %	Lack of on-boarding program
Lack of performance management Sys.	Lack of leadership practices	Underpaid employees	Unethical practices
Non engaged employees	Cultural diversity risks		
<b>Description Codes Pattern Map</b>			
Talents draining	High employee turnover	Support	Cultural based
Distrust	overtime hours < 25%	management	Context-based
Non-resilience	High sick absenteeism %	Catalyst	Standalone risk assessment
Lack of onboarding	Labour market regulations	Improve HCM	Prioritise risks
Lack of PMS	Non-leadership Practices	Strategy	
Non-leadership Practices	Deception		
Non-engaged Employee	Unethical practices		
Ineffective HR policies	Fraud		
Underpaid employees	Corruption		
Cultural diversity	legal cases		
Perception of Injustice	Thieves		
<b>Secondary Cycle Categories</b>			
Indirect HC Risks	Direct HC Risks	Nudging Strategy	Risk assessment
<b>Initial Cycle Codes</b>			
	HCM associated risks		HC risks management

### 5.5.4 Areas of development for human capital management in ICE

This dimension of analysis concentrated on identifying the areas of human capital development that require improvement and enhancement. In other words, it aims to identify weaknesses in drivers of human capital management in order to propose actions and reforms within ICE. Findings showed that there are 15 areas of development to improve human capital management within ICE, and these areas of development relate to great extant drivers of human capital management. These areas of development are workforce planning, job descriptions JD including roles and

responsibility, performance management, knowledge management, leadership practice among managers, human capital retention, organisation design, talent attraction due to high salaries, compensation and salaries survey, empowerment practices, training and development, engagement assessment system, working physical environment, career path development, and organisational culture management.

The agreement levels among percipients can be classified into two categories: participants from shared services centre (Competitiveness Consultancy) and general managers of five subsidiaries, namely, ICEWEB, Meltblown Plant Industries MPI, Hospitality Gate, Dimensions Public Relationship Agency DPRA, and ICESLE. The shared services' participant focused more on Workforce planning, Job profiles and descriptions JD, Compensation and Salaries survey, organisational design, leadership practice, engagement assessment system and talents attraction. Whereas GM participants concentrate on development areas related to their core business such as knowledge Management, working physical environment, training, career development, and performance management system.

Table 5.4 illustrates the master of the code, including key themes, codes pattern map, secondary and initial cycles categories. The initial cycle codes were human capital drivers, which were explained into three categories in the secondary cycle: areas of development in human capital drivers, improving, and weaknesses. Regarding areas of development in human capital drivers, it included description codes such as performance management system, engagement assessment system, compensation and salaries survey, workforce planning, developing Job profiles and descriptions JD, and knowledge management's process and system. The code performance management system is the system that manages performance across the organisation by setting targeted KPIs for each employee and monitoring their achievements. A head of HG stated "Having an efficient performance management system would be one of the key are of development in order to maximise the return out of our employees". The code engagement assessment system denoted a system to assess organisation engagement by sending a continuous survey to the employees and reporting their feedback. The code compensation and salaries survey described conducting compensation and salaries survey within a specific market and sector to reach a fair payroll and

align with the market prices. The code workforce planning referred to analysing, forecasting, and planning workforce supply and demand to gap assessment and decide talent management strategies to ensure that an organisation has the right talents, with adequate skills in the right job at the right time. The code job profile is a general outline for each job in the organisational structure which is a detailed job description that can be developed based on it to include purpose, scope, duties, responsibilities, and KPIs for each job within the structure. The head of MPI stated “I think we need to improve HR structure within MPI in order to have a clear organisational structure, JDs, and KPIs”. The code knowledge management's process and system mean practices, policies, and systems adopted and used to manage knowledge and learning.

As regards the category improving, it consisted of description codes like leadership practice, diffusing of empowerment practices, career path development, developing human capital retention strategies, and building a detailed organisational structure for each subsidiary within ICE. The final category was weaknesses which consisted of description codes such as talents attraction strategies, working physical environment, career development, and training. The head of MPI stated “we need to enhance working physical environment which is perceived by our employees as a weakness in comparison with nearby factories”.

Table 5.4 Codes Master of areas of human capital development in ICE.

<b>Themes</b>		
<b>Areas of HC development in ICE</b>		
<b>Description Codes Pattern Map</b>		
Performance Management System	Leadership practice	Talents Attraction
Engagement Assessment System	Empowerment practices	Working physical
Compensation and Salaries survey	Career Path development	Career Development
Workforce planning	Human capital retention,	Training
Job profiles and descriptions JD	Organisational design	
Knowledge Management		
<b>Secondary Cycle Categories</b>		
Areas of development	Improving	Weaknesses
<b>Initial Cycle Codes</b>		
HC's drivers		

### **5.5.5 Human Capital Risks within ICE and risks management**

This dimension of analysis concentrated on identifying risks of human capital that require risk management. Findings showed that 14 potential risks need to be managed within ICE. Poor workforce planning is a possible risk in not having a succession plan and the expected difficulties of replacing a leaving employee. Additionally, labour market regulations risk is another crucial risk regarding gender diversity and imposing 30% of the workforce to be female besides increasing non-Saudi employees' cost. Moreover, poor HR policies' negative ramifications are another critical risk that needs to be mitigated by studying any new HR policy's expected financial, emotional, social, security, and legal impact. Disengaged employees are existing risks affecting performance and productivity due to poor on-boarding strategy and weakness in the engagement drivers. The head of HG stated “having a disengaged employee like having a machine that does not connected to electricity. So, risk of having a disengaged employee is a critical risk that we need to monitor and manage closely”. Other potential and existing risks are the safety of employees, poor deployment caused by mismatching between jobs and employees, poor information management, lack of knowledge transfer, a war for talents in the area of project managers, insufficient innovation, fraud and corruption, poor productivity, low compliance and adherence to ICE's values, code of conduct, working norms and behaviours, and working philosophy; and lack of self-trust and trustful leadership. In the same context, there are other risks related to the risk management itself, namely, lack of human capital qualitative risk assessment system and HC risks registry.

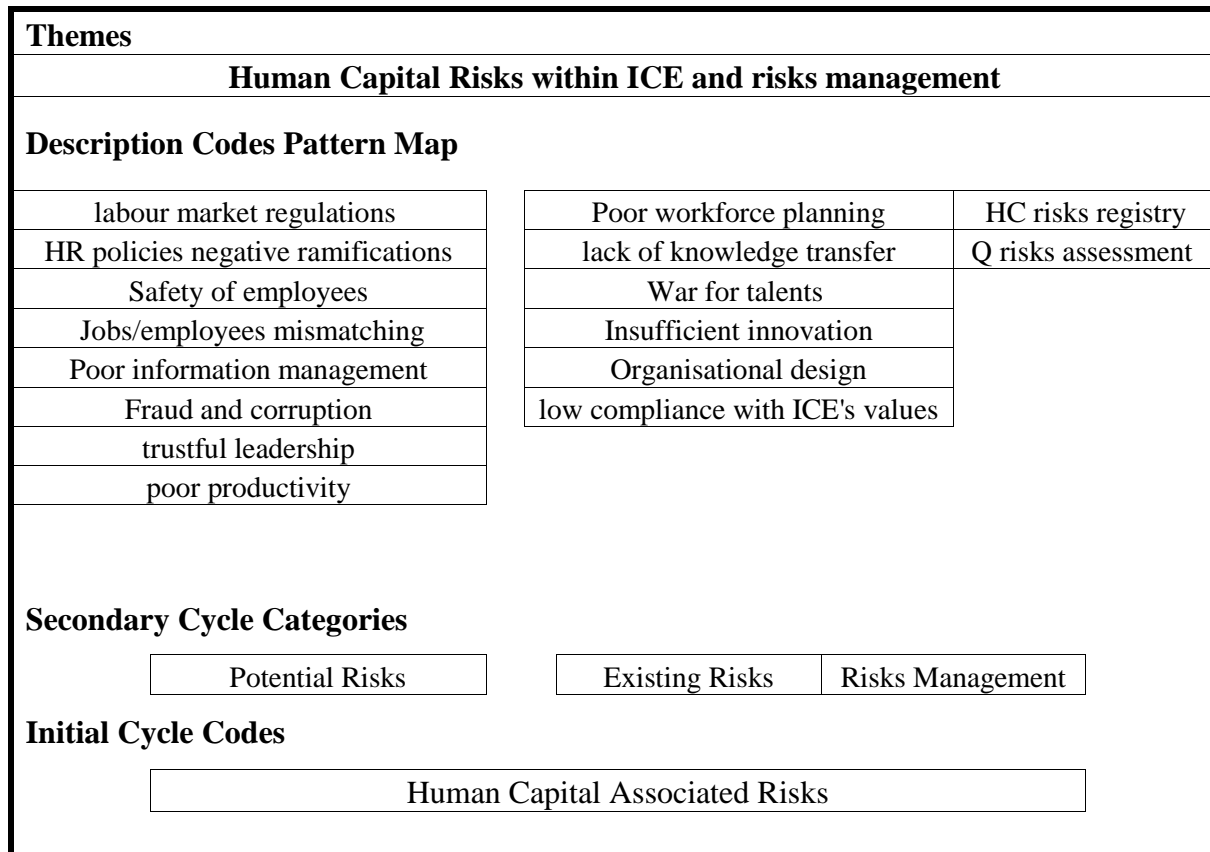
The agreement levels among percipients can be classified into two categories, namely potential risks and existing risks. Potential risks were highlighted more by participants of the shared services centre (Competitiveness Consultancy) and general managers of ICEWEB and Dimensions Public Relationship Agency DPRA, working in the services sector. In contrast, existing risks were addressed by general managers of ICESLE, Hospitality Gate and Meltblown Plant Industries MPI, which can be categorised as manufacturing and trading sectors.

Table 5.5 illustrates the master of the code, including key themes, codes pattern map, secondary and initial cycles categories. The initial cycle code was human capital management associated risks that were expanded into three categories in the secondary cycle: potential risks, existing risks, and risks management. Regarding potential risks, it included description codes such as labour market regulations, HR policies negative ramifications, employees' safety, Jobs/employees mismatching between the job and employees' skills, poor information management, trustful leadership, fraud, corruption, and poor productivity. The labour market regulations code described the risk that might occur due to new labour regulations that might increase the costs. The code of HR policies' negative ramifications refers to risks that might occur due to issuing new HR policies that might negatively impact employees' engagement, satisfaction, and legal ramifications. The code employees' safety means providing a safe working environment, including safety equipment, policies, and procedures to ensure employees' health and safety. Head of MPI stated “we have a potential risk regarding the health and safety of our employees as they are working in a factory. I think we need to mitigate such potential risk by providing safety equipment”. The code of Jobs/employees mismatching refers to the wrong allocation of an employee in a job that does not correspond with their education, skills, abilities and interests. The code of poor information management denoted the inadequate infrastructure for collecting, managing, preserving, storing and delivering information to the right people at the right time. The trustful leadership code refers to the managers and supervisors who their employees can trust. Fraud and corruption codes described risks that might take place due to adopting unethical behaviours. The code of poor productivity means that these potential risks would produce and their role to decrease productivity and affect performance.

Regarding the existing risks category, it encompassed description codes: poor workforce planning, lack of knowledge transfer, the war for talents, insufficient innovation activities among employees, organisational design, and low compliance with ICE's values, norms, ethics, and working philosophy. The code poor workforce planning denoted a possible risk in not having a succession plan and the expected difficulties of replacing a leaving employee. The lack of knowledge transfer code means the risk of not having a robust knowledge management system to share knowledge and learning in an organisation/company. The code of the war for talents described the risk of

increasing competition on recruiting and retaining talented employees. The insufficient innovation code refers to the poor innovation activities in an organisation and among its employees. The code of organisational design described the risk of not having an effective organisational structure to achieve the strategic vision and mission. The code of low compliance with ICE's values, norms, ethics, and working philosophy means low representation and embodied ICE's values, ethics, and working philosophy. The category of risks management involved codes such as developing human capital risks registry and conducting continuance qualitative risks assessment to identify potential human capital risks and their contingency plans. The head of shared services in ICE’s group stated “Not having HC risks registry within ICE group is a risk by itself which we need to address it in the near future”.

Table 5.5 Codes Master of human capital management associated risks within ICE.



### **5.5.6 Proposed actions to enhance human capital management and mitigate associated risks.**

This analysis dimension concentrated on the theme of proposed actions to enhance human capital management and mitigate associated risks. The findings identified ten actions to be taken to improve human capital management and manage potential associated risks within ICE. These ten actions are adopting psychometric assessment, developing an organisational structure, developing a performance management system, developing a performance management system, developing knowledge management, designing training and development plan, conducting periodical compensation surveys, adopting the Peakon engagement system, enhancing the working environment, manage organisational culture, develop a risk register for HC risks, and develop HR policy-making process.

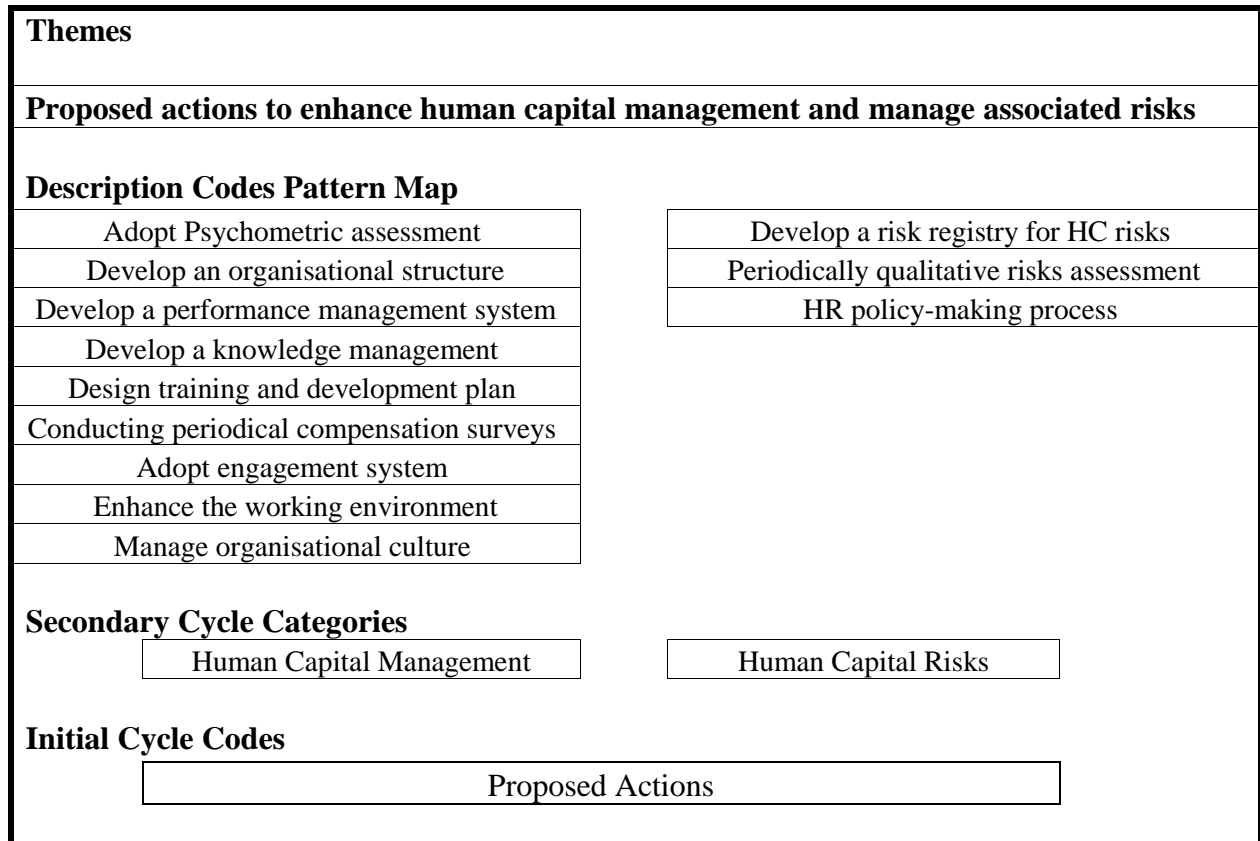
Table 5.6 illustrates the master of the code, including key themes, codes pattern map, secondary and initial cycles categories. The initial cycle code was proposed actions which was explained into two categories in the secondary cycle, namely human capital management and human capital risks. Regarding human capital management, it included description codes such as adopting psychometric assessment, developing an organisational structure for each subsidiary, adopting a performance management system, developing a knowledge management system, design training and development plan, conducting periodical compensation surveys, adopting engagement system, enhance the working environment and managing organisational culture. The psychometric assessment code means a tool to evaluate people and identify their aptitudes, personality traits, skills, and abilities. The head of shared services in ICE group stated “the data we would generate from psychometric assessment can be considered as the DNA of our HC. We can know strengths, weaknesses, learning styles, and interests of all our employees”. The organisational structure code described the need to develop an organisational structure for each subsidiary aligned with the set strategy. The code performance management system refers to the system that manages performance across the organisation by setting targeted KPIs for each employee and monitoring



their achievements. The knowledge management system code means practices, policies, and systems adopted and used to manage knowledge and learning. The head of ICEWEB stated “one of the actions that we need to take in order to enhance HCM and mitigating its risks, is to have knowledge management system which would enable IT developers to hand over from each other and encourage knowledge sharing practices”. The code training and development plan denoted developing a training plan for each employee and their career development. The head of ICESLE stated “There is a need to develop a training plan for each employee in the company. Acceleration in the field of scientific and laboratories suction requires continues learning and training programs”. The code of conducting periodical compensation surveys refers to conducting compensation and salaries surveys within a specific market and sector to reach the fair payroll and align with the market prices. The code of engagement system described how to assess engagement within an organisation by sending a continuous survey to the employees and reporting their feedback. The code of working environment and managing organisational culture means assessing and enhancing organisational culture and improving the working environment.

As regards the category of human capital risks, it consisted of description codes like developing a risk register for human capital risks, conducting periodically qualitative risks assessments, and creating an HR policy-making process. The head of shared services on ICE group stated “in order to develop registry for HC risks, we need first to do qualitative risks assessment for each subsidiary. The results of these assessments can be the input of HC risk registry”. The code of developing a risk register for HC risks means to create a risk registry based on the qualitative risk assessment for human capital within ICE. The HR policy-making process code refers to developing a guideline for HR policy, including studying the potential impact from emotional, financial, and social perspectives.

Table 5.6 Codes Master of proposed actions to enhance human capital management and manage associated risks.



### 5.6 Conclusion

In conclusion, the collected data analysis showed key themes covering the importance of human capital management, human capital management drivers, human capital risks, and recommendations to enhance human capital management and mitigate associated risks within ICE. The thematic analysis method was adopted to analyse the case study's collected data by identifying secondary and initial cycles categories, codes pattern map, and themes. In combination with the thematic analysis method, the researcher used rapid identification of themes from audio/videos recordings (RITA) to analyse semi-structured interviews. Hence, RITA allowed the researcher to identify six evaluation foci: the importance of human capital, human capital management, human capital risks, areas of development in HC's drivers within ICE, HC risks within ICE, and proposed actions to enhance human capital management and its associated risks. The next chapter (chapter 6) discusses the key data analysis findings.

## **CHAPTER SIX**

### **DISCUSSION OF FINDINGS**

#### **6.1 Introduction**

In this chapter, the researcher aimed to present the qualitative study findings and compare them with the literature chapter results. By doing so, key themes were identified and discussed in relationship with the literature review results. The first section is about the findings regarding human capital within an organisational context and its importance as a sustainable competitive advantage. The second section highlighted human capital management drivers and a suggested framework for identifying them. Each found driver was presented and discussed compared to the literature review results in chapter two. Thirdly, the results of human capital risks were illustrated and discussed in comparison with the literature review results in chapter two. Furthermore, in the last section, the researcher attempted to diagnose the current human capital management situation of ICE, along with associated risks and propose recommendations to enhance human capital management and mitigate its risks. The themes and discussion were organised to address the last three research objectives: identifying human capital drivers, identifying risks associated with human capital, and proposing actions to avoid or manage and mitigate human capital risks.

#### **6.2 Key themes and discussion**

##### **6.2.1 Human capital concept and interconnect its nations' and organisations' contexts.**

The concept of human capital has been adopted into levels, macro-economy and organisation's spheres. Human capital is vital, and managing it efficiently can create growth on macro and micro

levels. National planning and investment in human capital development are necessary to ensure national growth and development. Pedro, Leitao and Alves (2018) stated that there are many HC components or drivers within the organisational and national dimensions that can help enhance human capital on the macro-economy or organisation level. However, it has been found that the relationship between managing human capital on macro-economy and organisation level have become more interrelated and interconnected due to the nature of the modern economy, which are described as a knowledge-based economy. Within the knowledge-based economy, the production focuses on the human mind and how knowledge is used to build an efficient and productive economy. Hence, such findings come in harmony with the literature. It highlights the importance of asserting that the human mind is the most significant asset in the knowledge-based economy era (Martin 2014).

### **6.2.2 Human capital management can create a sustainable competitive advantage and significantly impact organisational performance.**

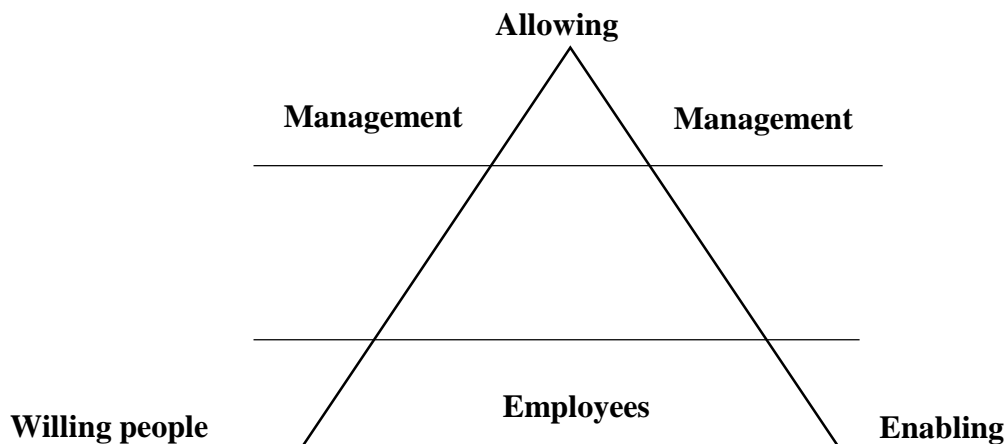
It has been found that there is a solid consensus among participants that HC is a sophisticated competitive advantage and irreplaceable intangible asset that has a strong positive relationship with financial performance and strategic achievements. Furthermore, human capital is considered the most crucial factor for achieving success in the organisation or company. The common finding goes in harmony with the literature review that considers HC a competitive advantage based on the VRIO framework, an acronym based on a four-question framework (consisting of value, rarity, imitability and organisation). Moreover, HC is a positive value-added asset to an organisation to gain and sustain a competitive advantage over its competitors (Azzahra, 2018; Torres, Ferraz and Santos-Rodrigues, 2018; Lin et al., 2017; Mouritsen and Roslender, 2009; European Commission, 2006; Mouritsen, 2006; Chatzkel, 2004; Teece, 1998). This is because HC may influence a firm's competitive advantage positively or negatively. For instance, Azzahra (2018) study revealed that a firm's instability and poor performance might result from its human resources weakness. Likewise, Torres et al. (2018) argued that HC impacts the organisation's performance – both financial and customer's dimensions.

### 6.2.3 Human Capital drivers

#### 6.2.3.1 Allow and enable willing individuals is the cornerstone of the HCM framework.

Managing human capital is based on raising three key questions: Are our employees willing to support our vision? Are our employees enabled to confront and struggle with problems? Are our employees enabled enough to do their jobs? Based on the above questions, one can create an HCM's framework that would fit his organisation, work environment, culture, market and sector. Answers to the above questions would be a qualitative assessment of human capital management on an organisation/company, and gap analysis can be done to enhance human capital drivers and components. The figure below illustrates the key questions for developing HCM's framework or model.

Figure 6-1: Triangle of Human Capital Management



Source: Developed by the author.

The figure above reflects three key questions about human capital management within a particular working environment. Regarding willing people, it provokes thinking about factors that might hinder your employees from supporting your strategic vision, change agenda, or mission of a company/ organisation. Such factors are engagement, trust, the buy-in of change agenda, belief, and other factors that might affect employees' willingness to work patiently. It requires providing them with all tools and resources to enable them to do their jobs. For example, compensation, training, medical insurance, safety tools, career management, learning and other factors are

required for their jobs. At the top of the triangle, management should work to allow willingness and enabling among employees. Examples of allowed activities include empowerment, recognition, rewards, leadership practices, and other resources and practices that can stimulate willingness and enable.

Overall, managing human capital sounds cultural-based so it might include different drivers or components in various organisations depending on their working environment. The importance of some drivers might vary from one culture to another. Consequently, adopting a particular framework for human capital drivers might not be effective in different cultures or contexts. Hence, it is recommended to raise these three questions and define human capital drivers within the community and culture of that organisation/company in order to assess the credibility of the framework to a particular culture or society.

### **6.2.3.2 Drivers of Human Capital Management.**

#### **6.2.3.2.1 Human Capital strategy and systems**

Developing a human capital strategy was found to be a key element in human capital management. HCS should be focused on people's management's strategy and works as a connection between the organisation's strategy and HR function. On the other side, HCS should be cascaded down and aligned with the organisational strategy. Furthermore, the human capital strategy should be communicated to all employees in order to enhance engagement. Moreover, HCS includes developing employee value proposition EVP, which should be designed and communicated effectively. It is to be noted that the findings on EVP, which provides for potential career values, justice values, engagement values, feel-good values, comfort values, and esteem Values, go in harmony with literature (Goswami, 2015; Pavar and Charak, 2015; Sengupta, Bamel, and Singh, 2015; Rounak and Misra, 2020).

Organisation and job designing was found to be another element of human capital management, and I included it under the strategy category. This element or drive includes developing organisational structure, developing skills matrix, and creating job profiles, job descriptions, roles, responsibilities and KPIs for each job on the

organisation. Moreover, this element should be integrated with the performance management system that could provide meaningful feedback for an employee and highlight the area of development besides achieving KPIs. Also, the performance management system is fundamental to be linked with a scheme of reward and recognition in order to increase productivity. The above findings on organisation design, job designing, and performance management systems agree with the literature results (Fernando et al., 2020; Karami and Gustomo, 2020).

In the same category, I include the drive of having a sophisticated HC/HR system that allows extracting relevant HR data and conducting HR analytics that provides evidence for HR policy. It is worth mentioning that the HC/HR system should comprise other data like employ profile, including psychometric data. Psychometric data can be used in various applications to manage human capital more efficiently, such as workforce deployment, team building, and succession planning.

#### **6.2.3.2.2 Employee lifecycle management**

According to Cattermole (2019), there are six stages in the employee lifecycle: attraction, recruitment, on-boarding, development, retention, and separation. Each stage requires a number of actions in order to enhance human capital management. It includes managing all stages in the employee lifecycle and developing policies and procedures to strengthen human capital management compared with other companies and organisations. For example, HR can create a policy to increase knowledge sharing and management from those who retire and benefit from accumulating long experience in the separation stage. In the same context, literature assures the importance of managing an employee's life cycle to create successful human capital management (Asha, 2014; Cattermole, 2019; Sato et al., 2020).

Regarding attraction, it was found that a talent pipeline is a crucial action that needs to be taken to meet the business trend's challenges. In other words, HCM should predict potential changes in the business environment and work to attract talents who can help

achieve a company/organisation's strategic vision. This finding goes in harmony with the literature, emphasising the importance of attraction practice (Cikova and Micah, 2018; Lin et al., 2017; Kucharpikova, Tokarþikova and Blaskova, 2015). Regarding the recruitment stage, an efficient recruiting process and recruiting based on cultural fit are considered essential practices at this stage. Hence, it is recommended to articulate the organisation's culture, including its values, goals, ethics, code, work philosophy and practices and then include this understanding into the hiring process. The finding on cultural fit goes in harmony with literature such as Catanzaro, Moore, and Marshall (2010) and Gardner et al. (2012). The on-boarding stage includes several practices that would enhance human capital management, such as on-boarding strategy, inclusive workplace, and creating positive employee experience, supporting similar conclusions in the literature (Graybill et al., 2013; Zajac, 2017; Itam, 2020).

In the development stage, it was found that certain practices would enhance human capital management, such as utilising psychometric data, training and development, coaching, and mentoring. Psychometric assessment can be used in various applications to manage human capital more efficiently, such as workforce deployment, teams building, and succession planning. As regards the retention stage, talent management practices were found to be the most critical element that should be included in human capital management, which goes in harmony with the literature (Sparrow and Makram, 2015; Thunnissen, 2016; Krishnan and Scullion, 2017). Finally, in the stage of separation, some practice would enhance human capital management, such as feedback from exit interviews, farewell parties and managing the consequences of separation in terms of replacement and managing emotion.

#### **6.2.3.2.3 Organisational culture management**

Organisational culture is considered to be the social control system that dramatically impacts performance and human capital management. It decides the way and the manner of doing and practising work in a particular environment. There was a consensus among all participants about its importance as a crucial driver of human capital management.



Furthermore, organisational culture usually guides the decision-making process across all organisation levels and greatly influences many parts of the organisation's functions. Hence, assessing organisational culture is a significant action that needs to be taken in order to do the gap analysis between the current situation and the targeted shape. According to Suderman (2012), The Organizational Cultural Assessment Instrument (OCAI) is a tool to provide a valuable baseline measurement of corporate culture. Furthermore, the output of this tool can help to view the gap between current and future cultures. Assessing organisational culture includes assessing organisational core values, shared assumptions, common approaches to work, and norms and practices. Changing culture or cultivating new core values, shared assumptions, common approaches to work, norms, and practices require effective communication and long practising adopted by top management and cascaded down across all organisation levels.

Moreover, culture can be enabled and adopted by following a leading by-example approach by management and reflecting the targeted values, shared assumptions, common approaches to work, norms, and practices in the performance management system to increase adaptation. In other words, culture management requires to have value and culture compliance starting from management down to lower levels as leading by example is the most influenced approach to cultivate values, ethics, and working culture as leaders set the tune of culture. All above findings of organisational culture and its relationship with human capital management are aligned with the literature (Ostroff, Kinicki, and Muhammad, 2012; Martinez et al., 2015; Warrick, 2017; Elsbach and Stigliani, 2018; Zeyada, 2018; Di Stefano, Scrima and Parry, 2019).

#### **6.2.3.2.4 Work physical environment**

Work physical environment was found to be a factor that influences managing human capital. The design of the workplace and its physical environment has a significant impact on employee confidence and trust. Additionally, reflecting the organisation's values and working philosophy on its workplace's interior design encourages adopting them by its employees. Moreover, a workplace's interior design inspired by an

organisation's values, code of conduct, and working philosophy can be considered a nudge to adopt them and bring about the necessary change. According to Thaler and Sunstein (2008), nudges are any part of the choice architecture that could predictably adjust people's behaviour without forbidding any options or significantly changing their economic incentives. The above findings go in harmony with the literature, which proves the positive relationship between interior design of workplace or works physical environment with job satisfaction, performance, and motivation (Djukic et al., 2010; Chandrasekar, 2011; El-Zeiny, 2012; Raziq and Maulabakhsh, 2015).

#### **6.2.3.2.5 Leadership practices**

Leaderful practices significantly impact human capital management as it creates the required momentum and influence to maximise human capital return. For example, required values, code of conduct, working philosophy and other dimensions of required organisational culture would be cascaded down across all levels and cultivated by practising them from top management and adopting a leading by example approach. Besides planning and creating the team's direction, line managers practising leadership would increase the organisation's engagement level and motivate employees to perform better. Hence, leadership plays a significant role in creating and sustaining commitment among team members to achieve goals and enhance performance. It was found that servant and transformational leadership are the favourite styles that can be adopted as critical drivers in human capital management. It is worth mentioning that servant and transformational leadership includes leaderful practices such as situational management, meaning maker, learner, change agent, dialogue, mutual influence and stewardship, as stated by Raelin (2003) and his leaderful practices four C's model. In general, the above findings agree with the results on literature about the importance and positive contribution of transformative, servant, and leaderful practices on human capital management (Birasnav, Rangnekar, and Dalpati, 2011; Raelin, 2014; Hurduzeu, 2015; Lantu, 2015; Di Fabio, and Peiró, 2018; Khan, Sentosa, and Salman, 2018).

#### **6.2.3.2.6 Hygiene factor**

The term hygiene factor among the participants refers to Herzberg's Two-Factor Theory by Herzberg (2003). According to Herzberg, the two factors affect job satisfaction; where Hygiene factor includes company policy and administration, relationship with supervisor, work conditions, salary, medical insurance, security, and work relationships. Likewise, it was found that the hygiene factor includes salary, compensation, security, medical insurance, fairness, respect, equal opportunity, and fair treatment are essential elements of human capital management. In other words, the hygiene factor elements can be causes to reduce the willingness to work and decrease job satisfaction, which will affect performance and productivity. The findings on this theme go in harmony with the literature regarding the relationship between hygiene factor elements and performance (Bin, AS, (2015); Platis, Reklitis, and Zimeras, 2015; Yuen et al., 2018; Eliyana and Ma'arif, 2019).

#### **6.2.3.2.7 Empowerment**

Empowerment on the individual and structural perspectives was the critical element in human capital management. In other words, HCM should be engaged to enable empowerment practices through two approaches, policies, procedures and organisational culture. Regarding organisational culture, empowerment can be cultivated by training managers and supervisors on its benefits, rationale, and how they can practice empowerment among their teams. As regards structural empowerment, it can be enabled through HR policies and procedures that encourage empowerment and recognise its practices. In conclusion, the above findings agree with the literature (Wallace et al., 2011; Meyerson and Dewettinck, 2012; García-Juan, Escrig-Tena, and Roca-Puig; 2019; Al-Omari, Alomari, and Aljawarneh, 2020) and the positive impact of empowerment on human capital management which make it a key drive.

#### **6.2.3.2.8 Engagement**

The engagement was found to be the most crucial driver in human capital management as it has a strong positive relationship with excellent performance and high productivity. Metaphorically speaking, engagement for human capital likes fuel or electricity for a production line. It is worth mentioning that engagement as a human capital driver relates to other drivers, such as managing employee lifecycle and employee experience. This driver requires continuous feedback to evaluate HR services to guarantee their effectiveness and efficiency and enhance employee experience. Additionally, it was found that engagement assessment might help manage the balance between a company and employee interests. One of the vital dimensions of engagement is to make an alignment between the head(knowledge), the heart (attitude), and the hand (skill). In other words, an employee should be convinced and buy-in to a company/organisation's vision to develop the necessary attitude to perform his skills to do the required job. Finally, engagement assessment should continue to make a working culture. It requires developing an assessment platform that assesses engagement across all levels and generates actions to enhance engagement and cultivate it as a culture. This driver's findings accumulate to the literature's solid consensus (Simpson, 2009; Febriansyah, 2010; Purcell, 2014; Johnston, 2018; Sun and Bunchapattanasakda, 2019) the importance of engagement to the human capital management.

#### **6.2.3.2.9 Trust**

Although trust is a contemporary topic, the findings highlighted the importance of trust in organisational climate and culture. In fact, trust sounds to be the glue that connects most organisational and human capital activities besides delivering economic value. It seems to be the hidden power behind the competitive advantage of having substantial human capital in organisations. This finding goes in harmony with the dogmatic statement by Covey (2006), who said: "trust is the only thing that can change everything". Therefore, assessing and managing trust in organisations and companies sounds like an insisting need to build a sustainable competitive advantage out of human

capital. However, besides the four corners of self-trust discussed in chapter 2 (credibility; good intention, competencies, and record of achievement), it was found that trust has another dimension: to be true to oneself self-authenticity. Furthermore, trust sounds to be the most valuable commodity that any leader can get, and any follower can give. In conclusion, it is safe to conclude that findings align with literature (Alfes et al., 2013; Ciulla, 2017; Jena, Pradhan, and Panigrahy, 2018; Khan et al., 2019; Meng and Berger, 2019; Fischer, Hyder, and Walker, 2020) about the criticality of trust to leadership, job satisfaction and engagement which lead at the end to be elements of human capital management.

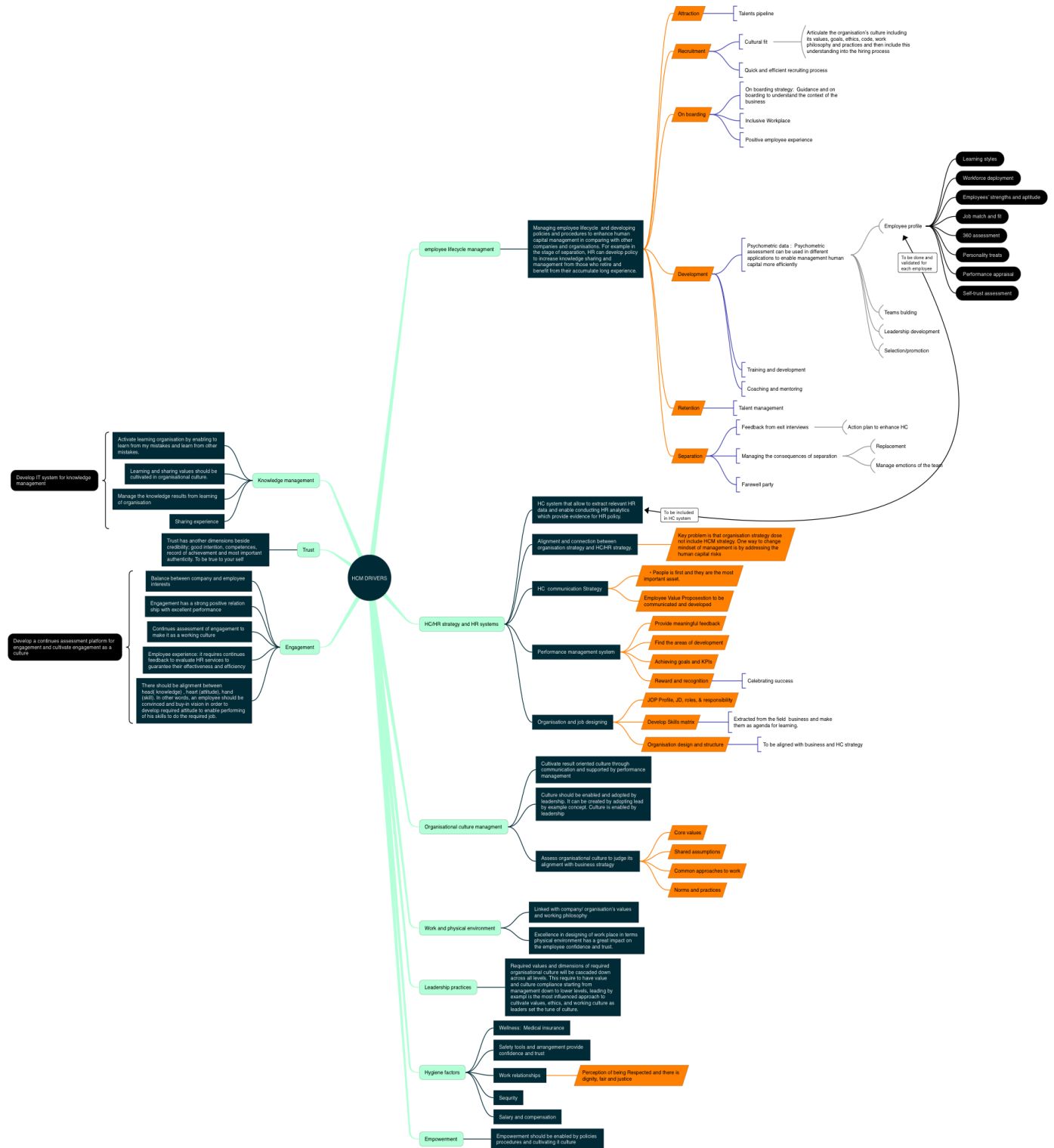
#### **6.2.3.2.10 Knowledge management**

Knowledge Management KM was found to be an essential driver of human capital management as it aims to create, acquire, and communicate knowledge. Furthermore, KM aims to activate organisational learning by learning from its mistakes and learning from other mistakes. Besides the above, learning and sharing values should be cultivated in organisational culture to manage the knowledge from learning of organisation and sharing experiences. Hence, it is recommended to develop an integrated IT system to manage knowledge, including sharing, spreading, storing and retrieving across all organisation levels. In conclusion, the findings go in harmony with the literature (Shariatmadari and Forouzandeh, 2015; Pasban and Nojehdeh, 2016; Cahyaningsih et al., 2017; Abualoush et al. 2018; Iqbal et al., 2019; Alnoor, 2020) in terms of having a positive and significant relationship between knowledge management (KM, human capital and transformational leadership.

Overall, it is safe to conclude that the findings go in harmony with the literature regarding the importance of the above human capital drivers and their positive relationship with performance. Nonetheless, the drivers extracted from literature in chapter two do not match the findings in terms of categorising and grouping—for example, managing the six stages of the employee life cycle was not mentioned exactly in chapter two. However, these stages were categorised under diverse groups like human capital development and career management drivers. The figure below

illustrates the findings regarding the key drivers of human capital management, which include their practices.

Figure 6-2: Human Capital Drivers



## **6.2.4 Human Capital Risks**

### **6.2.4.1 Human capital risks as a nudging strategy to guarantee sustainable support from top management to enhance human capital management.**

According to Thaler and Sunstein (2008), nudges are any part of the choice architecture that could predictably adjust people's behaviour without forbidding any options or significantly changing their economic incentives. Likewise, nudges can be designed to embrace a particular direction with an organisation/company and bring about change. Grunewald, Hammerman, and Placke (2017) concluded that nudging is also applicable to HR and organisational activities as a sustainable, conscious attitude occur if the person decides on it by themselves. Therefore, developing human capital management effectively by managing its risk is considered more effective than following a strategic approach. It will give strong buy-in by the top management of human capital importance and criticality. Data among both samples show that proposing human capital management development by addressing human capital risks would gain top management attention and guarantee continued support. Nonetheless, Hummel and Maedche (2019) concluded that nudging might be less effective than proclaimed, and it depends on the category (such as change, reminder, simplifications, and precommitment) and the context (such as health, policy-making, energy, and environment) of the nudge.

### **6.2.4.2 Human capital risks**

#### **6.2.4.2.1 High Employee turnover**

High employee turnover was a critical risk, especially in the case of talents resigning or employees that an organisation/company had invested in them and dived to leave their jobs. The acceptable turnover rate in Saudi Arabia is between 10 to 20% across all sectors and industries. In other words, a high-potential employee (HIPO) and talent draining is a critical risk that an organisation should reduce the turnover rate to 0%.

Additionally, if the turnover rate exceeds 20%, there is no established practice to include it within the risk registry and propose action to eliminate, avoid, or mitigate such risk. The findings agree with the literature (Benzoni and Chyruk, 2015; and Govender and Jasson, 2018) in terms of risk identification.

#### **6.2.4.2.2 Working overtime hours above 25% of daily working hours**

Above 25% of overtime work hours was found to be a human capital risk that needs to be monitored as it shows low productivity on the daily working hours. Additionally, overtime work might affect productivity in actual working hours and decrease human capital efficiency. This risk was not identified in the literature review in chapter two; however, it was found that there is literature that agrees with this finding (Chang and Woo, 2017) and concludes that overtime work might be a potential risk on productivity.

#### **6.2.4.2.3 Distrust**

Distrust was found to be a critical risk on human capital management, which might undercut most human capital strategies. Distrust was found to be attributed to the practices and behaviours of line managers and leadership in general. The distrustful manager might create a distrustful atmosphere that leads to low commitment, anxiety, unwillingness to collaborate, disloyalty and sharing knowledge. Therefore, distrust among employees has a negative impact on other human capital drivers such as engagement, empowerment, and organisational culture. Such finding goes in harmony with the literature such as (Savolainen and Häkkinen, 2011; and Savolainen and Lopez-Fresno, 2013), which conclude the destructive impact of distrust on human capital management.

#### **6.2.4.2.4 Low change resilience among the workforce**

Non-resilience among the workforce for change and innovation was found to be a potential risk associated with human capital management that requires management



intervention. In today's business world, change is the constant factor that makes it necessary to change the workforce's mind-sets to embark on change and prepare for it. This finding agrees with the literature (Bullough, Renko and Myatt, 201; Howard and Irving, 2014; and Rahman and Mendy, 2019) regarding the importance of workforce resilience to embrace change capitalising on its opportunities.

#### **6.2.4.2.5 Lack of on-boarding program**

The absence of an efficient on-boarding program was found to be a potential risk in managing human capital. The on-boarding program aims to identify a new employee of the organisational culture, policies, and communication methods and facilitate knowledge transfer. Additionally, the on-boarding program is supposed to enhance workplace inclusion in order to increase employee engagement. Therefore, the absence of an on-boarding program might escalate to create additional risks such as low workplace inclusion, non-engaged employee, and poor adherence to organisational culture, values and code of conduct. This finding aligns with the literature (Cable, Gino, and Staats, 2013; Graybill et al., 2013; Chillakuri, 2020) regarding on-boarding program importance in human capital management.

#### **6.2.4.2.6 High Sick absenteeism rate**

A high sick absenteeism rate was found to be a risk that needs to be monitored as it affects the performance and levels of productivity. This finding goes in harmony with the literature (Cucchiella, Gastaldi, and Ranieri, 2014; Kocakulah et al., 2016; and Alharbi et al., 2018) in terms of the criticality of such risk on performance and productivity. In the same context, sick absenteeism might be a plausible excuse to avoid attending work for other reasons related to work environments, such as frustration, disengagement, or low job satisfaction. Thus, it is recommended to look at the real causes of sickness absenteeism and consider a strategy to eliminate, avoid or mitigate such risk.

#### **6.2.4.2.7 Poor performance management system**

Lack of performance management system and KPIs for each employee was found to be a critical risk for human capital management. As a matter of fact, the performance management system is the basis of some human capital management drivers, such as measuring progress, recognition, training, and career development. Hence, the absence of efficient performance management that translates the strategic vision and cascades it down across all levels and each job is considered a critical risk. The literature (Gruman and Saks, 2011; Pulakos and O'LEARY, 2011; Buckingham and Goodall, 2015; and Cappelli and Tavis, 2016) has a solid consensus with this finding and can be concluded that the absence of performance management system safely as a risk on human capital management.

#### **6.2.4.2.8 Lack of leadership practices by line managers**

Lack of leadership practices was found to be a significant risk associated with human capital management, and it might cause the draining of HIPO (high-potential employees) and talented employees. Moreover, the lack of leadership practices was found to be the key reason for low engagement. The finding of non-leadership practices risk goes in harmony with the literature (Bedarkar and Pandita, 2014; Popli and Rizvi, 2016; Khodakarami and Dirani, 2020) regarding the impact of leadership practices and supervisors on engagement and performance.

#### **6.2.4.2.9 Underpaid employees**

The perception of being underpaid was found to be a potential risk associated with human capital management. The evaluation of compensation should be conducted within an organisation and in comparison with the market in order to mitigate this risk. The perception of being underpaid within the organisation might cause unfairness or injustice, which would negatively impact human capital management. At the same time, the perception of being underpaid in comparison with the market might lead an employee

to look for another job in other companies, especially if there are weaknesses in additional human capital drivers. Therefore, a continuous benchmark against compensations/ salaries in other companies is recommended to mitigate such risk. The above finding agrees with the literature (Buurman et al., 2012; Mandhanya, 2015; Adeoye, 2019), considering underpaid employees as a potential risk that requires intervention.

#### **6.2.4.2.10 Unethical practices**

Unethical practices such as fraud, deceiving, corruption, and theft were found to be a risk associated with human capital management. Indicators of this risk could be many legal cases filed against the employees or complaints. However, unethical practices risk could be discovered by conducting a survey of the dominant ethics and practices on the organisational culture. Unethical practices have a negative impact on the reputation of a company/organisation as they might hurt the corporate image besides affecting its performance. In general, the finding of unethical practices risk goes in harmony with the literature such as (Robbins, Roodt, and Meyer, 2011; and Benzoni and Chyruk, 2015) regarding its negative impact on performance.

#### **6.2.4.2.11 Non engaged employees**

It was found that identifying engaged and disengaged employees is not a significant result in engagement assessment. Actually, it will be easy to recognise engaged and disengaged employees, who usually represent 20% of the workforce. Most importantly is determining a non-engaged employee who usually represents a significant workforce share. The non-engaged employees are the potential risk that requires early interventions such as taking actions to increase occupational self-efficacy to mitigate their impact on human capital management. This finding sounds aligned to some extent with literature (Chaudhary, Rangnekar, and Barua, 2013; and Bedarkar and Pandita, 2014) regarding increasing self-efficacy and enhancing engagement drivers. Furthermore, it can enhance

the drivers' engagement of non-engaged employees, namely communication, work-life balance, and leadership practices.

#### **6.2.4.2.12 Labour market regulations and ineffective HR policies**

New regulations of the labour market or unproductive HR policies were found to be a risk that needs to be expected and prepare an action plan when it crystallises. As a way of example, the Saudization of the labour market by enforcing more Saudi workers and increasing non-Saudi workers' costs caused critical risk for all companies in Saudi Arabia in 2016. Likewise, ineffective HR policies that might negatively impact employees' trust and emotions are a potential risk that needs to be managed. Hence, a qualitative risk assessment for expected regulations and HR policies against the likelihood of occurring should be conducted and prepare a contingency plan for mitigation. The finding of labour regulations risk and HR policies agrees with the literature (Agrawal and Matsa, 2013) regarding its impact on performance.

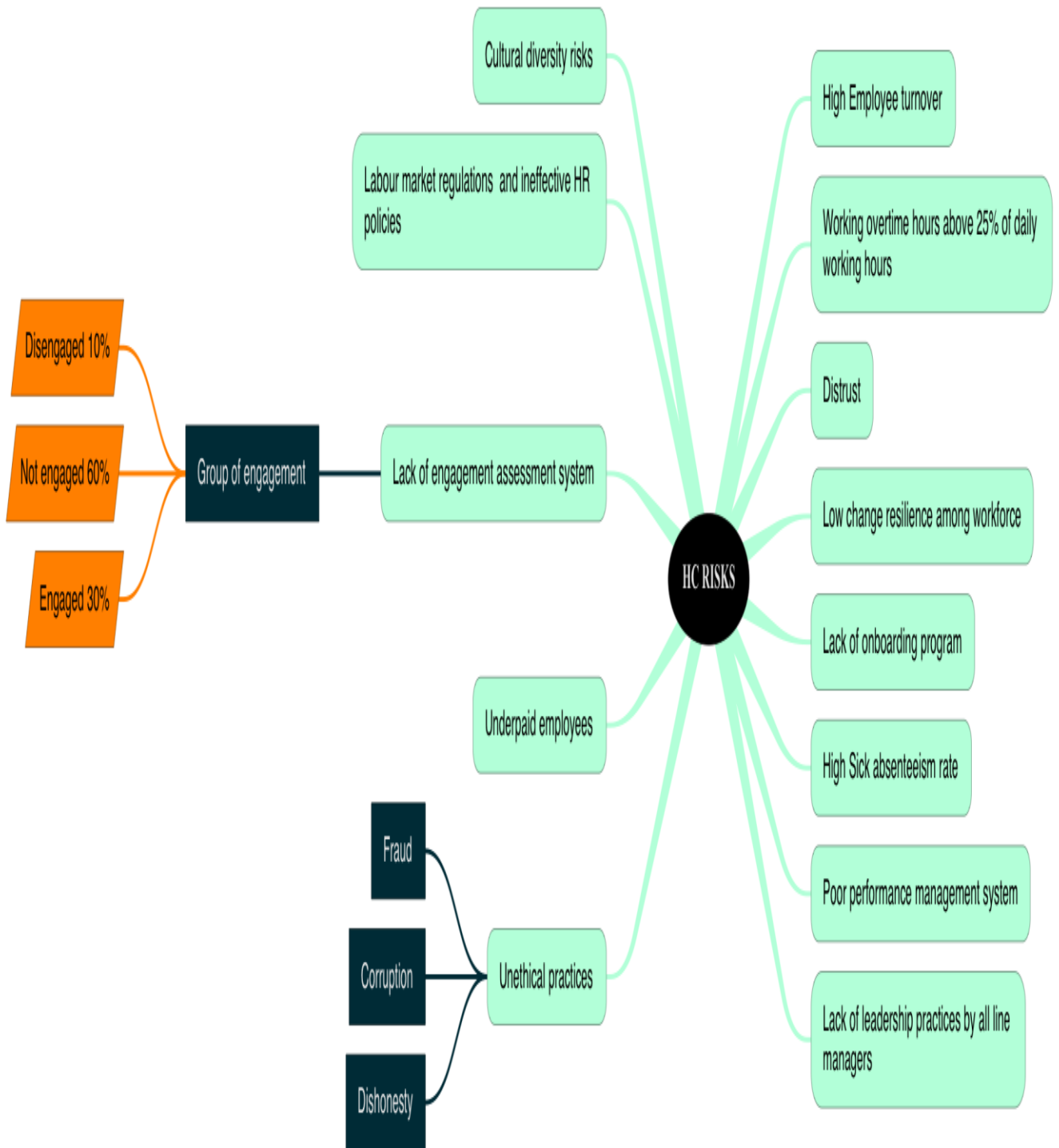
#### **6.2.4.2.13 Cultural diversity risks**

Cultural diversity was found to be a risk that would cause some negative impact, such as disharmony in groups, conflict, and low productivity. Furthermore, cultural diversity usually causes resistance among the majority of members of an organisation/ company. It might also influence critical areas like employee appraisals, which would create a feeling of unfairness, injustice and inequality. Although diversity in general and cultural diversity, particularly, helps trigger innovation and enhance performance, mismanaging diversity might create risks. This finding goes in harmony with the literature (Martin, 2014; Hofhuis, van der Zee, and Otten; 2015; Sharma, 2016) regarding potential risks associated with cultural diversity.

Overall the findings agree with some extant literature regarding the potential risks associated with human capital management. Nonetheless, the human capital risks extracted from literature in

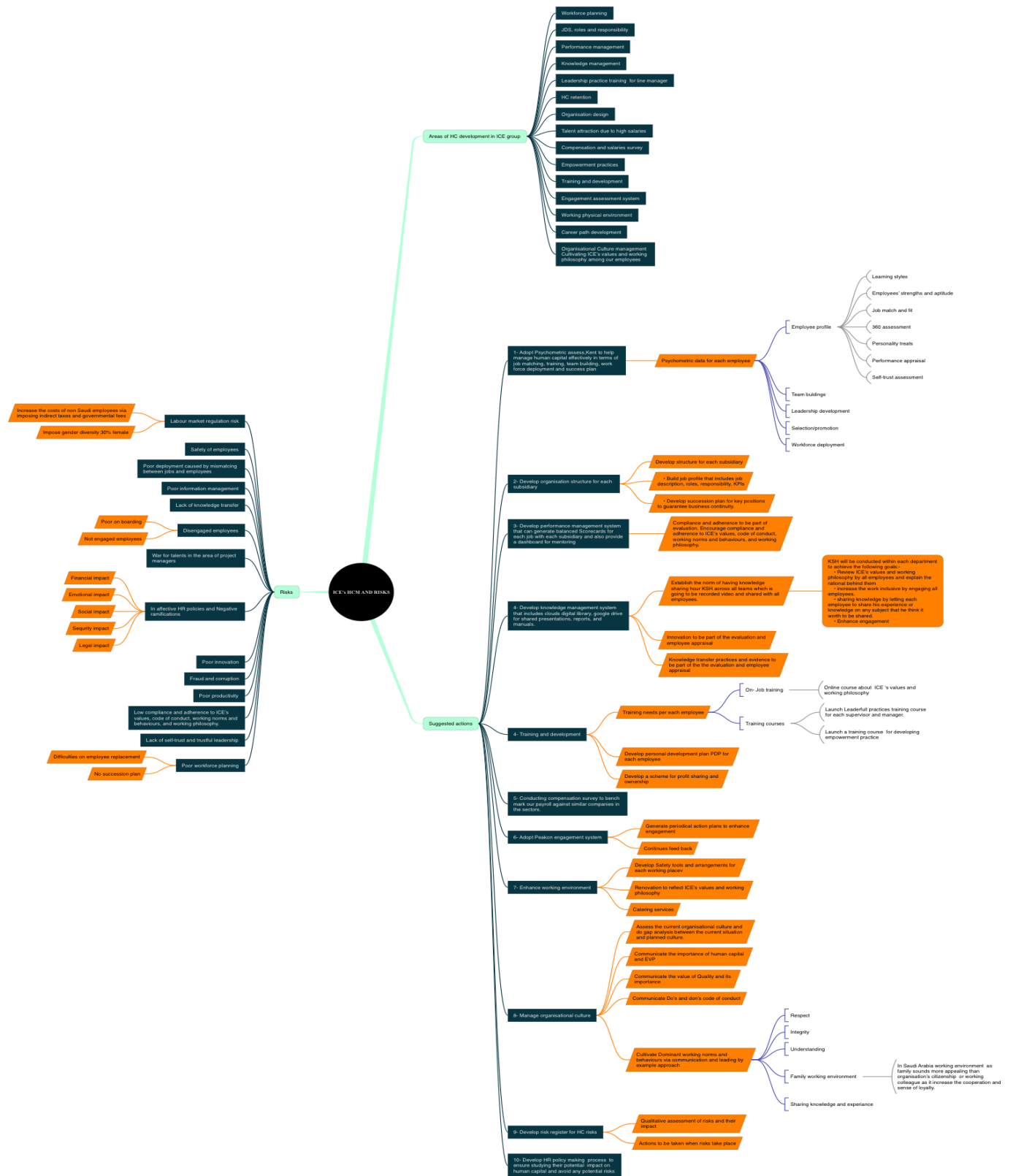
chapter two do not match precisely with the findings as there are unknown human capital risks, namely, low change resilience among the workforce, absence of an efficient onboarding program, underpaid employees, non-engaged employees, working overtime hours above 25% of daily working hours, Labour market regulations and HR policies. Therefore, it is safe to conclude that human resource management and risk management has received limited attention from academic and practitioners in the management literature. This conclusion goes in harmony with the finding by (Becker and Smidt, 2016), who conducted a review of papers published since the year 2000 and stated that limited research addressed the risk management on human capital. The figure below illustrates the findings regarding the critical risks associated with human capital management.

Figure 6-3: Human Capital Risks



In conclusion, the researcher attempted to diagnose the current human capital management situation of ICE, along with associated risks. Based on the current situation, a set of actions were proposed to enhance and improve human capital management and mitigate potential risks. The figure below illustrates human capital drivers that need to be enhanced, potential human capital risks, and proposed actions.

Figure 6-4: ICE's HCM, RISKS and proposed actions





### 6.3 Conclusion

In conclusion, the collected data analysis showed key themes covering the importance of human capital management, human capital management drivers, human capital risks, and recommendations to enhance human capital management and mitigate associated risks within ICE. Literature highlights the importance of asserting that the human mind is the most significant asset in the knowledge-based economy. Furthermore, human capital is considered the most crucial factor for achieving success in the organisation or company. Needless to say that there is a solid consensus among participants that HC is a sophisticated competitive advantage with a strong positive relationship with financial performance and strategic achievements.

Regarding drivers of human capital management, it was found that it can start from raising three key questions: Are our employees willing to support our vision? Are our employees enabled to confront and struggle with problems? Are our employees enabled them to do their jobs?. Furthermore, it is worth mentioning that managing human capital sounds cultural-based, so it might include different drivers or components in various organisations as it depends on their working environment. Consequently, adopting a particular framework for human capital drivers might not be effective in different cultures or contexts. The importance of some drivers might vary from one culture to another. Hence, it is recommended to raise these three questions and define human capital drivers within the community and culture of that organisation/company in order to assess the credibility of the framework to a particular culture or society. The findings showed that there are ten drivers of human capital management within the managerial practice of Saudi Arabia. Overall, it is safe to conclude that the findings go in harmony with the literature regarding the importance of the above human capital drivers and their positive relationship with performance. Nonetheless, the drivers extracted from literature in chapter two do not match the findings in terms of categorising and grouping—for example, managing the six stages of the employee life cycle was not mentioned exactly in chapter two. However, these stages were categorised under diverse groups like human capital development and career management drivers.

In the same context, it sounds that developing human capital management effectively by managing its risk is considered more effective than following a strategic approach. It will give strong buy-in

by the top management of human capital importance and criticality. Therefore, it is recommended to use human capital risks as a nudging strategy to guarantee sustainable support from top management to enhance human capital management. As regards the risks of human capital, the findings showed that there are thirteen risks associated with human capital management. In general, the findings agree with some extant literature regarding the potential risks related to human capital management.

Nonetheless, the human capital risks extracted from literature in chapter two do not match precisely with the findings as there are unknown human capital risks, namely, low change resilience among the workforce, absence of an efficient onboarding program, underpaid employees, non-engaged employees, working overtime hours above 25% of daily working hours, Labour market regulations and HR policies. Therefore, it is safe to conclude that human resource management and risk management has received limited attention from academic and practitioners in the management literature. This conclusion goes in harmony with the finding by (Becker and Smidt, 2016), who conducted a review of papers published since the year 2000 and stated that limited research addressed the risk management on human capital.

Finally, the researcher attempted to diagnose the current human capital management situation of ICE, along with associated risks. Findings showed that there are 15 areas of development to improve human capital management within ICE. These areas of development relate to great extant drivers of human capital management. Likewise, findings showed that 14 potential risks need to be managed within ICE. Based on the current situation, a set of actions were proposed to enhance and improve human capital management and mitigate potential risks. In the following chapters (Chapter 7 and 8), the writer illustrates the conclusion, reflection, future studies, and limitations.

## CHAPTER SEVEN

### CONCLUSION

#### 7.1 Introduction

The research objectives that I attempted to achieve were to study the evolution of 'Human Capital' and its context within an organisation/company, identifying human capital drivers and components within an organisation/company, identifying risks associated with human capital within an organisation/company, and proposing and implementing actions to avoid or manage and mitigate human capital risks to enhance human capital management practices in ICE. Such objectives pose several questions that need to be addressed in this thesis. Therefore, I thought it was crucial to highlight human capital's nature by addressing a research questions about human capital in its micro-level form, identifying HC's drivers, and risks associated with HC. I included in this chapter the proposed recommendations to address the management problem illustrated in the section 1.3 and 1.4. Furthermore, an attempt has been paid to elaborate on the findings of research questions and their implications on professional managerial practices in sections 7.5 and 7.6. Overall, this chapter highlighted my conclusion on literature review, action research and methodology, findings and implications, implications for professional managerial/organisational practice, and contribution to knowledge.

#### 7.2 . Findings on the literature review

This study explored human capital management and associated risks in an organisation. In Chapter 2, I reviewed salient literature on human capital and related risks, human capital management, and other relevant concepts. Human capital plays an important role in product development and service delivery. This fact can be understood because the human capital workforce can promote the creativity and innovation necessary for organisations' growth and expansion. The chapter is

divided into twelve sections consisting of discussions which include: human capital as capital or resources; human capital; measurement of human capital; human capital context; organisational intellectual capital; HC as a competitive advantage; measurement of human capital; drivers of human capital; enablers and parameters of human capital drivers; and human capital and associated risks. The overview of the themes which emerged from this chapter during the literature review is highlighted in the remaining parts of this section.

The literature revealed that HC is an asset to an organisation. Human capital is a valuable asset to a firm because organisations require employees and the workforce to plan and achieve their objectives. Hence, human capital impacts, positively or negatively, on the performance of an organisation. Human capital strategy (HCS) is necessary to ensure effective HC development. The primary purpose of HCS is to transform human capital into a valuable asset to enhance an organisation's value and enhance its performance. HCS is beneficial as it helps an organisation effectively manage human resources' investment as it pertains to all employees' categories within an organisation. There are several dimensions of HCS (including policies, technology, culture, and framework) critical to ensuring a conducive environment, resourceful workforce, and effective business strategy. A resources HC is a source of competitive advantage to an organisation, and it can be measured and assessed. HC can be evaluated and measured using both monetary and non-monetary models. Non-monetary models suitable for evaluating and measuring HC include the Michigan model (1969), Flamholtz model (1972), and Ogan model (1976). Monetary models suitable for assessing and measuring HC have replacement costs model; opportunity costs model; discounted wages and salaries model; designed initially dynamic model; and net value-added model. The literature also revealed that several drivers or factors are influencing HC, but seven drivers of HC were considered relevant to this study, namely: leadership practices, employee engagement, knowledge accessibility, workforce optimization, learning capacity, empowerment and trust. Lastly, we identified 21 risks associated with HC in the literature, including employees' disengagement; unethical practice; poor talent management; diversity problems; poor leadership; lack of succession planning; poor information management; cultural differences; health and wellbeing; poor productivity; high employees' turnover; high absenteeism rate; poor reputation; high in-job legal cases; poor innovation; lack of knowledge transfer; misaligned training need; low

level of trust; fraud; corruption and theft. Overall, the literature review addressed partly three research questions which are, namely; what is human capital within its micro-level (company and organisation)?, What are the drivers and components of human capital within a company and organisation?, What are the potential risks that might be crystallised in the human capital of a company/organisation?. Also, the first objective of the thesis was achieved through literature review and relevant international reports, as illustrated in chapter 2.

### **7.3 Action research and methodology**

This study has been developed based on my observation of the importance of human capital management on the performance of companies and organisations. It has been noticed in the business world that success in companies can be significantly attributed to human factors, which makes me question the nature of human capital management and its drivers and components. I took action to explore the concept of human capital management and to know its impact on a company's performance. Furthermore, this action research aims to validate the literature findings with the practical knowledge of human capital experts to evaluate human capital in my company and enable me to construct a holistic framework for managing human capital and its associated risks.

In chapter 3, the methodology and method of inquiry used for this study have discussed. This chapter has highlighted, justified and developed techniques engaged in addressing the research questions and adopting qualitative mixed-methods research (QUAL-qual design) by selecting two samples for this study: human capital experts and ICE's managers' samples. The QUAL-qual design was found to be appropriate for this thesis as it aims to collect data from different levels and different perspectives. Semi-structured interviews were conducted with human capital experts in order to identify drivers of human capital and risks associated with human capital within an organisation in Saudi Arabia. In the second sample, semi-structured interviews were conducted with ICE's managers in order to validate the findings in the first sample and propose actions to enhance human capital management and associated risks in ICE group. As regards the methodological perspective, the researcher used an inductive approach and engaged in the research

from specific to the general to ensure that themes constructed for the data collected for the study. The action research process comprises four steps: (1) constructing, (2) planning action, (3) taking action, and (4) evaluating action, i.e. evaluation of action to ensure reflection and assessment of the research process. The chapter's discussions focused on my epistemological position, my approach and plan; action research cycle one: construction; action research cycle two: planning; action research cycle three: taking action, and action research cycle four: evaluating action.

In each cycle, I illustrated the actions taken and anticipated potential issues. This was helpful and improved the mechanism of conducting this research and fulfilling the research objectives. A case study approach was adopted to achieve the thesis's objectives as it explored a bounded system and elaborated the theory of human capital management by conducting an in-depth investigation of the relationships among human capital drivers and their associated risks.

As a phenomenological assumption, the researcher believed that the analysis of the reality of HCM and the research questions are subjective in nature. From an epistemological perspective, the researcher studied the concept of human capital risks and examined its impact within ICE to get an insider view and perspective of ICE's managers on human capital risks management. Qualitative mixed-methods research (QUAL-qual design) as an inductive approach are used for the study. This study used two sets of samples: human capital experts and ICE's managers' samples. The study selected five human capital experts and Six (6) top ICE managers through a purposeful sampling technique as it is suitable for this study. It helps select research participants and data sources to ensure that relevant participants and appropriate data are used for the study. Data analysis is discussed in the next chapter.

In chapter four, the course of actions taken to address this thesis's objectives is adequate in terms of the study's design, selected samples, and the data collection methodology. The case study had been presented in detail, especially the role of shared service in managing human capital in the ICE group. As regards samples, qualitative semi-structured interviews with five human capital experts had been conducted to identify human capital drivers and risks associated with human

capital within the company/organisation. Additionally, in sample No.2, six managers have had In-depth individual interviews to evaluate human capital management practices and prioritise human capital risks. All participants in both samples were interviewed and signed the Participant Consent Form PCF. The ICE participants had been given an introduction about the concept of human capital and its associated risks as most of the sample participants are not experts on human capital management and human resource management.

However, due to the COVID-19 pandemic researcher decided to conduct virtual personal interviews via one of the virtual meeting platforms such as Zoom. These virtual personal interviews were held by following the same steps stated in the section on inquiry methods. Regarding analysis, the data collected for the study were analysed using thematic analysis as thematic analysis facilitates the identification, analysing and reporting of patterns (themes) within the data. The collected data analysis showed key themes that cover the importance of human capital management, human capital management drivers, human capital risks, and recommendations to enhance human capital management and mitigate associated risks within ICE. The researcher used rapid identification of themes from audio/videos recordings (RITA) to analyse semi-structured interviews. Hence, RITA allowed the researcher to identify six evaluation foci: the importance of human capital, human capital management, human capital risks, and areas of development in HC's drivers within ICE, HC risks within ICE, and proposed actions to enhance human capital management and its associated risks. The researcher asked some respondents to read and highlight the main themes which constructed from the data collected through interviews. Thereafter, the researcher compared themes identified by the researcher and themes identified by some respondents to check the credibility of the analysis and make necessary adjustments to enhance the categorisation system. Besides developing the category system, I also discussed the literature context results to compare and contrast the findings with previous research findings.

## **7.4 Findings and implications**

In conclusion, the collected data analysis showed key themes covering the importance of human capital management, human capital management drivers, human capital risks, and

recommendations to enhance human capital management and mitigate associated risks within ICE. Literature highlights the importance of asserting that the human mind is the most significant asset in the knowledge-based economy. Needless to say, there is a solid consensus among participants that HC is a sophisticated competitive advantage with a strong positive relationship with financial performance and strategic achievements. Furthermore, human capital is considered the most crucial factor for achieving success in the organisation or company. However, the literature tends to classify human capital based on its nature (as an intangible asset) rather than its importance to a company/organisation. In fact, human capital is categorised as a branch of intellectual capital, making it less critical in the eyes of top management. Therefore, it is essential to reposition human capital to be perceived as similar to financial capital in terms of importance and management as it has a significant impact on performance more than other tangible or intangible assets.

Regarding drivers of human capital management, it was found that it can start from raising three key questions: Are our employees willing to support our vision? Are our employees enabled to confront and struggle with problems? Are our employees enabled enough to do their jobs?. Furthermore, it is worth mentioning that managing human capital sounds cultural-based, so it might include different drivers or components in various organisations as it depends on their working environment. Consequently, adopting a particular framework for human capital drivers might not be effective in different cultures or contexts. The importance of some drivers might vary from one culture to another. Hence, it is recommended to raise these three questions and define human capital drivers within the community and culture of that organisation/company in order to assess the credibility of the framework to a particular culture or society. The findings showed that there are ten drivers of human capital management within the managerial practice of Saudi Arabia. Nonetheless, such findings cannot be generalised as it should be noted that the importance of some drivers might vary from one culture to another and from one context to another. Overall, it is safe to conclude that the findings go in harmony with the literature regarding the importance of the above human capital drivers and their positive relationship with performance.

Additionally, the second research question was addressed regarding the drivers and components of human capital within a company and organisation. Nonetheless, the drivers extracted from



literature in chapter two do not match the findings in terms of categorising and grouping—for example, managing the six stages of the employee life cycle was not mentioned exactly in chapter two. However, these stages were categorised under diverse groups like human capital development and career management drivers. In general, the overall results achieved objective No.2, which aims to identify human capital drivers and components within an organisation/company.

In the same context, it sounds that developing human capital management effectively by managing its risk is considered more effective than following a strategic approach. It will give strong buy-in by the top management of human capital importance and criticality. Therefore, it is recommended to use human capital risks as a nudging strategy to guarantee sustainable support from top management to enhance human capital management. As regards the risks of human capital, the findings showed that there are thirteen risks associated with human capital management. In general, the findings agree with some extant literature regarding the potential risks related to human capital management.

Nonetheless, the human capital risks extracted from literature in chapter two do not match precisely with the findings as there are unknown human capital risks, namely, low change resilience among the workforce, absence of an efficient onboarding program, underpaid employees, non-engaged employees, working overtime hours above 25% of daily working hours, Labour market regulations and HR policies. Therefore, it is safe to conclude that human resource management and risk management has received limited attention from academic and practitioners in the management literature. This conclusion goes in harmony with the finding by (Becker and Smidt, 2016), who conducted a review of papers published since the year 2000 and stated that limited research addressed the risk management on human capital. In general, the findings in this section answered the research question about the potential risks that might be crystallised in the human capital of a company/organisation and achieved the third objective, which aim to identify risks associated with human capital within an organisation/company.

Finally, the researcher attempted to diagnose the current human capital management situation of ICE, along with associated risks. Findings showed that there are 15 areas of development to improve human capital management within ICE. These areas of development relate to great extant drivers of human capital management. Likewise, findings showed that 14 potential risks need to be managed within ICE. Based on the current situation, a set of actions were proposed to enhance and improve human capital management and mitigate potential risks. In conclusion, such findings fulfil the fourth objective of this study, which aims to propose and recommend actions to avoid or manage and mitigate human capital risks to enhance human capital management practices in ICE.

#### **7.4.1 Proposed actions on enhancing human capital management and managing its associated risks within ICE**

Findings on this part are categorised into three sections: the areas of HC development, potential risks associated with human capital management, and proposed actions to enhance human capital management and mitigate associated risks. These findings answering the research questions and management problem illustrated in chapter 1 sections 1.3 and 1.4

##### **7.4.1.1 Areas of HC development in ICE**

One of this thesis's objectives is to identify areas of development and propose the course of actions to enhance human capital management and mitigate its associated risks within International Competitiveness Enterprise ICE. Findings showed that there are 15 areas of development to improve human capital management within ICE. These areas of development relate to great extant drivers of human capital management. These areas of development are workforce planning, job descriptions JD including roles and responsibility, performance management, knowledge management, leadership practice among managers, human capital retention, organisation design, talent attraction due to high salaries, compensation and salaries survey, empowerment practices, training and development, engagement assessment system, working physical environment, career path development, and organisational culture management.

##### **7.4.1.2 Human capital risks within ICE and risks management**

Likewise, findings showed that 14 potential risks need to be managed within ICE. Poor workforce planning is a possible risk in not having a succession plan and the expected difficulties of replacing

a leaving employee. Additionally, labour market regulations risk is another crucial risk regarding gender diversity and imposing 30% of the workforce to be female besides increasing non-Saudi employees' cost. Moreover, poor HR policies' negative ramifications are another critical risk that needs to be mitigated by studying any new HR policy's expected financial, emotional, social, security, and legal impact. Disengaged employees are existing risks affecting performance and productivity due to poor onboarding strategy and weakness in the engagement drivers. Other potential and existing risks are the safety of employees, poor deployment caused by mismatching between jobs and employees, poor information management, lack of knowledge transfer, a war for talents in the area of project managers, insufficient innovation, fraud and corruption, poor productivity, low compliance and adherence to ICE's values, code of conduct, working norms and behaviours, and working philosophy; and lack of self-trust and trustful leadership. In the same context, there are other risks related to the risk management itself, namely, lack of human capital qualitative risk assessment system and HC risks registry.

#### **7.4.1.3 Proposed actions to enhance human capital management and mitigate associated risks.**

The findings identified ten actions to be taken to enhance human capital management and manage potential associated risks within ICE as follows; -

1. Adopt Psychometric assessment to effectively manage human capital in job matching, training, team building, workforce deployment, and success plan. Psychometric data can be used to develop an employee profile that includes his learning styles, strengths and aptitude, job match and fit, competencies out 360 assessments, personality traits, performance appraisal, and self-trust assessment. The employee profile data would be used in HR analytics to support critical decisions such as team building, leadership development, selection, promotion, and workforce deployment.
2. Develop an organisational structure for each subsidiary, including building job profiles that include job descriptions, roles, responsibilities, and KPIs. Additionally, develop a succession plan for key positions to guarantee business continuity.

3. Develop a performance management system that can generate balanced scorecards for each job with each subsidiary and provide a dashboard for mentoring. Encourage compliance and adherence to ICE's values, code of conduct, working norms and behaviours, and working philosophy by including them in evaluations and appraisals.
4. Develop a knowledge management system that includes clouds digital library, Google drive for shared presentations, reports, and manuals. Moreover, encourage innovation and knowledge transfer practices by making it to be part of the evaluation and employee appraisal. Finally, establish the norm of conducting a knowledge sharing hour KSH across all teams that will be recorded video and shared with all employees. KSH will be undertaken in each department to achieve the following goals: -
  - Review ICE's values and working philosophy by all employees and explain the rationale behind them
  - Increase the work inclusive by engaging all employees.
  - Sharing knowledge by letting each employee share their experience or expertise on any subject they believe is worth sharing.
  - Enhance engagement.
5. Design a training and development plan that comprises training needs per each employee based on the personal development plan PDP and includes On-the-job training and online course about ICE's values and working philosophy. Furthermore, launch two training courses for managers and supervisors: leaderful practices and empowerment practice training course. Finally, develop a profit-sharing scheme and ownership by top performers among employees.
6. To conduct a compensation survey to benchmark the payroll against similar companies in the sectors.
7. Adopt the Peakon engagement system and generate periodical actions to enhance engagement by enhancing engagement drivers, namely leadership practices, communication, and work-life balancing.

8. Enhance the working environment by providing safety tools and arrangements for each workplace. Also, conduct a renovation on the workplace to reflect ICE's values and working philosophy and offer catering services.
9. Manage organisational culture by assessing the current corporate culture and doing a gap analysis between the current situation and planned culture. Cultivate the value of quality, ICE's code of conduct, sharing knowledge, working behaviours (Respect, Integrity, and Understanding) in the organisational culture through continuous communication and adopting the leading-by example approach. Additionally, to design employee value proposition EVP and communicate it along with the importance of human capital. Finally, spread the feeling of a family working environment as it sounds more appealing than the organisation's citizenship or working colleague, and increase the cooperation and sense of loyalty.
10. Develop a risk register for HC risks and conduct a periodically qualitative assessment of risks and their impact and actions to be taken when a risk occurs.
11. Develop an HR policy-making process to ensure studying their potential impact on human capital and avoid potential risks.

## **7.5 Implications for professional managerial practice**

Regarding the implications for professional managerial/organisational practice, I think managers and professionals should reconsider human capital management like financial or physical capital in terms of its importance and impact. Besides, the findings have addressed the four questions of this study, their answers have implications for professional managerial practices. First, defining the nature of HC within an organisation and its contribution to achieve a sustainable competitive advantage, would emphasise the importance of HC on the perceptions of executives and managers. Second, identifying drivers and components of HC would enable management to propose actions plans in order to enhance performance of each driver and component which would have a positive collective impact on the organisation's HC and also enrich professional managerial practices. Consequently, drivers and indicators of efficient human capital management need to be in the board directors and executives' dashboard like the financial dashboard. Additionally, top

management needs to perceive human capital as critical capital that requires to be managed holistically to make sustainable growth. Third, identifying risks associated with HCM would include them in an organisation's risks registry and encourage human capital managers/practitioners to play major role in managing critical HC's risks such as disengagement, poor talent management, poor organisational culture, and infirm leadership practices. Fourth, it is recommended to use human capital risks as a nudging strategy to guarantee sustainable support from top management to enhance human capital management. Doing so will give strong buy-in by the top management of human capital importance and criticality.

Moreover, adopting a particular framework for human capital drivers might not be effective in different cultures or contexts, as the importance of some drivers might vary from one culture to another. Hence, it is recommended for management and professional managerial practitioners to address these three key questions, namely, fundamental questions: Are our employees willing to support our vision? Are our employees enabled to confront and struggle with problems? Are our employees enabled enough to do their jobs?. Answering these three questions would guide practitioners to identify human capital drivers that are required to define human capital drivers within the community and culture of that organisation/company in order to assess the credibility of the framework to a particular culture or society.

## **7.6 Implications for investment management, financing decisions and business valuation.**

Human capital is a vital intangible asset that significantly impacts strategic, financial, and business performance. Hence, developing a maturity model for evaluating human capital in companies would increase the efficiency of investment decisions and gain a better understanding of investment risks associated with human capital. For example, evaluating human capital can be adopted on crowdfunding platforms to give a better business valuation for start-ups and companies. Additionally, evaluating human capital would give a clear picture for investors to take investment decisions.

## **7.7 Contribution to knowledge**

I think this study contributes to the knowledge and managerial practice by concluding some recommendations. First, emphasising the need to reposition human capital (on the literature and practice) to be perceived like financial capital in terms of importance and management as it dramatically impacts performance more than other tangible or intangible assets. Second, it suggests using human capital risks as a nudging strategy to guarantee sustainable support from top management to enhance human capital management. Third, this study endeavoured to identify drivers of human capital to be included and structured on a holistic framework that is more comprehensive and sophisticated than Bassi and McMurrer's model in 2007, which is the famous model in this domain. Bassi and McMurrer's model suggested five dimensions to assess human capital on a company and organisation. In contrast, this study identified around forty-three drivers and practices that can be used to manage human capital. Needless to say, the importance of these drivers and practices might be variant from context to context, and the management's role is to select the relevant drivers that fit with their culture.

Moreover, this study showed the importance of considering cultural and contextual differences when adopting a particular framework for human capital drivers. It should be noted that the importance of some drivers might vary from one culture to another and from one context to another. Finally, it has been concluded in this study that risks of human capital management have received limited attention from academics and practitioners in the management literature and suggested new risks associated with human capital management.

## CHAPTER EIGHT

### REFLECTION, FUTURE STUDY AND LIMITATIONS

#### 8.1 Introduction

At the end of the journey, it is vital to draw my reflections on this study's findings and address how they can be built on its findings. The first section of this chapter highlights the reflections on human capital management, risks associated with human capital management, and areas of development within our case study ICE in terms of human capital management and risks management. Additionally, The same section illustrates my reflections as an insider researcher. The following section addresses the future studies which are recommended to bridge the gap in the literature to build a holistic framework for human capital management considering the cultural, sectorial, working environmental differences. In the last section, the limitations were addressed and assure the fact that the drivers of human capital management and its associated risks mentioned in the literature can be applicable across most of the countries; however, the priority and importance ranking of these drivers and risks might vary from culture to culture, country to country, and market to market.

#### 8.2 Reflection

Managing human capital is contextual and cultural-based, affected by factors such as culture, working environment, labour market regulations, market characteristics, political and economic environment. Therefore, developing a human capital management model is recommended based on raising three key questions: Are our employees willing to support our vision? Are our employees enabled to confront and struggle with problems? Are our employees enabled enough to do their jobs ?. Answers to these questions would allow a practitioner to identify the effective drivers of human capital management, which can be managed to enhance performance and increase productivity. Although some drivers of human capital management mentioned in the



literature can be applicable across most of the countries, the priority and importance ranking of these drivers might vary from culture to culture, country to country, and market to market.

Regarding human capital management risks, developing human capital management effectively by managing its risk is considered more effective than following a strategic approach. It will give strong buy-in by the top management of human capital importance and criticality. Data among both samples show that proposing human capital management development by addressing human capital risks would gain top management attention and guarantee continued support. Nonetheless, the human capital risks extracted from literature in chapter two do not match precisely with the findings in chapter 6 as there are unknown human capital risks, namely, low change resilience among the workforce, absence of an efficient onboarding program, underpaid employees, non-engaged employees, working overtime hours above 25% of daily working hours, Labour market regulations and HR policies. Therefore, the variation between the literature and findings of this study might be attributed to two reasons. The first reason might be that human resource management and risk management has received limited attention from academics and practitioners in the management literature, which shows a gap in the literature and calls for further studies in this subject. Second, human capital management's risks register is cultural and context-based, requiring a standalone risk assessment to identify, prioritise, and manage risks.

I attempted to diagnose the current human capital management situation of ICE, along with associated risks. Findings showed that there are 15 areas of development to improve human capital management within ICE. These areas of development relate to great extant drivers of human capital management. Likewise, findings showed that 14 potential risks need to be managed within ICE. Consequently, a set of actions were proposed to enhance and improve human capital management and mitigate potential risks. Future studies shall be conducted to assess the impact on performance and productivity by managing these 14 potential risks and enhancing 15 drivers and practices of human capital management.

However, I thought it would be more sophisticated if he used human capital drivers as a tool to identify potential human risks. In other words, the poor performance in any human capital drivers would be considered a human capital risk that needs to be registered, monitored, and managed. Additionally, I reflected on the need to develop a maturity model to assess human capital management based on the performance of human capital drivers and practices. The maturity model of human capital management could be categorised into four modes, strong, developed, poor, and weak. Such a maturity model enables benchmarking against strong human capital management performers and suggests adopted reforms to enhance human capital management.

Regarding the implications of findings on ICE, the 15 identified areas of development on human capital management have been incorporated and broken down on operational KPI's in order to be monitored on the ICE's dashboard. Likewise, the identified 14 potential risks were included on the risk registry to be monitored and managed when they crystallised on ICE's working environment. Furthermore, there is growing discussion among the management on ICE to include the human capital section beside the four classical sections of balanced scorecards: financial, customer, internal processes, and learning/growth. By doing so, I think this would give more attention to human capital management and its significant role in its performance.

Regarding my reflections as an insider researcher, I thought conducting this study strengthen my capabilities and skills to be a potential scholar-practitioner. In fact, this study encapsulated what I have learned during my DBA journey in terms of identifying the working problem, Problematising process, literature review, and developing a course of actions to address the problem at hand. Moreover, analysing the results and reflecting on my actions in order to reframe the course of actions to deal with the problem is another skill that I practised in this study. Hence, I believe that I have made the transition from a classical practitioner who was taking actions immediately to solve an existing problem to the level of scholar-practitioner who adopt a scientific and practical approach starting from identifying, analysing, and finding the root of the problem to reframing my actions and reflecting on their outcomes. Moreover, scanning the literature to find similarities with the problem at hand is another skill that I have developed in this study in particular and in the whole DBA journey in general. One of the exciting lessons that I have learned was to check the

credibility of frameworks and models with the existing problem and its context in terms of culture, working environment, and organisational politics. To do so, when a researcher finds a framework or model on the literature that might fit with his working problem, he needs to identify the critical questions behind such framework or model and match it with his questions of the problem on hand. Additionally, the scholar-practitioner is recommended to match the cultural, operational, environmental, organisational and political context of published frameworks and models with the problem's context.

### **8.3 Future studies**

I think there is a gap in the literature to build a holistic framework for human capital management considering cultural, sectorial, and environmental differences. Although some drivers of human capital management and its associated risks mentioned in the literature can be applicable across most of the countries, the priority and importance ranking of these drivers and risks might vary from culture to culture, country to country, and market to market.

I attempted to diagnose the current human capital management situation of ICE, along with associated risks. Findings showed that there are 15 areas of development to improve human capital management within ICE. These areas of development relate to great extant drivers of human capital management. Likewise, findings showed that 14 potential risks need to be managed within ICE. Consequently, a set of actions were proposed to enhance and improve human capital management and mitigate potential risks. Future studies should be focused on assessing the impact on performance and productivity by managing these 14 potential risks and enhancing 15 drivers and practices of human capital management.

Furthermore, it is safe to conclude that human capital management and risk management has received limited attention from academic and practitioners in the management literature. This conclusion goes in harmony with the finding by (Becker and Smidt, 2016), who conducted a

review of papers published since the year 2000 and stated that limited research addressed the risk management on human capital. Therefore, I encourage conducting further studies on human capital management and its associated risks in different countries, sectors, and working environments.

## **8.4 Limitations**

Human capital is a crucial resource that needs to be managed holistically and assessed its efficiencies like financial capital in organisations and companies. Despite the fact that some drivers of human capital management and its associated risks mentioned in the literature can be applicable across most of the countries, the priority and importance ranking of these drivers and risks might vary from culture to culture, country to country, and market to market. Although this study aimed to provide a model of managing human capital drivers and associated risks from a strategic level, this study was conducted based on a case study of a company in Saudi Arabia which not recommend generalising its results and findings on another case study without considering cultural, sectorial, and working environmental differences.

Word account: 52,630

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## APPENDICES

### Appendix A: Research Participant Consent Form

**Title of Research Project:** [Managing Human Capital and Associated Risks in Organisations \(A Saudi Company Case Study\)](#)

**Principal Researcher:** [Abdullah Atiah Alzahrany](#)

**Please  
initial box**

1. I confirm that I have read and have understood the information sheet dated [DATE] for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.

2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, without my rights being affected. In addition, should I not wish to answer any particular question or questions, I am free to decline.

3. I understand that, under the Data Protection Act, I can at any time ask for access to the information I provide, and I can also request the destruction of that information if I wish.





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## Appendix B: Research information Sheet



### Participant Information Sheet (PIS)

#### Title of Study

Managing Human Capital and Associated Risks in Organisations (A Saudi Company Case Study).

#### Participation in the study

You are going to be asked to participate in this research study. You have the full right to decide for being part of this research or not. It is recommended that you understand the nature of your participation in this research. It is worth mentioning that your participation in this research is entirely confidential. Please do not hesitate to ask any questions before, during, or after involving in this research.

#### Purpose

The main goal is to identify drivers and components of human capital within an organisation/company and develop a framework for human capital risk management. To do so, In-depth individual interviews will be conducted with two samples in this thesis, namely, Human capital experts and ICE's managers' samples. The interviews will be done with critical reflection (reflexivity) during the action research process and consider the cultural aspect of Saudi Arabia.

#### Target participants

Data would be collected through in-depth individual interviews with human capital experts and International Competitiveness Enterprise ICE's management. The interviews will be audio recorded to extract all responses. The responses from both samples will be analyzed in detail in order to incorporate their views about the research's questions. The sample of human capital experts will include five experts in human capital management to identify human capital drivers and risks associated with human capital within the company/organization. On the other side, The sample of ICE's management should include key positions within ICE, namely, managing directors of three subsidiaries, director of shared services and director of finance. A discussion guide will be developed in order to cover research questions and collect data, and probe responses from human Capital experts and ICE's management.

#### About the researcher

The principal researcher is the CEO of ICE, and part of his role is to monitor and enhance human capital within his group. At the same time, the researcher is conducting this study as a doctoral student- practitioner as so to fulfil the requirements towards his Doctorate in Business Administration (also known as DBA) with the University of Liverpool in the UK. The professional doctoral degree is a program geared towards shedding light on complex change management issues by working through action learning and action research methods; therefore, the data collection and interaction on this study will be done using a researcher angle.

### **Research Design**

This research will be done using a qualitative case study of the ICE using an exploratory approach and adopting an action learning approach. In-depth individual interviews with two samples, human capital experts and ICE managers, would be conducted along with critical reflection (reflexivity) during the action research process. The case study would be the right approach to pursue fulfilling the research objectives of this research as it aims to explore a bounded system. As an insider researcher (CEO of ICE), I will endeavour to identify potential risks that might be crystallised in the human capital and propose/implement actions to avoid, manage, or mitigate this human capital when they take place. It is worth mentioning that the research design and purpose of the study has been discussed in section B of the Ethics Application Form.

### **Data collection**

As regards the research method, we are going to use qualitative research and develop a discussion guide in order to gather data from the two samples, namely, human capital experts and ICE's managers. The discussion guide would reflect the research questions, which are going to be started with "what," "why", and "how." I think my research questions will guide the discussions and have the features of being open-ended, none directional and evolving.

Data would be collected through in-depth individual interviews with ICE management and recorded audio of the responses. The responses of ICE management will be analysed in detail in order to incorporate their evaluation of human capital's drivers and components with ICE. The sample of ICE's management should include key positions within ICE, namely, managing directors of each company (five companies), director of shared services and director of finance. A discussion guide will be developed in order to cover research questions and collect data, and probe responses from ICE's management.

The time of each in-depth interview is planned to be between ninety to one hundred minutes in order to establish trust and rapport with participants. During the interview, I will collect data, and I'll take notes, including gestures, facial expressions, non-verbal gestures and body. All interviews will be coded using a thematic technique where emerging themes can be linked to the research question through the conceptual framework.

### **Data Storage**

All data collected for this research will be safeguarded in an encrypted laptop that only the principal investigator has access to, as stated in question 4 of the Ethic Response Form. Recorded interviews will be transcribed and de-identified in order to maintain anonymity and confidentiality. Any paper data will also be safeguarded in a lockable cabinet and will be stored for five years until its adequately disposed of.

### **Benefits and Risks of taking part**

The benefits of this research can be summarized on the manifold: first research will allow individuals to dialogue and measure and enhance human capital in their companies which sounds to be the most insisting issue in the business world these days; second, research would enable participants to work in managing the human capital along with the financial capital and financial perspective of their companies. Third, research data will add substantial value to any company/organization facing a similar scenario, as it could serve as a reference point towards implementing the plan or framework for managing human capital risks.

The risks for participants will be minimal; nevertheless, the risk of examining your own backyard could air political, cultural, or emotional risks, as the topic is a sensitive one. If any of these scenarios see the light, the principal investigator will intervene with a plan to mitigate and minimize the risk exposure for participants

In the case of voluntary withdrawal, any data collected before withdrawal may be used, providing data is de-identified. Data could not be withdrawn once anonymisation took place. It is worth mentioning that risks have been addressed in the Ethic Response Form in questions 7, 8, and 10. Furthermore, the risk has been discussed in section E of the Ethics Application Form.

### **Expenses and/or payments**

Participation is entirely voluntary, and no payment or reimbursements of any type will be provided for the time allocated to the interviews. It is worth mentioning that the result of this study will be reflected on shared with all participants in order to implement an action plan for enhancing ICE's human capital.

### **Results of the study**

The outcome of this research will be made available in the form of a doctoral dissertation that will be housed physically and electronically in the library of the University of Liverpool. Confidentiality and anonymity will be maintained at all times in order for participants to not be identifiable from the results.

### **If I need to complain about this research – who do I contact?**

"If you are unhappy, or if there is a problem, please feel free to contact the Principal investigator Abdullah Atiah Alzahrany via the phone number +966 11 2918700 or the email [aaa@cc-sa.biz](mailto:aaa@cc-sa.biz), and he will try to help. If you remain unhappy or your problem remains unsolved, or you think you have a perception of a coercive element to participate in this research, then you should contact the Research Governance Officer of the University of Liverpool at [ethics@liverpool.ac.uk](mailto:ethics@liverpool.ac.uk). When contacting the Research Governance Officer, please provide details of the name and description of the study (so that it can be identified), the researcher involved, and the details of the complaint you wish to make.

This document has been produced to act as guidance for participants. Should additional information be required, do not hesitate on contacting the principal investigator at the coordinates below.

### **Thank you for considering your participation in this research.**

#### **Principal Investigator:**

Name Abdullah Atiah Alzahrany

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### Appendix C: RITA Coding forms

Sample No. (1)		Participant: 1					Human Capital expert										
Themes/Time segment by 5 minutes	5-9.59	10-14.59	15-19.59	20-24.59	25-29.59	30-34.59	35-39.59	40-44.59	45-49.59	50-54.59	55-59.59	60-64.59	65-69.59	70-74.59	75-79.59	80-84.59	85-89.59
Importance of human capital in the national and organisational context	X	X	X										X				
Human capital management framework and human capital drivers				X	X	X	X						X				
Human capital management associated risks								X	X	X	X				X	X	

Sample No. (1)		Participant: 2					VP of Human Resource in a company										
Themes/Time segment by 5 minutes	5-9.59	10-14.59	15-19.59	20-24.59	25-29.59	30-34.59	35-39.59	40-44.59	45-49.59	50-54.59	55-59.59	60-64.59	65-69.59	70-74.59	75-79.59	80-84.59	85-89.59
Importance of human capital in the national and organisational context	X	X	X														
Human capital management framework and human capital drivers				X	X	X	X									X	
Human capital management associated risks								X	X	X	X						

Sample No. (1 )		Participant: 3				Director of Human Resource											
Themes/Time segment by 5 minutes	5-9.59	10-14.59	15-19.59	20-24.59	25-29.59	30-34.59	35-39.59	40-44.59	45-49.59	50-54.59	55-59.59	60-64.59	65-69.59	70-74.59	75-79.59	80-84.59	85-89.59
Importance of human capital in the national and organisational context	X	X	X														
Human capital management framework and human capital drivers				X	X	X	X	X	X	X							
Human capital management associated risks											X	X	X				

Sample No. (1 )		Participant: 4				Human Resource Advisor											
Themes/Time segment by 5 minutes	5-9.59	10-14.59	15-19.59	20-24.59	25-29.59	30-34.59	35-39.59	40-44.59	45-49.59	50-54.59	55-59.59	60-64.59	65-69.59	70-74.59	75-79.59	80-84.59	85-89.59
Importance of human capital in the national and organisational context	X	X	X	X													
Human capital management framework and human capital drivers					X	X	X	X	X	X	X	X	X				
Human capital management associated risks														X	X	X	X



Sample No. (1)		Participant: 5					Human Capital expert										
Themes/Time segment by 5 minutes	5-9.59	10-14.59	15-19.59	20-24.59	25-29.59	30-34.59	35-39.59	40-44.59	45-49.59	50-54.59	55-59.59	60-64.59	65-69.59	70-74.59	75-79.59	80-84.59	85-89.59
Importance of human capital in the national and organisational context	X	X	X														
Human capital management framework and human capital drivers				X	X	X	X	X	X								
Human capital management associated risks										X	X	X	X				

Sample No. (2)		Participant: 1					Head of Shared Services										
Themes/Time segment by 5 minutes	5-9.59	10-14.59	15-19.59	20-24.59	25-29.59	30-34.59	35-39.59	40-44.59	45-49.59	50-54.59	55-59.59	60-64.59	65-69.59	70-74.59	75-79.59	80-84.59	85-89.59
Importance of human capital in the national and organisational context	X	X	X														
Human capital management framework and human capital drivers				X	X												
Human capital management associated risks						X	X	X									
Areas of development for human capital management in ICE									X	X	X	X	X	X	X		
Human Capital Risks within ICE and risks management																X	
Proposed actions to enhance human capital management and mitigate associated risks																	X

Sample No. (2)		Participant: 2					Head of ICESLE										
Themes/Time segment by 5 minutes	5-9.59	10-14.59	15-19.59	20-24.59	25-29.59	30-34.59	35-39.59	40-44.59	45-49.59	50-54.59	55-59.59	60-64.59	65-69.59	70-74.59	75-79.59	80-84.59	85-89.59
Importance of human capital in the national and organisational context	X	X															
Human capital management framework and human capital drivers			X														
Human capital management associated risks				X													
Areas of development for human capital management in ICE					X	X	X	X	X	X							
Human Capital Risks within ICE and risks management																	
Proposed actions to enhance human capital management and mitigate associated risks																	

Sample No. (1 )		Participant: 3					Head of MPI										
Themes/Time segment by 5 minutes	5-9.59	10-14.59	15-19.59	20-24.59	25-29.59	30-34.59	35-39.59	40-44.59	45-49.59	50-54.59	55-59.59	60-64.59	65-69.59	70-74.59	75-79.59	80-84.59	85-89.59
Importance of human capital in the national and organisational context	X																
Human capital management framework and human capital drivers		X															
Human capital management associated risks			X														
Areas of development for human capital management in ICE				X	X	X	X	X	X	X	X	X	X	X			
Human Capital Risks within ICE and risks management															X		
Proposed actions to enhance human capital management and mitigate associated risks																X	X

Sample No. (2)		Participant: 4					CEO of DPRA										
Themes/Time segment by 5 minutes	5-9.59	10-14.59	15-19.59	20-24.59	25-29.59	30-34.59	35-39.59	40-44.59	45-49.59	50-54.59	55-59.59	60-64.59	65-69.59	70-74.59	75-79.59	80-84.59	85-89.59
Importance of human capital in the national and organisational context	X																
Human capital management framework and human capital drivers		X															
Human capital management associated risks			X														
Areas of development for human capital management in ICE				X	X												
Human Capital Risks within ICE and risks management						X											
Proposed actions to enhance human capital management and mitigate associated risks							X	X	X	X							

Sample No. (2)	Participant: 5					Head of ICEWEB											
Themes/Time segment by 5 minutes	5-9.59	10-14.59	15-19.59	20-24.59	25-29.59	30-34.59	35-39.59	40-44.59	45-49.59	50-54.59	55-59.59	60-64.59	65-69.59	70-74.59	75-79.59	80-84.59	85-89.59
Importance of human capital in the national and organisational context	X																
Human capital management framework and human capital drivers		X															
Human capital management associated risks			X														
Areas of development for human capital management in ICE				X													
Human Capital Risks within ICE and risks management					X												
Proposed actions to enhance human capital management and mitigate associated risks						X											

Sample No. (2)	Participant: 6					Head of HG											
Themes/Time segment by 5 minutes	5-9.59	10-14.59	15-19.59	20-24.59	25-29.59	30-34.59	35-39.59	40-44.59	45-49.59	50-54.59	55-59.59	60-64.59	65-69.59	70-74.59	75-79.59	80-84.59	85-89.59
Importance of human capital in the national and organisational context	X																
Human capital management framework and human capital drivers		X															
Human capital management associated risks			X														
Areas of development for human capital management in ICE				X	X	X	X										
Human Capital Risks within ICE and risks management								X									
Proposed actions to enhance human capital management and mitigate associated risks									X	X	X						

