

**THE ROLE OF HRM IN INNOVATION MANAGEMENT DURING  
ECONOMIC CRISIS: A FOCUS ON THE OIL AND GAS  
INDUSTRY USING ENI AS THE CASE STUDY.**



**Author:** Evelyn Ama Sam

**GRADUATE SCHOOL**

**Supervisors:**

Andrea Filippetti - LUISS Guido Carli

Co-supervisor- Ponti Giovanni Benedetto

*Academic Year: 2020/2021*

## Abstract.

In today's global economy, there is an urgent need for human resources managers especially those in the energy industries to find innovative strategies to navigate the current global pandemic in addition to the calls for energy companies to move to a green economy. The heightening emphasis on innovation, human focus, collaboration, training, and change management are considered key strategies HRM needs to steer the affairs of their companies successfully. This research seeks to explore the role of HRM in innovation management during an economic crisis: a focus on the oil and gas industry using Eni as a case study. The overarching aim is to comprehend what strategies HRM considers key and hence focuses their energy on in order to help make their companies remain competitive in the face of economic crisis. A secondary research question aims at investigating how the COVID-19 forced to bring innovative ideas in HRM.

The methodology for this research is an exploratory qualitative case study approach that focuses on Eni, which is an energy company. The data collected was through two kinds of sources: semi-structured interviews of four respondents occupying senior HRM roles in Eni and an exploratory literature review. Subsequently, the analysis of the primary data collection of interviews followed an Aspect-Thematic Analysis.

The analysis of the data showed that all the HRM agreed on key strategies, which are considered effective to help make the company remain competitive in the wake of the global pandemic. These are training, smart working, Human Focus, management of change, innovation, and technology. Even though all of these were deemed to be of great importance, a special emphasis was placed on training and Human Focus as Eni considers its employees as key resources within the company, which needs to be given priority. The success of an HRM in striving through an economic crisis, therefore, depends heavily on the ability to handle the employees, make them feel part of the company, and equip them with the needed skills and knowledge to help the employees partake in the transformation process.

**Keywords:** *Innovation, collaboration, collaboration, human focus, training, technology, smart working, management of change.*

## Acknowledgements

Throughout my journey in my master's program and the writing of this thesis has been enriching and rewarding. This research has been insightful and has broadened my knowledge base since the research was conducted in a different culture and environment.

A special thanks goes to God for his mercies and protection and for granting me the grace to bring this research to a successful end.

I am most grateful to Eni for supporting the ideas behind my research topic from the onset. I want to sincerely express my gratitude to the human resource management of Eni Corporate University for their thought-provoking considerations and the information they provided me with throughout this journey.

To all other participants of the study, I express my deepest appreciation for all the time and discussions that have proved vital for my work. Your contributions made me come this far with this work. Not forgetting my supervisor, Professor Andrea Filippetti, I thank you for your valuable comments throughout this journey of writing the thesis.

A special thanks goes to my best friend with whom I feel boundless because he pushes me beyond my limit. When it is worth it, there is no limitation, he says. Thank you for making me a priority. Not forgetting my family for supporting me to find my path. I say a very big thank you. Finally, to the good friends I made in LUISS, I would like to express my gratitude to you for your great support. It has been great knowing and having you as friends.

## Table of Contents.

Abstract.....	2
Acknowledgements.....	3
1. Introduction.....	7
1.1 Background Framework.....	7
1.2 Problem statement.....	9
1.3 Proposed Research Question.....	10
1.4 Motivation.....	12
1.5 Relevance of the study:.....	12
1.6 Research Boundaries and limitations:.....	13
1.7 Thesis disposition: .....	13
2.0 Literature Review.....	15
2.1 Innovation .....	16
2.2 Slack/ Redundant resources and innovation .....	18
2.3 Innovation strategies and HRM performance .....	20
2.4 Innovative Approaches Employed by HRM.....	21
2.4.1 Training:.....	23
2.4.2 Performance Appraisal: .....	24
2.4.3 Reward Systems:.....	25
2.5 Human Resource Management.....	26
2.6 HRM in Crisis Management. ....	28
2.7 Effect of Economic Crisis on the Oil and Gas Industry.....	30
3.0 Methodology .....	33
3.1 Research Strategy: .....	33
3.2 Research Design: .....	34
3.3 Research Methods and Data Collection:.....	35
3.3.1 Secondary Data Collection: Literature Review: .....	35
3.3.2 Primary Data Collection: Semi-structured Interviews:.....	36
3.3.2.1 Interview Process:.....	37
3.3.2.2 Selection of Respondent: .....	38
3.3.2.3 Interview guide: .....	39
3.4 Data Analysis: .....	40
3.5 Research Quality.....	41

3.5.1 Authenticity.....	41
3.5.2 Trustworthiness.....	41
3.5.3 Transferability:.....	42
4.0 Empirical Findings.....	44
4.1 Demographics of Participants. ....	44
4.1.1 Interview Protocols .....	44
4.1.2 Eni. ....	45
4.2 Innovation and Technology .....	46
4.2.1 Training.....	49
4.3 Management of Change. ....	53
4.3.1 Challenges of management of change. ....	55
4.4 Human Focus .....	57
4.5 Collaboration and Inclusivity.....	58
5.0 Discussions .....	61
5.1 Discussion of Results.....	61
5.2 Innovation and Technology. ....	61
5.2.1 Implications of innovation and technology.....	63
5.2.2 Training:.....	64
5.2.3 Implications of training.....	65
5.3 Human Focus. ....	67
5.3.1 Implications of Human Focus.....	68
5.4 Collaboration and Inclusivity.....	69
5.4.1 Implications of Collaboration and inclusivity.....	70
5.5 Management of Change. ....	72
5.6 Implications of Management of Change.....	74
6.0 Conclusion .....	76
6.1 Recommendations.....	76
7.0 References.....	78
8.0 Appendix.....	102
8.1. Appendix 1: Interview Guide for First Respondent.....	102
8.2 Appendix 2: Interview Guide for Second Respondent. ....	103
8.3 Appendix 3: Interview Guide for Third Respondent. ....	105
8.4 Appendix 4: Interview Guide for Fourth Respondent. ....	106

List of Tables .....	107
Table 1 - Various definitions of innovation by respondents. Source: Produced by the author... 48 .....	107
List of Figures .....	107
Figure 1- Exponential Increment of Training. Source:( Innovative Methodologies Dept.) .....52. ....	107
Summary of Research .....	108

## 1. Introduction

This chapter gives a brief overview of the research topic. It commences with a theoretical framework then further goes to state the problem. The proposed research questions, the relevance of the study, and the motivation behind this research are presented in addition to the boundaries and limitations of the study. The chapter ends with the structure of the thesis in general.

There has been heightening evidence that proves that practices of human resource management are key predictors of organizational performance (Giauque *et al*, 2013). Over the years, new technologies have been made available in the market-leading to key changes within the business processes of many companies. According to a report by the Organization for Economic Cooperation and Development (2009), major economic crises have propelled organizations' management to adopt strategies to live up to the major threat these crises pose to their businesses. With increasing worldwide competition and ever-increasing environmental turbulence, the ability of the organization to innovate is seen as a key factor to ensure their success (Brown & Eisenhardt, 1998; Cohen & Levinthal, 1990; Leonard-Barton, 1995; McGrath, 2001; Tsai 2001).

In this study, we will consider the extent to which HRM's role in innovation can serve as a tool to help management maintain the organization in moments of crisis.

### 1.1 Background Framework

Innovation is the intentional introduction and application within an organization of ideas, processes, products, or procedures new to the unit of adoption, designed to significantly benefit the organization or wider society (West & Farr, 1990). It is proven that new products and technology boost market share and stock value as well as overall survival (Banbury & Mitchell, 1995). It could be argued that maintaining a sustained basis is complex for many companies (Katila and Ahuja, 2002). Many organizations that demonstrate innovation rather than remaining committed to their traditional processes or work in the past are more likely to flourish in challenging times (Shalley et al., 2009). Yet, innovation puts forward some challenges on the organizations, and a move away from the existing ways of undertaking work into new domains is not

straightforward, especially given employees' commitment to what worked well for them in the past (Unsworth and Clegg, 2010). Institutions have the power to draw on employees' insights, abilities, and motivations within and across functional areas and this heightens the prospect for more incremental developments rather than radical development. Innovation signifies intentional changes, novel, and of value within the context in which it occurs (West and Farr, 1990) arising from the individual creative and innovative actions. Innovation may be limited in scope (which could be a team set aside time for regular reflection) or radical (which is a team implementing a new system of peer review that the organization takes up). Innovation might more or less be aligned with institutional parameters that frame and underpin organizational endeavours (Di Maggio and Powell, 1983).

On the other hand, human resource management maximizes employee performance to achieve the employer's strategic objective (Wood, 1999). A report from McKinsey and Company (2021), states that most oil and gas industries face a great deal in using human resources to stimulate innovation in an organization. Managers understand how to organize their human resources when the aim is to pursue innovation in the event of economic crises. For example, HRM is seen as a major intangible asset for innovating an organizational performance measurement and management system (PMMS) (Bourne et al, 2013; Kaplan, 2012; Kaplan and Norton, 2004, 2005). In place of this, evaluating human resources management is seen as a central issue both in research and in practice. The ability to assess HRM function in innovation and its impact on economic crises is of great importance. It helps us to measure the contribution and the value HRM adds to the organization. The roles HR plays help to increase credibility and legitimacy as well as enhancing an organization's power (Vermeeren *et al.*, 2014). Human resource managers from time to time evaluate the organization which subsequently helps them to address any potential deficiencies and problems that may confront the company. Effective HRM is considered synonymous with well-developed practices. The contribution to the industries' performance by HR performances is not only determined by the content of HR practices but rather by the context in which HRM roles are implemented (Vermeeren *et al.*, 2014). HRM is assumed to accurately represent the opinions of all members by virtue of the roles they play. Nonetheless, this

approach may not necessarily represent reality because it ignores the variability in employee's practices.

Human Resources Management is the organizational function within a field that focuses on people for instance hiring, training, compensation, performance appraisal, business growth, employee inspiration (Heathfield 2008). Simply put, HRM is the management function that focuses on hiring, training, motivating, and keeping proficient employees.

The quality of workforce the HRM hires and maintains can help measure the superiority and how powerful the organization becomes. The ability to discover prospective or existing employees with the right competencies and capabilities to help achieve the utmost objective of the organization even in the time of crisis is considered a great achievement to the organization. To be certain that the organization maintains the right labour, effective HR management and decisions are key.

Companies worldwide aim to focus on holding on to employees considered to be assets to them especially those that hold key information and competencies. The reduction of employee turnover and the conservation of knowledge are some key issues the HRM seeks to uphold. It can be argued that organizations always face cost burdens in the event of acquiring new employees and also the risk of the new workforce lacking the requisite capabilities to replace existing employees that have left. HR management endeavours to propose adequate benefits to the employees in order to lower the risk of losing knowledge.

## 1.2 Problem statement

The main objective of any business is to make maximum use of opportunities available in order to maximize profit. The different organograms within any business or organization play important roles in ensuring that the missions and visions of the organization are met. The Human Resource Manager plays a pivotal role in every business (Kalyani & Sahoo, 2011). The functions of the HRM in businesses are so diverse and complex that in the event of a crisis, with the least mistake, the business can become fragile in its operation. Companies that are able to adapt to innovative processes and means especially in times of economic crisis are able to gain a

competitive advantage over others (Rajapathirana & Hui, 2017). The environmental uncertainties, as well as the complexities that are faced every day by businesses, are compelling. It is strenuous to keep up with the pace of evolving and competitive dynamics and thus, there is the need to find alternative courses of action (Baedeker et. al., 2014). Sustainability, moreover, is a key prerequisite in today's businesses. Work organizations are undergoing a period of rapid change due to technological advancement, the changing, and increasing trends of globalization, and changing lifestyles and workforce (Penn & Desyllas, 1999). Crises have had severe impacts on many industries. Most companies are in distress during this period which causes some to fold up, others may lose a significant amount of market share whereas those that can put in place good policies eventually survive. Change and innovation that are adequate are considered necessary in this crucial moment and HR must know the right amount needed to survive the critical moment.

The oil and gas industry may be resilient in the face of crisis when good innovative policies are adopted, and this will make the company face the challenge and thrive. These strategies could include amongst other things, the skills to maintain or dismiss in times of laying off workers in economic difficulties, what skill to develop to adapt to the changes that may occur in the industry in the crisis moment, what to consider when hiring future employees after the economic recession, key training programs to be implemented, as well as which key HR functions should be prioritized in the innovation process.

HRM is particular about losing employees with key competence with the reason being that oil and gas projects have long gestation periods and losing strategic employees means the project would sooner than later come to a halt. Therefore, there is the need to implement human resources practices that aim at retaining employees' interest and motivation (Rodriguez - Sanchez, 2020). However, risky and hectic work poses a major challenge for employee turnover in an oil and gas organization (Tiwari, 2012).

### 1.3 Proposed Research Question

Many issues come to mind in addressing this research topic. The functions of the HRM are delicate and narrowing it down to the oil and gas companies raises a lot of concerns. The oil and gas companies play a crucial role in sustaining and fuelling our economy (Grasso, 2018). With the very little glitch in their operation, other driving sectors of economic development will be affected. Human resource management has the potential to implement policies for the growth of an organisation even in the time of crisis (Caligiuri *et al.*, 2020). While it is evidently clear that much can be said, it is imperative to address these key questions listed below for the sake of time and scope of the research.

1. How has the economic crisis increased the effectiveness of HRM roles?
2. What are the most effective innovative strategies employed by HRMs in the Oil and Gas business for increasing survival during crises?
3. In the event of an economic crisis, what innovative approaches are employed by the HRM in managing employees?

In the wake of this current global pandemic, it is relevant to pinpoint that I found myself writing a master thesis covering HRM's role in innovation management during a crisis. In addition, the oil and gas industry are battling with pressures from stakeholders to quickly switch to green energy. From this scenario, it appeared logical and of substantial relevance, considering this aspect in my thesis. The second line of reasoning can be drawn:

1. How has economic crisis increased the effectiveness of the HRM's role?
2. What is the impact of HRM's innovative approach on the total performance of the organisation in the energy transition period?
3. Can the findings obtained using Eni as a case study be applied to other oil and gas companies and even non-oil and gas operating companies?

## 1.4 Motivation

The COVID-19 has undoubtedly affected all organizations, leading to a maze and challenging environment for human resource managers to devise ingenious solutions to ensure the sustainability of their businesses (Hamouche, 2021). The occurrence of the global pandemic has adversely affected many businesses (Shafi *et al.*, 2020). It is evidently clear that there are very few studies that have tried to address the impact of COVID-19 on HRM in general (Hamouche, 2021). Others have also studied the impact of COVID-19 on the tourism industry and the hospitality business (Su *et al.*, 2020). However, studies on the effect of this crisis on HRM especially in the oil and gas industry are sparse. Considering the pressures mounted on the oil and gas industries by the environmental and climate change advocates and other stakeholders and the current global pandemic, there is no doubt that HRM needs to be innovative, invent outside-the-box master plans to support their business to remain competitive. As a result, it is worth considering the role of HRM in innovation management during an economic crisis.

## 1.5 Relevance of the study:

Many studies demonstrate a positive correlation between human resource management and organizational performance (Brito & Oliveira, 2016). Studies are now beginning to explore the role of human resources management in ensuring organizational innovation (Rasool *et al.*, 2019). Many issues remain unexplored such as the innovative role HRM plays in moments of crisis. There is also little evidence of the effects of these roles on the survival of the business (Fairlie, 2020). The relevance of the study stems from the analysis of the opportunities and challenges the innovative ideas of the HRM pose to the organization as well as the implication this crisis has on their organization. It may open discussions in many areas like the relevance of HRM to businesses.

This study's findings will redound to the oil and gas industries' benefit, considering that the industry is faced with numerous crises every now and then. There is the need for companies to always be prepared for unforeseen circumstances even when they are crawling from current ones. The HRM is an integral part of every

organization (Ghazzawi & Accoume, 2014). The greater task HRM plays in an organization justifies the need for the HRM to be more innovative, to steer the change of events towards a positive end in an organization. Thus, companies, especially the oil and gas industries that apply the recommended approach derived from the results of this study will remain competitive even in the wake of a crisis as they may incur no significant loss. The HRM would be guided on what innovative approaches should be hammered on during a crisis and how to deploy those innovative ideas. For researchers (if it is a group) or an independent researcher, the investigation will unveil critical areas in the oil and gas operations that need to be taken a closer look at, hence pinpointing ways to help sustain the industry.

#### 1.6 Research Boundaries and limitations:

The focus of the research will be on understanding the innovative strategies the HRM embraces during difficult times. In particular, the various decisions HR makes to enable the company to withstand threats regardless of the impact of the crisis is what this thesis looks at. The emphasis will be on the key innovation technologies adopted, the measures put in place, and the overall effect on employees and the industry in general.

#### 1.7 Thesis disposition:

In order to guide the reader, presented below are the thesis structure.

1. Introduction: it presents the research project to the reader by providing a background framework, problem statement, motivation, research questions, the significance of the study, the limitations, and the findings of the research questions. It goes further to indicate the limitation and boundaries of this work.
2. Theoretical Framework: describes the relevant literature for the study, including the description of the strategic roles HRM play and some innovative ideas they implement during an economic crisis.

3. Methodology: describes the methodology used to conduct the research, touching on the research strategy, collection of data, and analysis, quality of the research, and finally reflecting on the decisions.
4. Analysis of the data: Brings to bear the main findings from the data collected from the semi-structured interviews.
5. Discussions: Provide the correlations between the theoretical framework and the empirical findings.
6. Conclusion and recommendation: provide answers to the research questions, show practical implications, and discuss recommendations for future research.

## 2.0 Literature Review

This chapter will present the theoretical foundation of the study. This study aims to analyse the innovative strategies the HRM put in place during crises. A comprehensive presentation of Human Resource Management and innovative strategies of HRM in crisis covering the definition, the relationship between innovative process and growth, the different measures the HRM adopts to make the industry resilient in the face of challenges amongst others will be looked at. Empirical literature acknowledged the strong relationship between innovation and long-term economic growth (Chang, Gong, & Shum, 2011; Maier, Brad, Nicoara, & Maier, 2014). Most studies on innovation in crisis management are geared towards reducing the damage or salvaging the industry from difficult times temporarily. Human resources managers are deemed poised to have been given the mandate to implement policies that aim at growing the company. Human resource managers should be able to put in place methods that could help them to forecast crises and implement preventive measures to reduce the impact of the forecasted risk. With the increasing rise of the industrial crisis, it opens the opportunity for the HRM to implement innovative strategies to solve problems posed by the crisis. Many previous pieces of research focus on the relationship between HRM practices and organizational performance (Shipton, Fay, West, Patterson, & Birdi, 2005). Nevertheless, only a few focuses on the strategic HRM practices in the event of a crisis. We cannot deny the importance HRM plays in most organizations, but these traditional roles are not enough in severe economic downturns and that the aim is to find the innovative roles HRM plays during those difficult times.

Most research has been done on the innovative approaches HRM used during the crisis (Caligiuri *et al.*, 2020). In most instances, the crisis is either financial or geared towards a specific sector of the economy. However, there has not been any crisis so vast and wider than the COVID-19. The global pandemic affected every part of the world. The global economy was badly hit, and all the various parts of the economy were affected. Previous innovative approaches were not robust to tame this global pandemic. The pandemic tested every part of the economy and won. The innovative approaches used, needed to be revisited and revised to meet the current pandemic. My research is to understand innovative approaches used by the HRM during this pandemic and the strategies they hope to adopt to handle future pandemics of this nature or even worse.

It can be inferred that judging from the gravity of this pandemic, any effective and efficient innovative approach which is a solution to this crisis can be used against most unforeseen crisis yet to come.

## 2.1 Innovation

Innovation as defined by Rogers in (1998), is a network or a chain of different changes in business activities, with overarching goals of improvement in a firm's performance. According to Cooper & Kleinschmidt, (1993) and Tohidi & Tarokh, (2006), these changes can be novel or improved goods and services, creating intellectual assets or technologies, or even investment in education or new market approaches. Innovation is key for an organization to heighten its performance and competitiveness globally (Abbaspour, 2015; Le Bas & Lauzikas 2009; Ling & Nasurdin, 2011). A culture of innovation is key to ensure the success of an organization (Shahnaei & S.Long, 2015). Innovation propels an organization to enjoy a competitive advantage (Aryanto, Fontana, & Afiff, 2015, Subramaniam & Youndt, 2005). The survival of an organization in today's harsh economic condition is highly dependent on innovation (Abbaspour, 2015; Ceylan, 2013; Runfeng, 2011). Further, innovation is pivotal for the success, advancement, and survival of an organization (Chang, Gong, & Shum, 2011; Maier, Brad, Nicoara, & Maier, 2014). Innovation should be looked at from two different angles thus its depth and breadth. The breadth of innovation includes the policies, services, procedures, administration, products, and so on. Whereas the depth of innovation features the significance, the expanse as well as the influence on long-term profitability (Chuang, 2005). Technological and administrative innovations are the different types of innovation in an organization (Chuang, 2005; Mohd Nasrudin & Tan, 2011). Innovation according to Shipton, Sparrow, Budhwar & Brown (2017), could be limited in scope (e.g., the setting aside time for steady reflection by the team) or radical (the team implementing a novel system of peer review that could be taken up by the organization in general). Following the recession of the 1970s, much research on the relationship between innovation and economic development has been conducted (Tylecote, 1992). Certain factors determine how persistent a firm can be with its

innovation activities. Those that depend on firm-specific characteristics are strategies, the attitude of management, stage of development amongst others. Whereas technological change and scientific research are those that touch on the cumulative and path-dependent nature of innovation (Filippetti & Archibugi, 2010). The majority of researchers are of the impression that demand, and innovation are positively related and that a decline in demand will push innovation activity downwards (Filippetti & Archibugi, 2010). According to Merrill, (2008), to see the fruitfulness of innovation, there is the need to aggregate different innovative individuals. Many organizations vary in the way they undertake innovative activities and learn. In other words, innovation behaviour differs across sectors in business: various national systems of innovation in Europe are linked with different responses to innovation when financial crises erupt (Filippetti and Archibugi 2011). The inability to sustain innovation during crises is a thing of great concern (Filippetti & Guy, 2016). Most often, innovative projects are to be denied in times of adversity because their outcomes are uncertain (Herold, Tayaraman, & Narayanaswamy, 2006). Limited attention has been given to activities that create resilience in an organization (Galdeano, Ahmed, Fati, Rehan & Ahmed, 2019; Ishak & Williams, 2018). Usually, firms undertake innovation through extensive interaction with diverse actors outside their domain. Some of these actors include research centres, universities, suppliers, users, and so on (Filippetti and Archibugi 2011). Many factors come together to shape the national environment and how it tends to affect the innovative behaviour of firms during economic downturns. In a macroeconomic shock, a vigorous financial system might play a vital role if it can furnish the firm with the resources which may be invested in innovative activity (Filippetti and Archibugi 2011). It is worth noting the two arguments on innovation. On one hand, it is on record that firms that are fully established may postpone the introduction of innovation as it leads to diverting resources from projects that are in progress for, they prefer to milk the value of their existing rents. Firms may be invigorated to embark on innovative ideas, given that the value of current rents reduces during a recession. On the other hand, a view hinged on the role of demand has it that, during business-cycle upswings, innovation is deemed to be introduced (Filippetti and Archibugi 2011).

## 2.2 Slack/ Redundant resources and innovation

The effect of the COVID-19 pandemic on most organizations is manifest. These effects are both positive and negative depending on how the organization manages the crisis. Since the outbreak of the worldwide pandemic in 2020, some organizational resources within various organizations may be lying idle or are not being utilized efficiently and effectively due to the fact that some activities that require the workforce to be physically present cannot be undertaken. This means the workload of the employees would obviously be reduced and some may even be dismissed when their services are no longer needed.

The issue of the employees having less work to do or facing dismissal will depend on the innovative ideas the HR manager possesses. Organisations are in constant competition against each other, they continually strive to find new ways to maintain and improve their competitive position in order not to lose market share and performance (Kamien & Schwartz, 1979). As a result of this competition, it is imperative for the human resource manager to design various means to make use of the redundant resources in a more innovative way. These excess resources within the organization due to the effect of the COVID-19 can be called organizational slack. Too much or too little of these resources be it financial or workforce is detrimental to the organization (Nohria & Gulati, 1996).

Slack is defined as the resources an organization has that are more than the quantity needed to produce the required level of output the organization desires. These resources could be employees, untapped opportunities, unused capacity, and so on (Nohria & Gulati, 1996). Much research within an organization has it that slack has an inverse relationship with organizational performance because it encourages managers to engage in vital innovative activities that will propel the performance of the business (Lee, 2014). Too little slack is bad for the organization, and too much slack is also detrimental (Nohria & Gulati, 1996). Innovation is central to most organizations since it aids the organization to leave up to current trends and to also develop. In recent times, most firms are pressured to innovate and at the same time in competition to eradicate all forms of slack within their organization (Nohria & Gulati, 1996).

Considering this statement, we can recognize a paradox, on one side we have indicated that slack enhances efficiency, and it is vital for innovation, and on the other

side, the organization will be at risk if it gets rid of its redundant resources to the point that it undermines their innovation capacity. It has been argued that slack renders enormous benefits to the organization in terms of innovation by permitting the organization to assess new strategies and innovative projects which may be difficult or impossible to approve in a resource-constrained environment (Cyert & March 1963:278). If this is the argument, then the issue of the COVID-19 making some workers have less to do or some on the verge of losing their jobs may be avoided when the human resource manager is able to create innovative ideas such as designing effective training activities to equip these employees with new skill sets that would be valuable to the organization.

In this case, the employees will be useful and would be occupied with work that will reflect in higher productivity for the business. This will help the organization to introduce new products and as well enter into a new market. Viewing this from a different angle will also free managerial attention (Cyert & March 1963). This is because, in a resources-constrained environment, managerial attention is mostly centred on short-term performance issues other than on undetermined innovative projects (Nohria & Gulati, 1996). Slack resources can be used also to counter uneven performance (Kamin & Ronen, 1978) or to other occurrences such as environmental jolts or budget cuts (Meyer, 1982).

Some criticisms have been raised against slack enhancing organizational innovation. Opponents argue that slack lessens the desire to innovate and promotes undisciplined investments in research and development activities that seldom produce economic benefits (cf. Jensen, 1986, 1993; Leibenstein, 1969). Others argue that slack resources are synonymous to waste and that these resources reflect the self-interest, and incompetence of management rather than it being viewed as a buffer and a thing of higher importance to the organization (Nohria & Gulati, 1996). Nohria and Gulati (1996) further stipulate that these slack resources are gratuitous costs that must be eliminated.

In sum, when the organization has few redundant resources, its innovation is inhibited because it cannot experiment with innovative ideas that their benefits are unknown. Equally, when the organization has an excess of these resources, it breeds undisciplined because bad projects may be ventured into other than good projects. These statements

suggest that moderate-level redundant resources are good for the organization to enhance innovation (Nohria & Gulati, 1996).

### 2.3 Innovation strategies and HRM performance

Human resources management effectiveness can manifest in how well they invest in human capital and reduce the cost to the minimum. Human resources are very crucial in every organization and that; having their interest and needs at heart is very important to the organization (Beardwell & Clark, 2007). There is no denying the fact that innovation is vital, nevertheless, it is impossible to attain innovation without aligning human resources to innovation initiatives and instituting favourable human resources practices (Kim & Choi, 2014; Le Bas & Lauzikas, 2019). Empirical studies (e.g., Al-Bahussin & El- Graihy, 2013; Aryanto, et al., 2015; Katou, 2008) have unveiled the correlation between human resource practices and innovation. When the interests of employees are considered, it reflects in the performance of the HRM. Human resources management's objective is to increase the success of the organization along with the success of the workers by making good use of the limited resources available. It should adopt these basic objectives which are efficiency, competitive advantage, legal compliance, work-life quality, and workforce compliance (çetin and Ozcan, 2014). Innovative strategies' effect on HRM performance manifests in several ways. One way is by undertaking personnel management beyond the usual bureaucracy and rules by benefiting from the enormous skills of the employees. Innovative strategies encompass several humanitarian disciplines such as training, empathy, talent assessment/management, psychology, teamwork, trust, citizenship, social responsibilities, rewarding, and motivation. Over the years, many pieces of research focus on the relationship between HRM practices and organizational performance (Sipton *et al.*, 2005). Taking insight from the learning perspective of an organization, it can be said that the HRM system has the propensity to promote organizational innovation. We cannot deny the fact that organizations provide a framework within which an individual commit to learning and feels motivated. One thing of concern is how the labour forces within an organization are affected by the firm's innovation

activities during a crisis. One of the forerunners of organizational resilience is strategic human resource management (Stokes et al, 2018). When HRM practices are aligned with an ambidextrous organization, a firm can develop the capabilities of a resilient organization (Stokes et al, 2018). Through the innovative activities of the HRM, competencies among workers are designed, which has the possibility to reinforce situation-specific response to threats, captivate uncertainty, and engage in transformative activities so that potential disruptive events that threaten organizational survival could be exploited. Innovative strategies of the HRM hold that where there is a commitment to learning, the organization urges the employees to take risks, make several experiments with ideas and not to be too rigid in their pursuit to unveil new and different phenomena of interest. Normal accident theory argues that instead of trying to avoid a crisis, an organization by planning and developing strategies to withstand a crisis will enable them to turn their crises into opportunities (Shrivastava, 2009; Rijpima, 1997; Perrow, 1984). To propel creativity, it becomes imperative to recruit people who possess the right skills and knowledge required to meet identified gaps (MacDuffie, 1995; Song, Almeida & Wu, 2003). In other words, when core competencies and situation-specific responses are created among employees by HRM, the organization ultimately will develop capabilities that will make it stronger and effectively withstand the crisis (Coombs & Laufer, 2018; Gittell et al., 2006). For HRM to boost innovative activity, he/she should be able to ensure employees' commitment to contributing to innovative ideas to achieve greater successes. Research on innovation opines that there should be the communication of new ideas and knowledge throughout the organization for it to be implemented (Damanpour, 1990). In the first place, innovation occurs only when individuals have creative ideas (West et al., 2004), it is imperative for an organization to lay down the various mechanisms aimed at supporting an individual's quest in acquiring new knowledge.

#### 2.4 Innovative Approaches Employed by HRM.

Human resources are indispensable resources for every organization and the organization seeks to do whatever it takes to maintain these resources. Human resources are important for every organization according to Al-Bahussin and El-Garaihy (2013).

Performance is linked to the effectiveness of human resources (Matookchund, N.G., & Steyn, R (2019). It is evident that most successful organizations utilize human resource practices as a tool for improving organizational performance and effectiveness (DeNisi & Pritchard, 2006; Esu & Inyang, 2009). Research and development employees such as engineers and scientist have built up or embedded in them some tacit knowledge and this knowledge is lost by the firm when they are dismissed, firms usually do not lay off research and development employees (Hall, 2005; Griliches, & Hausman, 1986; Lach & Schankerman, 1988). Empirical evidence has it that research and development investment play a crucial role in driving economic performance. (For an extensive empirical study see, Gullec and van Pottelsberghe de la Potterie, 2001). Most companies invest more in R&D to become competitive and also to withstand potential crises. According to the report of Global innovation 1000 study by Booz & Company in 2003, a Korean electronics company, Samsung ranked second in research and development spending in 2003. Another report by Boston Consulting Group revealed that the most innovative automotive company in 2012 was Hyundai, a Korean car manufacturer. All these come to prove that there are gains in investing in innovation. HRM mostly put in place a lot of measures to avoid laying off key employees since its cost outweighs the benefits derived. In an ever-increasing dynamic world, firms are encouraged to be more innovative (Nohria & Gulati, 1996). It is argued that firms that do not have sufficient slack are deemed to delay new investment outlays in times of adversity. Slack acts as a cushion to aid the firm to successfully adapt both to internal and external pressures due to policy changes (Bourgeois, 1981, p.30). Slack here means a collection of resources within an organization that are in excess of the minimum required to produce a given level of organizational output (Nohria & Gulati, 1996). Persistence fosters innovation as well as ensures the right flexibility needed to adapt to the resource's allocation levels as the project progresses. In times of economic crisis, Human resources practices give rise to steady improvement and success (Ahmed, Mohammed, & Islam, 2013; Hayton, 2015). Delery and Doty (1996) opine that the practices of the human resources manager are key to achieving organizational goals. It is important to appreciate the means that human resources propel innovation as well as the practices when deployed can result in the right performance level of organizational innovation (Shahnaei & S. Long, 2015). These practices are of utmost importance and

constitute innovative elements (Teece, 2007). HRM should be able to implement specific practices in order to catalyse innovation to keep the organization resilient and to be able to withstand the turbulence situation and below are some of the innovative strategies.

#### 2.4.1 Training:

Training is one of the innovative techniques used by HRM in times of crisis. According to Shipton et al., in press, it states that training is about exposing individuals to new and different experiences to enhance questioning of the ways of existing operations. Extensive training on jobs or skills can heighten the knowledge needed to make connections between divergent stimuli (Bae & Lawler, 2000; Guthrie 2001). The training activities put in place have the propensity to ingrain in employees a greater willingness to be adaptable and have a broadened perspective of understanding and interpreting problems (Clark, Amundson & Cardy, 2002). Training aims at equipping the individuals with knowledge and this helps to reduce employee turnover since high staff turnover is linked to knowledge depreciation (Bento & Garotti, 2019). A recent approach suggests that putting in place training programs secures flexibility and alleviates transitions between tasks and projects (Danowsky & Poll., 2005). It is imperative for the human resource manager to plan training programs as soon as a crisis strikes (Lockwood, 2005). According to Nahapiet and Ghoshal (1998), they argued that knowledge is not just an individual attribute, but rather has a collective and tacit dimension. HRM systems could augment knowledge transfer between individuals to assume the collective dimension mentioned earlier. Career development seminars or meetings form part of training schemes when conducted regularly showcase a non-threatening environment in which an employee gains the right skills needed to effectively work with others and overcome the challenges the organization might face now or in the future (Shipton, Fay, West, Patterson & Birdi, 2005). Research has proven that activities that aim to foster empowerment, layering, involvement, and participation, granting employees input into performance goal setting may intercept “core competencies” from becoming “core rigidities” (Leonard-Barton 1992, 1995). To

decide what type of training and development is required to survive an economic crisis, there is the need of the human resources department to conduct an evaluation of the workforce present in the organization. Companies in crisis can benefit from ascertaining training needs for their existing staff. One pivotal role of HRM is to reduce losses of the organization and prevent labour turnover. Therefore, training and development programs should be realized as tools for retaining talented employees as well as gaining their loyalty (Vardarlier, 2016). Training is much more economical than the cost of employing new and competent applicants. Training is an essential tool in the oil and gas industry since most of the jobs in the industry are very hazardous either directly or indirectly. Therefore, having good knowledge and experience in dealing with organizational hazards to prevent injury or fatality at the workplace is key. Training equips the employee with the right skills and abilities which fine-tunes their innovation in production, processes, and in their everyday operations (Jaw, 2003). There is improved organizational expertise especially in demand and content innovation terms when training is implemented (Weisberg, 2006). Training can help address some problems linked to employee turnover according to Landsman (2004). He argues that training is a valued activity for enhancing employee's performance and skills. It helps to curtail job stress since roles are explicitly defined to employees. Further, training is carried out to inculcate employees with skills to execute their tasks efficiently, have more insight into the organization as well as building good working relationships. It also helps to increase the employees' productivity level since their level of commitment towards their organization heightens through the training sessions.

#### 2.4.2 Performance Appraisal:

Empirically, various studies have consented to the fact that performance appraisal (Aktharsha & Sengottuvel, 2016; Dalota & Perju, 2010, Runfeng, 2011), along with other human resource practices (Aktharsha & Sengottuvel, 2016; Chang *et al.*, 2011; Dalota & Peru, 2010), is an antecedent to innovation. Human resource practices such as performance appraisal, participation of employees, and reward systems promote innovation (Dalota & Perju, 2010; Jimenez-Jimenez & Sanz-Valle, 2005; Laursen &

Foss, 2003). Performance appraisal methods can add to organizations' existing innovations where some employees work with better innovation and creativity (Jimenez Jimenez and Sans Valle, 2005). Cohn *et al.* (2008), concur that getting the right people is crucial to building a culture of innovation at the workplace. It can be argued that key personality traits are shared by innovators and these traits can be identified and fostered (Agolla, 2018). Further research has it that, for employees to come up and experiment with new ideas, the management of the organization must put in place the right mechanisms (Agolla, 2018). These mechanisms should incorporate forms of appraising an employee. This will boost the motivation of the workers to come up with greater innovative ideas. When employees' performances are recognized, it helps boost their morale and enhance their developmental skills. Performance appraisal forms a pivotal aspect of the career aspirations of employees as well the overall organization's objectives. The employees' aspirations are the preference for advancement, influence, financial rewards, work-life balance, and the overall job satisfaction that must be achieved by them when there is an effective performance appraisal system (Gatherer and Craig, 2012). Every organization that cherishes innovation will embrace appraisal systems that consider the core values the business cherishes the most. To cite an example, any organization that appreciates creativity, problem-solving, innovative ideas as key attributes aside from the traditional performance functional areas and competencies, such organizations will prioritize these core values stated above. Creativity is the foundation of the modern organization, in essence, there is the need for an organization to embrace effective performance management systems on creativity, innovation, and reward those who have demonstrated such attributes (Uzkurt et al., 2013). Buller and McEvoy (2012) state that there should be a sort of alignment between the organization and individual factor since the performance of an organization is highly dependent on the individual and the collective behaviours of the employees. Further, the creation of human and social capital to attain superior performance is facilitated by alignment (Bendoly et al., 2010).

#### 2.4.3 Reward Systems:

By virtue of the dynamic and competitive business environment that organizations continually face, it poses a sort of challenge to them. Therefore, it is imperative for an organization to ensure the satisfaction of its stakeholders since their satisfaction is positively correlated to the organization's survival. We can achieve the stakeholders,' specifically the employee's satisfaction by implementing innovative strategies. Firms may get transformed either through pressure or by choice due to rapid and unexpected eventualities. The theory of ability and motivation opportunity states that better performances are expected of employees when motivated (Paauwe, & Boselie, 2005). Reward systems within an organization play a key role in attracting and retaining employees (Abury, 2011; Lankeu and Maket, 2012). It has been established that suitable reward systems not only attract and retain qualified workers but also, go a long way to motivate them to give their all (Lankeu and Maket, 2012:269). HRM plays a crucial role in impacting employees' motivation as well as exhibiting the positive attitude required to support firms to gain competitive advantage (Shahnaei & S. Long, 2015). Fringe benefits or supportive practices of HRM can motivate employees to become more innovative (Tan & Mohd Nasrudin, 2011). Employees are able to take risks and think creatively for successful and novel products and processes to enhance the innovation performance of the organization when adequate compensation schemes are in place (Shahnaei & S. Long, 2015). Reward systems must be aligned with employees' performance so that workers will be adequately rewarded for their creativity and innovation since innovative ideas bring value to the organization (Agolla, 2018). Engida and Bardill (2013), and Lankeu and Maket (2012) argue that reward drives innovation and for an organization to innovate, they should have in place a competitive reward system to attract and retain the most valued employees and also urge them to be innovative and creative. One of the best techniques of HRM in oil and gas is giving rewards and compensation to deserving employees. The motive of implementing reward systems is (1) to attract employees, (2) to inspire workers to the highest point to give their all, (3) To ensure employees stay thus reducing turnover to the minimum.

## 2.5 Human Resource Management.

Human resource management activities have heightened in today's competitive environment because it challenges the organization to tackle its internal capabilities to be able to face the turbulence from outside be it a change in government policies, an outbreak of a pandemic, or a change in fiscal policies. It has become one of the salient units of modern firms and organizations (Vardarlier, 2016). Human resources management is more or less an unavoidable consequence of starting, growing, and sustaining an organization. HRM is the idea of utilizing human capital reasonably and effectively (Vandarlier, 2016). The department of human resources serves a variety of roles and for various purposes which includes but not limited to increasing competition, managing international business, technological innovations, operating as stipulated with current regulation, monitoring union activities, ensuring ethical issues and the best practices versus the best fit. From the perspective of HRM, it has been argued that employees should be considered as the utmost factor that has the potential to add value to the organization (Canman, 1995). A simple definition of HRM is given by Baysal which states that it is the developing and the increasing contribution of employees to the organization's welfare (Baysal 1993). Employees considered as pivotal resources of the organization should therefore be managed in the same way as any other resources deemed important to the business (Kane, Crawford, & Grant, 1999). The human resources department to a greater extent is considered as the preservers of the culture of the organization (Zaidi, 2005) as well as guarding the values and principles the organization upholds throughout the company. HRM deploys and utilizes the optimal number of personnel in suitable positions and at the right time to enable the business to reach its goals. This enhances the job satisfaction and motivation of employees. Therefore, there would be a decline in the cost of operations while profitability will rise. All of these processes and activities may be grouped under the umbrella of human resources management (Uyargil & vd., 2010). The effectiveness of HRM may be seen in their abilities to invest in human capital as well as strategic cost minimization. The employee's interest and needs are key to ensure the organization's success (Beardwell & Clark, 2007). HRM is responsible for identifying the major opportunities available to the industry, capitalizing on them, and making them stronger whilst identifying and tackling the weaknesses and threats that are likely to be faced by the industry. The HRM does these by scanning both the internal and external environment and implements

some strategies aimed at sustaining the business. According to Adresi and Darun (2017), HR managers are obliged to recognize the negative impacts of revolutions as well as the risks their company is exposed to, to be able to plan for future crises and avoid being in a mess. Human resource management generally is about building an interpersonal relationship with the employees of the organization and that such a relationship increases employees' commitment level to their company. Ostroff and Bowen (2015), argue that human resource management helps mould employees' attitudes and perceptions of a picture-perfect view of their company and the likely treatment towards the organization. Having agreed that human resources management is concerned with heightening the success of an industry in conjunction with the success of its workforce by using the resources available, it should embrace these basic five objectives which includes efficiency, competitive advantage, legal compliance, workforce compliance, and work-life quality (çetin & özcan, 2014). HRM can achieve business success when the management of personnel is carried out beyond bureaucracies and rules and by benefiting from the skills and potentials of employees. This can materialize by merging the five management functions (Dessler, 2013). These functions encompass planning, organizing, staffing, leading, and controlling.

## 2.6 HRM in Crisis Management.

Organizational crisis occurrences are low; however, they pose major threats to the survival of the organization and its stakeholders (Dutton and Jackson, 1987). Individuals occupying various executive positions within an organization are aware and mindful of the various negative repercussions linked with an organizational crisis. An organizational crisis may be seen as an event that may totally or partially disrupt people, property, equipment, or the environment and this in turn negatively affects the organization (Vardarlie, 2016). The crisis which comes in various shapes and forms has the potential to ruin the reputation of the organization (Vardarlie, 2016). It gives no or minimal time and it often comes as a surprise to the organization (Herman, 1963; Quarantelli 1988). It takes a great leader with a plethora of competencies to lead its organization out of a crisis. Human resources managers play strategic roles when a crisis erupts, and their preparations and capabilities reduce possible anxiety throughout

the industry. Research has proven that crisis management is considered as the factor designed to help reduce the impact caused by the crisis (Coombs, 2015). It can be inferred that crisis are negative events and that under difficult conditions, the resilient organization maintains a positive adjustment, Sutcliffe and Vogus (2003). Resilient organizations have a competitive edge over their competitors who are non-resilient. This is because resilient organizations have the ability to swiftly adapt and adjust to both internal and external environmental changes (Lengnick-Hall et al., 2011). HRM plays key roles, and these roles are important to the organization before, during, and after the crisis. There is limited literature on how an organization can be resilient in difficult times (Ishak & Williams, 2018) HRM has the mandate to manage both the tangible and intangible resources of the organization, and that it is assumed that they are also responsible for managing the organization to come out successfully from the crisis (Vardarlie, 2016). Most times, leaders are not prepared to manage the crisis, crisis mismanagement could have negative effects ranging from loss of firm's profitability, a taint on reputation, or a decrease in market position (Gracia, 2006). According to a report by Pretty and Knight (1997), businesses that failed to adequately contain the crisis reported a 10% reduction in stock price following the initial week of the crisis. However, one year after the crisis, these companies recorded a 15 % reduction lower than before crisis prices immediately a year after the crisis. Companies that are able to handle the crisis strategically and effectively, did record a 5% reduction in the stock price and are able to swiftly get back to normal within the shortest possible time after the crisis. HRM adopts varieties of strategies that may be different from their usual traditional routine strategies. When enough competencies and skills are at play, the probability that the organization will be resilient following the crisis is highly enhanced. HRM in crisis requires abilities, traits, and integration of skills that could aid them to respond to and learn from the crisis for future purposes. The ambitious aim of handling a crisis is for a firm to be more competitive after a crisis than it used to be (Brockner & James, 2008; Wooten & James, 2008). For HRM to be very effective in handling crises posed to the oil and gas industries, they must gain a comprehensive understanding and a fair picture of the crisis. This will make them set up the right communication channel, build the right relationship in order to find out the causes, consequences, cautionary measures, and preventive and coping mechanisms for responding to it (Pearson &

Clair,1998; Shivastava, 1993). Human resources activities have the potential to contribute to the success of the organization in the most volatile moment by harnessing and developing employees (McCracken & Wallace, 2000).

## 2.7 Effect of Economic Crisis on the Oil and Gas Industry.

Every business or company is likely to face a crisis in one way or the other. As such, no business or company is ever free from the shackles of an economic, or natural disaster. In the event of economic chaos, even the most well-established and formidable company is hit and thus may undergo a change in operation to meet the current economic end (Ahmed *et al.*, 2019, Lengnick-Hall et al., 2011). The oil and gas industry have suffered a lot of challenges such as pressures from stakeholders to move into green energy, the 2008 financial crisis, and the current COVID-19 pandemic. The 2008 financial crisis had its root in the real estate industry somewhere in 2006 which led to an eventual rise in mortgages. The damage was managed initially but unfortunately, it resulted in severely reducing economic activity as the economy battled fiercely with this crisis. Not long after this, its effect became strongly felt in the oil and gas industry. The crisis tested the strength of our global economy and eventually won. There was a wave of economic chaos which lowered all assets including oil and gas. In that same time frame, there was a rise in unemployment, which resulted in companies reducing their production as per demand. The end result was obviously clear, less energy was consumed and the demand for oil and gas fell in turn. The prices of oil fell exponentially by 77.6% and by 71.4% for natural gas between July 2008 to February 2009. The reduction of prices in oil and gas as a result of the financial crisis was a major impact on the sector. The 2008 financial crisis and the subsequent Great Recession led to stringent and harsh conditions on credit lines making the majority of explorers and producers paying for exorbitant interest rates.

In the long run, this crisis was able to be resolved through the collaborative efforts of all stakeholders. For instance, there was an increase in inflation which led to commodity buying and an improvement in credit conditions as a result of an adaptation of aggressive stimulus by governments to lessen the financial crisis. In effect, there was

also a positive demand rebound as the fiscal and monetary stimulus factors contributed to economic deflation, leading to a positive rise in price.

The 2019 global health pandemic came as a shock after the 2008 financial crisis and the subsequent great recession. According to Elgouacemi *et al.*, (2020), the global oil price has been dynamic for decades. In addition, the current global pandemic (COVID-19) has unimaginably caused the oil and gas prices to be lower. In terms of demand, there have been reduced rates of production and mobility globally due to containment measures and economic disruptions related to the COVID-19. The International Energy Agency was able to stipulate in April 2020 that the global demand for oil and gas in 2020 was reduced by 30% compared to previous years. This level of reduction in demand has never been observed since 1995 (IEA, 2020). In lieu of this, producers had to look for alternative means to store surplus crude oil. Fortunately, a ray of hope was seen somewhere in June 2020, when pressure on oil storage capacity started to lessen as the market started to rebalance (IEA 2020).

Current strategies have not been effective and efficient in mitigating the overwhelming production and supply of oil and gas in the wake of the global crisis. The Russian Federation, also known as OPEC+ initially remained unwilling to reduce production during the early stages of the COVID-19. This paved the opportunity for Saudi Arabia and Russia to flood the market (Blas and Pismennaya, 2020). It was not until 12th April 2020 that OPEC+ reached an agreement on health production. This was due to the fact that the demand for oil and gas started falling since almost every country was initiating a lockdown. According to Brower (2020), the cut in the production of oil and gas is seen as the largest cut in the history of the producer cartel. There are still unclear paths on whether the many strategies being employed by both the government, NGOs, stakeholders, and the rest would be sufficient to help rebuff the market as soon as the OPEC + countries had projected.

Though the prices have since recovered, it is highly likely that there will not be buoyancy in prices as seen immediately after the 2008 financial crisis and the economic recession. In addition, the affordable cost of renewable energy, an increasing pledge towards decarbonization, and waning investors' appetite are strong signals that the fossil fuel industry is faced with the likelihood of structural decline according to Lahn and Bradley, (2020). BNP Paribas, (2020), stated that in the quest to transition to clean

energy by the world, it is obvious that oil prices may not fully recover to the levels seen pre COVID-19. In order for the oil and gas industries to survive these perils, it is imperative for the HRM to devise strategic and innovative approaches to help sustain the industry.

### 3.0 Methodology

In this chapter, the summary of how the research was done, the methodology employed and, the reasoning behind the choice and the merits and drawbacks that are associated with it are given or elaborated. The research approach would be the first to be highlighted, the research design would be next, and the approach used to gather data and analysis would follow suit. The overview of the peculiarity of the research was presented.

#### 3.1 Research Strategy:

Understanding the innovative roles HRM plays in the event of an economic crisis is the main aim of the research. In the study, the oil and gas industry, specifically Eni, is used as our case study. In this quest, I seek to decipher how the HRM adopts key strategies in their operations, thinking, and decision making in the wake of an economic crisis in order to make sure that the company still remains competitive. The innovative approaches employed by HRM are therefore the focus. Further, the aim is to understand how the HRM determines which employees to manage in times of crisis and how this affects the company. All these are considered using Eni as the case study.

According to Bryman & Bell, (2011), the procedure followed in conducting research is termed the research strategy design. In the business sphere, it is the overall orientation to the conduct of the research. In doing so, it is imperative to decide on the steps used for this methodology. The initial step consists of defining whether a deductive or inductive approach should be considered. A deductive approach aims at constructing a theoretical framework used as the basis for the collection and analysis of the empirical findings. Whereas the inductive approach creates a theory that is based on empirical findings that are not rooted in a theoretical framework (Bryman & Bell, 2011).

Due to the exploratory nature of the research, which means it aims at finding knowledge in relatively unfamiliar areas, and that makes an inductive approach to be the ideal approach to use. Instead of testing existing theories through deducing hypotheses, the notion is to observe and draw conclusions from new phenomena. Thus, the process is the reverse: a new theory is created, from the findings. Implementing the deductive approach would have been strenuous since much research has not been conducted

around this specific topic. It is worth noting that the inductive approach is accompanied by certain limitations, such as the risk of developing unclear and insignificant theory (Bryman & Bell, 2011).

In choosing what kind of research strategy (qualitative or quantitative) to conduct, the nature of the research questions needs to be the determinant according to Bryman & Bell (2011). In this study, a qualitative research method presents to be more appropriate in answering the research questions. Unlike quantitative, the aim is on words and on informal social relationships. It permits one to have in-depth knowledge on a specific topic that is mirrored in real-life settings. This method implies viewing the world from a different perspective which, however, demands much interpretation of data (Bryman & Bell, 2011). The study aims at understanding the role HRM plays in economic crises, the innovative strategies carried out in difficult moments, and the challenges oil and gas face in economic crises. Thus, a qualitative approach that is centred on words is more appropriate.

The merits derived from this method stand in the flexibility necessitated to investigate such specific context and, in the likelihood, to keenly observe respondents and ascertain subjective opinions. There will be the application of reliable analysis tools to minimize potential bias since the emphasis will much depend on perceptions and human behaviour. A further crucial aspect that must be looked at is the fact that qualitative research is not easy to replicate, and the outcome cannot be generalized (Bryman & Bell, 2011). Nonetheless, since the point is to obtain a deeper insight on the research topic rather than building general theory, this feature was not regarded as a problem.

### 3.2 Research Design:

Research design is a framework that manages the process of collecting and analysing data during the research (Bryman & Bell, 2011). Two main considerations should be made in selecting the research design thus: the exploratory approach and the case study.

Five types of research designs: experimental design, cross-sectional design, longitudinal design, case study design, and comparative design are recognized by the

author (Bryman & Bell, 2011). To formulate inductive qualitative research, a case study design is a better fit. A case study allows for a more comprehensive investigation into complex context through a complete and intensive analysis. It can be defined as the study that investigates a contemporary circumstance (the “case”) extensively and within its real-world context (Yin, 2014). Further, in business research, it is usually preferred when there is a qualitative type of study with a high degree of complexity (Bryman & Bell, 2011).

The case study approach comes with enormous benefits. Indeed, applying this approach often favours qualitative research methods through strong participant observation and interviews (Bryman & Bell, 2011). The case study approach is best suited in research that seeks to answer questions with “why” and “how” (Yin, 2011). Looking at the research questions of this study intended to truly understand complex innovative strategies that HRM implements in an economic crisis, the approach appears particularly appropriate.

### 3.3 Research Methods and Data Collection:

A crucial part of the research is data collection, and it entails the process of collecting and analysing data for the purpose of the research questions (Bryman & Bell, 2011). The different sources are contained in the research thus primary and secondary data sources are represented in this section. The first data was garnered via a narrative literature review, which represents the basis of understanding the focal point of the primary data collection, such as semi-structured interviews.

The data collection process was an iterative one that made use of both secondary data and primary data collected through literature reviews and interviews. Structured or semi-structured interviews would be applied, and a possible use of internal documents or actual observations by participating in meetings.

#### 3.3.1 Secondary Data Collection: Literature Review:

In conducting a literature review, different protocols can be adopted. One can make use of either a systematic or narrative literature review. In a systematic literature review, an analysis of existing literature is conducted with the sole aim of minimizing bias by the researcher. A narrative review is done to help the researcher understand the overview of the topic under discussion (Bryman & Bell, 2011). A narrative method would be used in this work since it can enable the author to alter or modify the depth and limitations of the work as it progresses aside the data being qualitative (Bryman & Bell, 2011).

To gain more knowledge and ideas on the subject matter before carrying on with the primary data collection, secondary data collection was carried out first. The aim was to bring forth a detailed theoretical background pertaining to this topic of the master thesis. The focus was on how the COVID-19 pandemic has forced Eni to re-organize its activities, the innovative approaches Eni embraces in crisis, the role of training for innovation / innovative activities, training programs in green transitioning for Eni, the challenges posed by the transitioning program to the organization, and the mechanism implemented to attract and maintain the needed workforce. After sufficient information has been collected, the primary data, such as the semi-structured interviews, was conducted.

Relevant existing literature consists of journal articles, academic papers, magazine articles, and books. Research gate, google scholar, as well as online libraries of the LUISS and Eni's website were the relevant databases that were consulted for this research. Due to the voluminous nature of information these search engines provide, all inputs were analysed critically so as to maintain only but reliable results. Very keen attention was paid to the presence of a peer-reviewed source, the number of citations, and up-to-date publication.

Generally, secondary data collection has played a crucial role in the data analysis process. To the researcher, it aided her to compare and relate the collected information through interviews with relevant existing literature.

### 3.3.2 Primary Data Collection: Semi-structured Interviews:

Semi-structured interviews will basically be the primary data source for this study. Data collected through interviews were relied upon extensively for this study which was later presented in the empirical findings chapter (4) and also analysed in (chapter 5). They allow deducing the right detailed information regarding the views of respondents by following a very flexible interviewing guide. In an exploratory kind of study, interviews appear to be the suitable option. Further, semi-structured interviews are preferred since they represent a good middle point between focus and flexibility (Bryman & Bell, 2011).

In this type of case study, making available a pre-set of questions will aid the interview to flow in the right direction and ensure the easy comparison between interviewees' answers since a good number of respondents are selected. In addition, the interview guide which is the predefined questions enables us to cover a specific wide range of topics. Altogether, there is the expectation that semi-structured interviews ensure flexibility and at the same time make room for follow-up questions on the topics that demand more attention (Bryman & Bell, 2011).

It is worth noting that we could substitute structured or unstructured interviews, moreover, shifting to other kinds of data used in case studies, such as internal documents or actual observations by participating in meetings. Nevertheless, semi-structured interviews appear to be the most suited to this kind of study for the reason stated above.

Semi-structured interviews have some negative aspects, and this lies in the degree of subjectivity that is in interpreting the collected data (Bryman & Bell, 2011). Thus, we aim to carry out careful data analysis. A particular attention will be needed to reduce every possible bias in the data observation.

#### 3.3.2.1 Interview Process:

With respect to the fact that this thesis was written in the era of a pandemic, all interviews were conducted via Microsoft Teams. Some possible limitations of this means of conducting the interviews were some possible gestures that may have taken place during the interview process that were blocked by the computer screens since

meeting in person was impossible. Nonetheless, the information garnered is complete and all interviews conducted seem beneficial for the purpose of the study.

To ensure that the answers given by the interviewees will not be out of place, the questions were sent to them beforehand, and this proved to be highly relevant since respondents knew what to expect. It is worth mentioning that the questions did not follow a defined structure meaning they were picked at random and follow-up questions were asked when necessary. All interviews were undertaken in a very serene environment.

Notes were made in order not to lose sight of vital aspects of the answers that called for follow-up questions and the entire interview process was recorded after approval was granted to do so. Interviews were manually transcribed, even though it consumed time, this activity was required to fully comprehend the answers to limit the possible loss of information and misunderstandings. Further, this helped in the easy analysis of the data. It also allowed for effortless comparison across data and to gain a broadened view of the overall data.

#### 3.3.2.2 Selection of Respondent:

The participants' selection was based on their willingness and ability to provide knowledge to address the research questions. It is a non-probability approach that renders itself more suitable for qualitative studies (Bryman & Bell, 2011). Inasmuch as it does not permit generalization of the findings, it still is the most suited sampling method. Though generalization is not the focus but may be a possibility since oil and gas industries are not that many so it is likely that industries may have a fair idea of what their competitors may be doing. The aim of this research is to find out the innovative strategies Eni embraces in green transition even in times of crisis. It may appear biased when purposive sampling is used, however, it still seems proper for this kind of study since it permits the selection of respondents based on the specific information needed (Etikan, Musa & Alkassim, 2016). To guarantee the high quality and trustworthiness of the findings, the reliability of the respondents has been evaluated.

The sample selection process was done in collaboration with the Eni Human Resources Team. Indeed, potential respondents that were relevant for the study were identified by the researcher by virtue of the great support from the department of technical training of Eni Corporate University. All respondents were well-versed in the field of HRM and the strategies that help them to smoothly adapt to the green transition even in this difficult moment. By virtue of their extensive experience, it allowed the researcher to acquire insightful sources from which to draw conclusions and to link one another.

#### 3.3.2.3 Interview guide:

The significant approach and means used in reaching respondents were through emails. To engage the respondents, the text was deliberately short and concise. The aim of the interview guide is to help in guiding the interview process and the likely issues that will arise. It is designed such that specific topics are covered and to allow for flexibility (Bryman & Bell, 2011). The same strategy was used throughout the interview to allow compatibility but was also adapted to suit each interview's need. The main reasons behind the questioning were to understand the roles HRM play in the crisis period including those innovative ideas that equip the employees with essential skills to keep the firm more competitive and going as well as the challenges Eni faced in the green transition. In the present pandemic, it becomes prudent to understand the impact of working remotely and the innovative practices that took place. The interview was designed in such a way that the initial part was an introduction and that was to get to know the respondent and have a general understanding of the broad topic. The other part is to know the role HRM plays in times of economic crisis, how the pandemic has forced Eni to reorganize its HR activities, their innovative strategies they adopt to keep the firm resilient, the role of training for innovation, and other activities they put in place to manage their key employees. The goal is to understand the processes the HRM uses, together with the opportunities and the challenges posed to them.

### 3.4 Data Analysis:

A critical means to analyse data is needed once the data is collected. Since the research uses a qualitative approach, a thematic analytical tool seems useful and common by virtue of the fact that we used the interview technique as well. This method emerges to be flexible and consumes less time in comparing it with other methods (Bryman & Bell, 2011). With respect to the significance of analysing both theoretical and statistical data, it proves to be an extremely useful and powerful tool for understanding and manipulating data.

Thematic analysis helps in finding patterns and focuses on crucial parts of the data. Related patterns across interviews are clustered into major themes. We then group them to form Aggregate Constructs. It is painless to make conclusions and link the data to exploratory theory once the process is done. You need to acquaint yourself with the data and this is through transcribing the interview conducted. Further, the interview conducted needs to be coded according to similar content. Comparison of the codes which is the next stage is done and this helps to find codes with similar themes and the last and final step is regrouping and naming accordingly (Bryman & Bell, 2011).

With respect to the data collection, we apply the thematic analysis that suits the needs of this master thesis thus elaborating an Aspect-Thematic Analysis. This attests to the fact that transcription, coding, and theme identification, came about. After the transcription of the interview was done, the data was then manually coded based on similar content and further grouped into themes.

It is critical to note that the risk of missing pivotal pieces due to the lengthy nature of data is prevalent. Constant monitoring should be ensured in order not to be biased whilst going through the data (Bryman & Bell, 2011). It is assumed that in interpreting qualitative data, this process is most often a subjective one. This implies every author and his/her approach in reading the data. Using this kind of rigorous analysis helps to have an in-depth understanding of every part of the data without missing any useful information.

### 3.5 Research Quality.

Reliability, validity, and replicability are the most accepted methods in evaluating the quality of social science research (Bryman & Bell, 2011). These criteria according to the authors Bryman and Bell (2011) are means of evaluating the reproducibility of the research and constancy of adopted measures (reliability), the correctness of the conclusions developed through the research process (validity) and finally, the reproduction of the research is by extensively noting the explanations of all the processes (replicability). Notwithstanding, these dimensions seem well suited for assessing the quality of quantitative research than qualitative research. Thornhill et al. (2012) certainly agree to the fact that these standards cannot be applicable to studies of exploratory nature. A different approach in evaluating the quality of qualitative study has been suggested by Lincoln & Guba (1995). The applicable standards used are authenticity and trustworthiness. Note that trustworthiness has four subdivisions, and they are credibility, transferability, dependability, and confirmability. These criteria appear to be more suitable for exploratory and qualitative research and thus, would be applied in assessing the quality of this research.

#### 3.5.1 Authenticity

To determine the feasibility of the research conducted, the researcher should be able to illustrate a wide range of disparate realities in a complete and fair manner (Connelly, 2016). This can be determined through the following. They include Ontological authenticity, Fairness, Educative authenticity, Tactical authenticity, and Catalytic authenticity (Bryman & Bell, 2011). These would not be extensively explored for the purpose of this study. It can be observed that the authenticity of this study can be seen from semi-structured interviews conducted. In fact, having a diverse viewpoint on the innovative activities of HRM in the event of a crisis informed our decision in the respondents' selection.

#### 3.5.2 Trustworthiness

Trustworthiness is made up of four items that fit and replace those often used for quantitative research.

Credibility guarantees the performance of research based on good practices, the use of standards that are applicable in qualitative studies. It is presumed as the degree of making credible conclusions (Bryman & Bell, 2011). All the necessary steps in qualitative research have been observed. Further, measures were considered to assure the credibility of the study. This includes an assiduous and thorough review of the literature to gain a broader knowledge of the topic under discussion. Vivid expectations from the interview from the sides of both the researcher and the respondents were met thanks to the interview guide. Based on the preferences of the respondents, the interview questions were sent in advance to them. A brief presentation of the topic was made at the onset of the interview coupled with a quick introduction of the researcher. A careful transcription of the interview was made so as to escape possible errors and make room for modification.

### 3.5.3 Transferability:

Transferability is the external validity in quantitative research. It is the measure of how independent the methodology used is from the results obtained and how applicable the method is (Bryman & Bell, 2011). Unlike quantitative study where their findings are mostly applied to a larger population, transferability with respect to qualitative studies has got some limitations for its findings are more suited to the specific contexts the study is about (Lincoln & Guba, 1895). The researcher selected a case study approach that looked at the different innovative ideas HRM implements in times of crisis and made relevant conclusions that may be applicable to other oil and gas industries. Further, all information concerning the case selection, respondents, the data gathered, and the context were advanced to enlighten the reader on the aim of the study.

Dependability may substitute reliability, which is a criterion for quantitative findings. It represents the consistency of the data with time, the conditions of the study, and the utilization of an “auditing” means to ensure that complete records of all the phases of the research have been captured (Lincoln & Guba, 1895). In fulfilling this criterion, an

extensive explanation of the method selected and used in gathering and analysing the data has been presented. Throughout this research, each step has been clearly explained. Moreover, transcription of interviews ensures the research conducted is transparent hence increasing the dependability of the study.

Lincoln & Guba (1895) put forward confirmability as the last criteria and this is in the place of objectivity in the case of quantitative studies. It talks about the researcher exercising good faith while conducting research and his or her prowess in eliminating personal values and judgment when interpreting the data (Bryman & Bell, 2011). It is worth noting that there is a high level of subjectivity linked to a qualitative study. Nevertheless, the researcher strived to be as objective as possible. The formulation of the interview guide followed an in-depth literature review as no leading questions were implied. Respondents, therefore, had the luxury to express their views independent of the views of the researcher. Again, all transcriptions of the interview were checked twice to avoid partiality in the data analysis.

## 4.0 Empirical Findings

The main aim of this study is to understand the role of HRM in innovation management during an economic crisis using Eni as the case study. The experiences and responses of the respondents added insight to the research questions that are posed in the research. Valuable contributions were drawn by listening and analysing the experiences of the various HRMs of Eni from different HR functions. Three research questions are tackled, supported with evidence, in addition to feedback from the respondents.

### 4.1 Demographics of Participants.

The results of the qualitative study are established on interviews of four Human resources managers from Eni. All the HR managers voluntarily participated in the study. All participants were contacted through Elisabetta Pisatti of the department of technical training at Eni Corporate University. Upon Elisabetta's contact with these managers, they then subsequently agreed to be a part of the study.

All the four participants are employees of Eni with two of them holding various human resources management positions at Eni centre of excellence called Eni Corporate University. Each participant has more than 10 years of experience and contributes to innovation management within the various departments within which they function. Since I found myself writing this thesis in the era of a global pandemic, each participant was interviewed using Microsoft Teams and this was very convenient because it also helped us to overcome the issue of distance since all of the respondents were located in other regions. Upon approval from the respondents, the interviews were recorded using the recording device on Microsoft Teams and this also allowed for convenient transcription of the recorded interviews. All the interviews took place within the month of May 2021, and the researcher took field notes during the interview. There were variations in the interview times, also, the timings of the interviews were scheduled in a way that was conducive for both respondents and the researcher.

#### 4.1.1 Interview Protocols

The interview protocol has a brief introduction to the purpose of the study. All four respondents received the questions ahead of time for the participants to prepare their responses. The majority of the questions were posed exactly as they were written. However, the researcher often followed up the semi-structured questions with open-ended questions such as, “Why” and “Can you tell me more?”. This was a way for the researcher to gain deeper insight and a richer understanding of the experiences of the respondents. All four respondents were asked different questions based on the roles they perform even though they are all HR managers. Nonetheless, since the research is on innovation, all respondents were asked “What do they think of what an innovation is and how helpful is it to the business?”. This question was asked to solicit a response from the participants about the overall value, or lack of value of innovation, that they anticipate having gained, and their experiences of how impactful it has been to them and to the business. All respondents were asked this question at the beginning of the interview.

### Research Questions

Three primary research questions guided this study:

1. How has the economic crisis increased the effectiveness of HRM?
2. What are the most effective innovative strategies employed by the HRM in the oil and gas business for increasing survival during a crisis?
3. In this event of an economic crisis, what innovative approaches are employed by the HRM in managing the employees?

This chapter brings to bear the empirical findings garnered from the primary data collection during the interview with the respondents. A brief introduction of the company precedes the empirical findings. Under 4 Themes, the data collected would be reported following the respondents' submissions. The empirical findings will be preceded by a brief description of the company.

#### 4.1.2 Eni.

Eni is an energy company that primarily operates in petroleum, natural gas, and petrochemicals. It was formally an oil and gas company that was born out of Agip in 1963. Agip was a state-owned petroleum company that was to develop and explore the oil industry of Italy, acquire, and commercialize oil and derivatives ([www.eni.com](http://www.eni.com))

Eni currently has a presence in over 70 countries, and its headquarter is in Rome. Eni is transitioning to renewable energy and its new mission is in line with the sustainable development goal of the United Nations. Eni is changing its energy mix to contribute to the fight against climate change. This company was included in the Carbon Performance Leadership Index, making it the only FTSE MIB Company to gain the triple E for Standard Ethics. Eni in collaboration with Cassa Depositi e Prestiti (CDP) Equity in March 2021 established GreenIT. From the 1970s to the 2000s, Eni has gone into strategic agreements with different partners, which has successfully helped strengthen the company and made it competitive in the global market. As of 2020, Eni was ranked 113th on the Fortune Global 500 list according to Eni's revenue and 24th in the energy sector ([www.eni.com](http://www.eni.com))

## 4.2 Innovation and Technology

The pandemic situation which occurred in 2020 and is still ongoing, has accelerated a change that Eni started years ago, both in terms of working attitude and of learning approaches, and has facilitated integration and balance between working and personal life. This has fostered the introduction of flexible digital learning solutions, supporting people in this evolution in accordance with a holistic approach (Innovative methodologies dept, 2021). When asked what innovation meant to her, defined innovation as “creativity and curiosity”. Stating that developing an innovation mindset requires curiosity of exploring contexts and worlds different from yours and finding connections to your activity. She mentioned that looking at innovation from a broader sense, it is not only linked to technology, rather it is a new and increasingly necessary way of thinking, especially for the development of the companies: an essential and mandatory capability for a future that requires so many changes. From the interview with the Head of Education and Training, the issue of what innovation was, arose. She mentioned that innovation is key for the business because it is imperative for the

business to change from time to time, especially in this period of a pandemic where every company or business is required to change something or adapt to the context with the reason being that the market is accelerating, therefore it is key for the HR to contribute to this process of innovation. She defined innovation as something of different meaning and that innovation is not just innovation of processes, products, or tools but also can be related to the ways we think. She further emphasized that, with the HR and training, there are some roles that are solely dedicated to innovation and technology because it is the scope of their jobs but in any case, HR may contribute to different ways of innovation. She also stated that they continuously focus on looking ahead, seeking new trends and other innovative approaches to moving the company forward. The Head of Education and Training also said that “to enhance the effectiveness and innovation of their employees, they try to work on enhancing the mindset of their employees”. Because innovation is not just a different tool or process but is a different way of thinking. Innovation is further defined as the means of being open to diversity by looking at things from multiple points of view. It is the ability to be agile in doing things in different ways to generate change. It also means collaborating with others as well as accepting the contributions of others (Development Department, 2021). Having the ability to exchange opinions and to arrive at a shared solution is seen as innovation. It also includes the possible rules of interactions and from simple confrontation to conflict. She continued to say that innovation is very instrumental for the business because if you continue to do things the same way you used to do in the past, there is no upgrading, and that innovation cannot happen. She further made a revelation that the pandemic situation has affected their ways of doing things and that they had to change their direction both within and outside the company. Firstly, the company tasked its workforce with the responsibility of having to work in virtual space because we were not used to working in virtual space. The personnel from Innovation Methodologies said innovation is linked to a culture of mistakes. Stating that most innovations are born by virtue of mistakes made. She cited an example “Amarone Della Valpolicella wine was created thanks to a mistake in the timing of the fermentation of the grapes of the Recioto Della Valpolicella wine”. Innovation has propelled us to face the pandemic situation, it made us courageous for without it, “we would not have

managed the situation and continued all our activities” (Innovation Methodologies Department, 2021).

The second issue concerns the type of innovation and technological tools they have introduced. The personnel from Innovation and Methodologies Department explained that they have put in place several innovative approaches and processes. She stated that innovation should be based on a circularity (trend identification, experience, implementation). She further stated that due to the pandemic situation, they are focusing more on distance learning in terms of approach not only to meet the growth in demand but to maximize didactic effectiveness. Moreover, the focus is now on immersive reality (Virtual Reality and Mixed Reality). Another example that Eni implemented thanks to innovation and technology was that, Eni organized a virtual field trip for one of the courses in order for the trainees to understand and better study the rocks and mountains since physical trips were not possible (Head of Education and Training, 2021). This field trip was organized to guarantee the employees and students that there was the possibility to go ahead with their usual activities with or without a pandemic. Due to our innovative ideas and the technologies used, the virtual field trip made it possible for some things that were not visible in presence to be made visible in the virtual, and she said,” sometimes problems could become opportunities”.

Table 1.

Various definitions of innovation by respondents.

Head of Education and Training	Innovation is of different meaning, and it is not just related to processes, products, or tools but it can also be related to the ways we think. It is also the ability to embrace diversity by looking at things from different perspectives.
	Defined innovation as creativity and curiosity. Viewing innovation from a broader angle, “it is not only linked to

Innovative Methodologies	<p>technology, rather it is a new and increasingly necessary way of thinking, especially for the development of our companies: an essential and mandatory capability for a future that requires so many changes”. She continued further to say, “innovation is linked to a culture of mistakes”, stating that innovations are born by virtue of mistakes made. She supported this argument with the example that, “Amarone Della Valpolicella wine was created thanks to a mistake in the timing of the fermentation of the grapes of the Recioto Della Valpolicella wine”.</p>
Development Dept.	<p>Innovation is defined as the means of being open to diversity by looking at things from multiple points of view. It is the ability to be agile in doing things in different ways to generate change. It also means collaborating with others as well as accepting their contributions. Having the ability to exchange opinions and to arrive at a shared solution is seen as innovation. It also includes the possible rules of interactions from simple confrontation to conflict.</p>
HR Trends and Future Competence.	<p>Innovation is very broad, and it may sometimes be connected solely to digitalization and technology.</p> <p>Innovation is also evolution. It means to bring new ideas no matter what domain you are or the ideas you belong to. It is also a means to embrace change and also have the courage to try new things or things in a different way.</p>

Source: by the author

#### 4.2.1 Training.

The Head of education and training, (2021), said they experimented with innovation in different ways of training people. Training is considered key, and Eni has established a centre of excellence that undertakes all the training activities, and this centre is called Eni Corporate University (ECU). She said HRM and training have relevant roles because they can contribute to enhancing innovation within the employees or the people. At Eni, “we believe in the value of training and also the value of internal training so we have got a very big internal faculty mainly colleagues that undertake their usual operational activities, however, they dedicate part of their time to the training of other colleagues and this has got great added value because they speak the same language of the students and they speak of processes or approaches which are the approaches and processes of Eni”. Training is considered a thing of great importance to our company. We dedicate a lot of time to our trainers, to our faculty, to our colleagues, and so on. The internal faculty are selected because they are well prepared on the contents of the training, they have the right know-how, and are also trained to be expert and effective trainers. The internal faculty have the ability to manage the classrooms and transfer the exact know-how.

During the energy transitions and the era of COVID-19, it was through training that we used to embed in our resources the knowledge and the right skills to adapt to the new environment and the change. Antonella further stated that during the transition period, all the employees of Eni had to be ready, and the teacher had a special responsibility to this because they are in the classroom, and while in the classrooms, they transfer know-how and the right approach to their students. Eni had to make sure its employees possessed the right know-how and skills to face the transition and to manage their work-life in the era of the pandemic. So, all our training contents were essential for the transition of the company. Also, “we supported our internal faculty by providing them with the skills such as how to effectively and efficiently use E-board. This enabled them to carry out their virtual classroom activities with ease in the midst of the pandemic”.

Because as HR and as a learning function, “we have the responsibility to train and to be ready to embrace changes that may occur”. For this reason, we worked a lot in our capacity, on our faculty, and also on our colleagues that are trainers to be sure that they play their roles best and are prepared to embrace the change (Head of

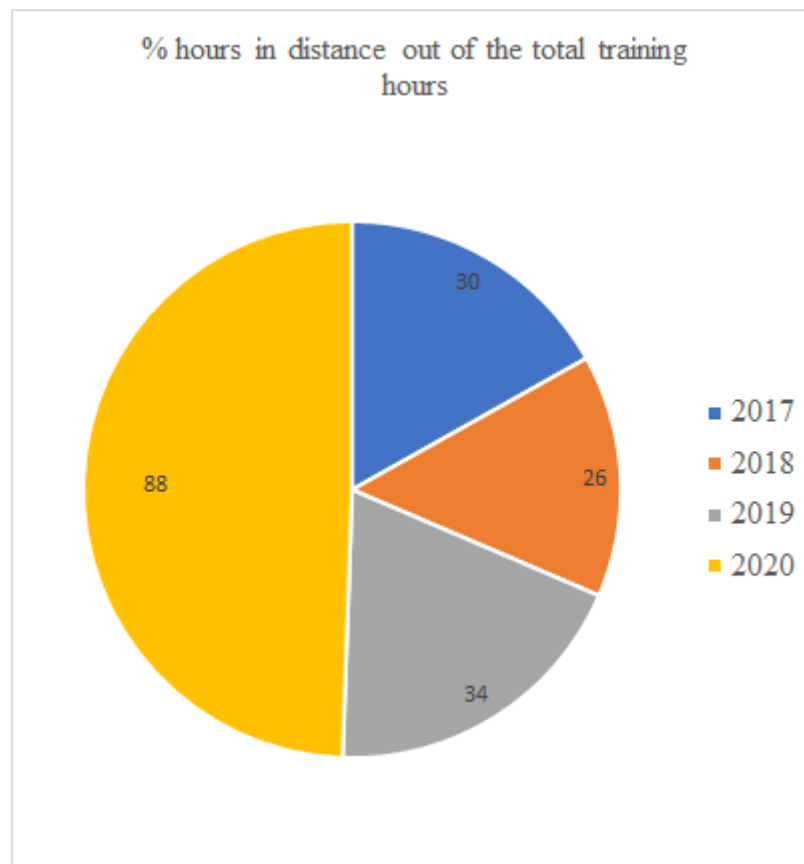
Education and Training, 2021). Innovative ideas embedded in the training made it possible to overcome the problem with distance. So, we no longer had problems relating to distance and that even if my colleagues are in another country, we can easily organize training by putting together people working in different parts of the world (Head of Education and Training, 2021). She added that we would have to move if the pandemic had not happened.

One thing of importance she raised was the fact that they are working on a new training environment that would be dedicated to all resources or people of Eni all over the world, and this environment is called “My Change”. The idea is to give awareness to all their employees of the direction of change in the company and to understand the role each is to play in this direction. So, contributing to this direction also means contributing to the sustainable development goals of the United Nations and to the planet in general. The motive of “My Change” which is the new training environment is to support each of us to understand which is our own contribution to this effect (Head of Education and Training, 2021). An example she gave was if I use the best washer while washing my hands, I will contribute and be beneficial not only to Eni but to the planet and this is the idea behind the establishment of this new learning environment.

We created new training content that was connected to the situation (Head of Education and Training, 2021). Training is a way to spread the culture of Eni and to also reach the objectives the company is set to achieve (Development Department, 2021). Now, this virtual training is a new trend that is supposed to continue, increasingly widening the horizon of the training experience, thanks to continuous learning based on the new learning flow of the work or life (Innovative methodologies Department, 2021). What is really interesting about this is we noticed the challenge of the pandemic has triggered the eagerness of people to learn and to solve problems. The learning curve has been going uphill and this has changed our way of work (HR Trends and Future Competence, 2021). With reference to distance learning, below is a table showing the exponential increment in training hours delivered with this approach in 2018-2020.

Figure 2.

A chart showing the exponential increment in training hours.



(Innovative Methodologies Department, 2021)

We are very much convinced that training is an essential asset for supporting the business in this crisis because even in order to make innovation happen, it is fundamental that everyone would be put in a proper condition of playing their roles effectively and efficiently by receiving the proper education (Innovation Methodologies Department, 2021). She further stated that this period requires them to work on the upskilling or reskilling of the competencies of the employees more than ever. In delivering or undertaking our training activities, we apply the appropriate technology to support the satisfaction of the specific training need.

Training is now perceived as continuous learning and this perception propels us in researching new trends. These days, we are convinced that training should be a mix of

a new design, new formats, new technologies: all these must be harmonized so that the training experience is completely built around people and their training needs (Innovative Methodologies Department, 2021).

#### 4.3 Management of Change.

Management has been good to lead the people throughout the change due to the organization and the new way to work, not setting people back but accompanying them in the transition (Development Department, 2021). So, management of Eni was able to accompany and train the resources to the new way to work and in any case, everyone has adapted to this by making a common front joining the forces and overcoming the initial difficulties that always exist when there is a change, but what we have done is to be covered (Development Department, 2021). In managing change, we consider the issue of development. In development, we focus on the value that the person would add to him/herself since the person is considered to be at the centre. Developing the employees must pursue personal growth in terms of both technical skills and experiences of skills. Managing employees during the period of COVID-19 required great efforts (Development Department, 2021), and management was able to accompany and train the employees to the new way to work. Due to this, management made several contributions in order to adapt to the new change. First of all, this period requires fast virtual maintenance of focus, being flexible as much as we can, being open-minded and agile (Development Department, 2021). Our mission in this period of transformation both in energy transitioning and COVID-19 is to be flexible and to be people who are not linked to the past but focus on the future, live, and arrive without any fear or any prejudice (Development Department, 2021). It is worth noting that COVID-19 has changed our mindsets. At that moment, it was essential for the management to lay down some measures to aid its employees to live the moment and to adapt to the change. So, we made some contributions that were beneficial. Through webinars, we shared with our colleagues and in training forms some difficulties we were all living in at that moment. We called this initiative “Eni Campus Life”. For instance, how we can manage our time always being at home, the resilience we have to

put in our activities, work on mindfulness and all these were very essential because we were all worried and were locked up in our various homes (Head of Education and Training, 2021). So, the idea was I would give you the opportunity to put forth your emotions and compare them with the emotions of your colleagues and this was helpful to everyone.

Another way “we managed the change was through smart working”. When the pandemic occurred in February 2020, from the onset we decided we had to continue with our activities because we had a lot of training activities running, for instance, we had some master courses ongoing so it was impossible to stop without knowing when the pandemic will end for things to return to normal. We decided to continue and the first thing we did was consider how to manage the activities designed for the traditional classrooms to the virtual classrooms. We knew we had to change but we, however, anticipated some activities could not be possible in the virtual mode (Head of Education and Training, 2021). Notwithstanding, when we realized the pandemic was spanning across months, we had to think of something to change our way of working and to support the business since training in Eni is crucial. Because we were already used to this kind of approach, it was quite easy to move and manage activities online. Nonetheless, we still had to do a lot of things to make this change possible. Of course, we were not used to managing people in virtual mode even though we had implemented smart working some years back before the COVID-19. Another management initiative related to the management of change was to create content connected with remote relationships, thus how can we build and maintain relationships with our colleagues if we do not meet. This was crucial because managers were used to having everybody under their control and offices were not entirely empty even with the introduction of smart work before the pandemic era (Development Department, 2021). This initiative was to help managers to manage their objectives even if his/her subordinates are not physically present. The Head of Development Department stated that this required them to be flexible and flexibility generated a sort of a ripple effect cycle by indicating “she was flexible with her subordinates and so was her boss to her”. This is because when people are given understanding, flexibility, and trust, they usually pay off with the responsibility of commitment and this was the right recipe that allowed the company to reach good results in this period. (Development Department, 2021), she stated further

that people have shown to be responsible and able to keep and undertake their jobs even better in some cases and have as well demonstrated resilience and to be strong, reactive, and even adaptable to learning new things from the digital point of view. The lesson learned in managing the change of this period is, swift response to specific needs is fundamental since speed is strictly correlated with flexibility.

In this particular moment, understanding each other, keeping communication open, and listening are considered great virtues, and are needed in managing the change. In the heat of the COVID-19 pandemic, we still had to carry out the operative work even though this work could not be carried out using virtual means. This required us to manage our workforce in a way that they can be safe carrying out their usual duties while respecting all the health instructions and COVID-19 protocols from the government. What we did was to reorganize ourselves with enlarged rotations on the field in order to never stop the work on the fields. It was obligatory for our workforce to self-isolate, have the necessary medical checks to be certain they have not contracted COVID-19 before they start to work, and follow the same process when they move back to their families and friends (Development Department, 2021). I believe things change and they can change really fast, and, in this sense, COVID-19 could be considered as a sort of an accelerator because it obligates us to change from one way to the other.

#### 4.3.1 Challenges of management of change.

The world is rapidly changing, and HR needs to catch up with all these dramatic changes that are happening. The wider transformation as well as the impact of the pandemic makes it necessary for governments, companies, individuals, and so on to adapt to the changes (HR Trends, and Future Competence, 2021). The HR is supposed to be agile, flexible and someone with a vision to anticipate new trends and move accordingly. There have been challenges that demand HR managers must contribute to. It is a challenge to preserve our planet and make sure there is access to energy and also with ambitious sustainability objectives. In addition, we are faced with digital and technological challenges and radical changes in society and these challenges are very

broad (HR Trends, and Future Competence, 2021). HR management is faced with numerous challenges when carrying out its managerial role especially during this period of a pandemic. These challenges could take numerous shapes and forms. The challenge with the HR role may happen with the number of people they manage and how different they are from one another, citing age difference as an example. For example, “we have employees who are in their 20s up to people who are closer to their retiring age in their late 60s”. This moment demands that every HR manager must adopt a smart way of working, and looking at how wide the age span is, the HR is expected to draw the attention of the people he/she manages to the new technologies on how to use them, and make sure all the people he/she manages really understand what technology is so that no one is left behind (HR Trends, and Future Competence, 2021). She further cited an example comparing the mode of communication now and in the past. She said, communication 20 years ago was basically emailing and face-to-face form of communication and this is also a way those in their late 60s are used to but now things have really changed. Social networks have changed communication so much and now this is the complexity the HR must deal with in managing the change. Managing this challenge requires the communication on how to use a particular technology should be very straightforward, immediate, and in a simple way for everybody to understand, and this in itself is a challenge because the older generation who are not used to all these new technologies would catch up at a very slow pace (HR Trends, and Future Competence, 2021). Another challenge in managing this change is one related to balancing work life with family. In the heat of the pandemic, everyone was locked up at home including school-going children. “People had to learn how to combine work with family effectively, I had to play dual roles, and this required great efforts (Development Department, 2021)”. For instance, in spite of the fact of me being a manager, I am also a worker and I have to produce desired results for my boss. Also, as a boss, I had to manage my team. This required me to be flexible with myself and with my team and to balance work and family because life was already stressful at that moment. I could not ask for more than they were able to do because they themselves are mothers, so it required empathy and flexibility. Indeed, the pandemic has made us put in a lot of effort because other works that I used to delegate such as cleaning the house and so on were all handled by myself (Development Department, 2021).

#### 4.4 Human Focus

Eni have a model of excellence that we recently built that is founded on the centrality of people. This model of excellence is called “Human Focus” (Head of Education and Training, 2021). Being aware of oneself, taking up responsibility for your actions and skills are essential to the development of ourselves and to the company as well. Eni is going through a phase of great evolution where the challenges of the COVID-19, as well as the energy transition, call each of us to play key roles and face this phase of challenges (Development Department, 2021). It is worth noting that these complexities need to be handled with the right skills, expertise, teamwork, and commitment to make us resilient and that is the aim of the Human Focus.

Within this model, there are some key competencies that are connected with innovation, critical thinking, system thinking, problem-solving, and so on (Head of Education and Training, 2021). This framework serves as a guide to management, and skills development, it must align with the strategy of the company. It is meant to reinforce desires to learn and innovate, to accelerate change, and drive excellence.

According to the personnel from the Department of Development, (2021), Human Focus applies to people management and development processes. It enables us to assess our behaviour and skills in order to consolidate our strengths and work on areas for improvement. Human Focus enables us to develop our corporate culture based on shared language that revolves around a single strong identity. In this respect, all the instruments, the tools that we use for the development of our people are strictly linked to Human Focus. Even the messages, the culture, and the change management that we are working on in this period reflect the behaviours that we have targeted in our Human Focus. All the keywords such as collaboration, communication, idea generation and so on that we include in defining what an innovation is are also included in the Human Focus (Department of Development, 2021). As such, they are described in our methodology for explaining the behaviours that we expect our people to have, making them resilient, hence becoming nearly impossible for them to be laid off. The personnel from the Innovative Methodologies (2021), emphasized that Human Focus is centred on people so being aware and responsible for your actions are fundamental to our development and our company’s development. Human Focus is a big basket with many capabilities that refers to the person, the behaviour, the action, and so on. It is a

repertoire of knowledge and skills, so every behaviour is described in order to keep the person at the centre of the behaviour. In essence, what we want to say is that it is the person who must be active, to change, and to propose, to think, to behave to be at the centre of these behaviours. So, there is no one skill specifically, they are many.

The objectives of the model of development are meaningful. It is pivotal to note that model of development works to develop the culture, to facilitate all the change management initiatives that are necessary for the company to implement Eni's organization and transformation in this scenario. "We do this strictly with the cooperation and management of Eni Corporate University and in particular the training because training is a way to reach these objectives" (Development Department, 2021).

#### 4.5 Collaboration and Inclusivity.

According to the Head of Innovative Methodologies (2021), innovation means opening up to diversity by looking at things from multiple points of view, collaborating with other stakeholders (either internal or external), and welcoming the contributions of other people. Considering our role in the current transformation we are engaged in activities that focus on culture, values, behaviours, skills, and competencies. Eni believe in collaboration and inclusivity. Collaboration helps strengthen our relationships with our competitors and other stakeholders so that we can really exchange knowledge and share best practices (HR Trends and Future Competence, 2021). A different point of view is inevitable because we believe in collaboration and inclusivity and they arise because we have people from different cultural backgrounds, levels of education, a field of study, age differences, and so on. Different kinds of diversity come with different types of views (Head of Education and Training, 2021). I think that was the right recipe that allowed the company to reach good results in this period.

Another context connected with inclusion should have something to do with the new transformation of the company because you have to be sure that all your people have got the right sensibility about inclusion. In this particular period, strategic collaboration is key to make the company resilient. As a result, we join forces with other departments to design the right activities for our people to provide them with the right know-how and attitude to produce desired results. To cite an example, the centre

of development works to develop the culture, to facilitate all the change management initiatives that are necessary for the company to implement Eni's organization and transformation in this scenario. "We do this strictly with the cooperation and management of Eni Corporate University and in particular the training because training is a way to reach these objectives" (Development Department, 2021). Internal faculty is a specificity of Eni because we believe in the value of training and the value of the internal training, so we have formed a sort of collaboration with the internal faculty who are mainly colleagues, and they dedicate part of their time to the training of other colleagues, and this has got great added value because they speak the same language of the students.

Based on growing trends, we generally carry out benchmarking within Eni corporate university. "We also carry out more specific market analysis on the specific trend in terms of best practices, in cooperation with other Eni departments" (Innovative Methodologies, 2021). Based on this analysis, we position ourselves in line with our peers and this helps us to be focused on excellence. This confrontation is of utmost importance to improve our services, and this is by virtue of collaboration. "We also have several tables during which we speak with our competitors and non-competitors". I would not like to use the word competitors because when you consider a company that is larger and has an international presence, be it an energy company or not, the complexities present in such companies are basically similar to ours. I think other companies move in similar ways because many of them of course decided to move to distance mode with their training activities. Many of them also put on the table contents connected with the pandemic situation (Head of Education and Training, 2021).

Further collaboration effort is that we had the opportunity to work with a group of 13-14 companies and the idea was to produce a learning product made by the contributions of each of the companies. This learning content is called LFACTO where L means leadership, and the contents of this product are relevant for the leaders of all the companies (Head of Education and Training, 2021).

Eni Corporate University is a partner to the business because it is dedicated to training employees of Eni as well as establishing relationships with both domestic and international Universities. One of our success factors is to work as partners with our colleagues from the line business so we have to really work together because we have

to understand at best the direction Eni is taking before we can support it with training. Eni is a company that keeps evolving and going forward, we would have a new Eni that would be much more open to the external world because now we are much more open to diversity compared to the past and we build relationships in an ecosystem approach (Head of Education and Training, 2021). Building connections is becoming very important and I envision an Eni with different activities, practical activities that are not imaginable just as our present activities were not imaginable in the past.

## 5.0 Discussions

In chapter 4, the results for this study were clearly provided. In this chapter, the discussions of the results and their relevance for those involved. The concluding part of this chapter focuses on the recommendations for future works.

### 5.1 Discussion of Results.

In this work, four themes were highlighted concerning the innovative approaches used by HRM during crisis management. This section includes the discussions on the participants' feedback in relation to the research topic of this study. The responses from the participants are compared with what is found in the literature. The necessary connections and relations are made, hence arriving at a scholarly conclusion. Innovation and technology, management of change, human focus, collaboration, and inclusivity are the themes gleaned from this study.

### 5.2 Innovation and Technology.

Innovation has been deemed as a crucial drive in every sphere of human life. Innovation and technology are key areas that form the basic determinant in innovation circles. Innovation is sometimes seen as “the use of purposive inflows and outflows of knowledge to accelerate internal innovation and expand the markets for external use of innovation respectively” according to Chesbrough, (2003). This means that outsourcing and experiments most likely give birth to innovation. Wagner and Watch, (2017), stated that the increasing pervasiveness of technology is accelerating businesses to try and balance organizational expectations, employees' desire, and technological strength. These two concepts as found in the literature agree with what was found during the interview. For instance, the Head of Innovative methodologies, 2021, stated that innovation is all about creativity and curiosity. Innovation should be based on a circularity (trend identification, experience, and implementation). As such, it demands experimentation in order to arrive at the desired result. To her, the ability to curiously explore contexts and worlds of diversity from oneself and find the connection to your

activity forms the basis for developing innovation. For instance, innovation can be born from mistakes as in the case of how Amarone Della Valpolicella wine was created as a result of a mistake in the timing of the fermentation of the grapes of the Recioto Della Valpolicella wine. This example can be linked to the concept of serendipity, first used by Horace Walpole, (1754). The unintentional invention that comes up by chance is termed “Serendipity”. Almost every product has serendipitous roots, especially those products related to animals, by the editor of Oxford Companion to America, Andrew Smith. Innovation may not necessarily have to do with only products or services but also the way and manner of thinking (Head of Education and Training, 2021). She stated that innovation has to do with the ability to embrace diversity by looking at things from different perspectives. Rajapathirana and Hui (2017), stated that innovation mostly happens by making use of open technologies and high-performance open tools in addition to depending on diverse spheres of knowledge. As such it can be seen that innovation and technology run hand in hand. The Head of HR trends, and Future Competence (2021), hinted that innovation is seen after attempting and failing on things differently. Technology is therefore an integral tool in the innovation process. However, innovation is fully operational in instances when the business has the ability to innovate (Laforet, 2011). She emphasized that technology is actually the enabler and lifeblood of innovation because it helps to create amazing things which otherwise would not have been created. This is in accordance with the data gathered from the interview conducted as part of this research. For instance, she explained that they have put in place several innovative approaches and processes prior to the pandemic. The head of Education and Training stated that they continuously focus on looking ahead, seeking new trends and other innovative approaches to moving the company forward. Enhancing the mindset of their employees, they believe, is a way to make innovation effective. As such, it can be deduced that the employees at Eni understand the relevance of innovation and are always available to move in a direction needed to help propel the company towards success. Also, according to the Head of HR trends, and Future Competence (2021), Eni had already started smart work a couple of years back before the pandemic surfaced. It was, therefore, easier for the employees to transition into their new working platform. It is therefore evidently clear that innovation is much appreciated and observed when one is prepared for it.

### 5.2.1 Implications of innovation and technology

It is worth remembering that COVID-19 has presented to HRM a ton of challenges, yet it has paved the way for other unforeseen opportunities. Knowing and understanding this does create the avenue for the organization to help make better decisions tomorrow (Hamouche, 2021). In effect, crises are known to sometimes create unexpected opportunities for companies (Demirkaya and Aydin, 2006). Innovation and technology have played an undeniable impact on the HRM during the pandemic. Based on the data gathered from this study, it was very clear that innovation and technology are pivotal in helping companies thrive during crises.

The head of HR Trends, and Future Competence (2021), stated that through innovation and technology, companies are able to catch up with rapid paces to gain a competitive advantage. It has also allowed companies to be more agile, more integrated, and more efficient in their operations and processes. For instance, through innovation and technology, Eni has been able to collaborate with other companies of like minds during the pandemic, to come up with ideas, suggestions, and recommendations on how to better survive the crisis together (HR Trends, and Future Competence, 2021).

Also, it was acknowledged that the technology which was put in place made working remotely possible when the pandemic started. Eni had already started smart work a couple of years ago. This means that the company embraces the need for technology in helping them advance and remain competitive. During the pandemic, transitioning into remote working was less challenging because the employees already had knowledge in using basic tools like Teams and among others. This made them more efficient and more productive with respect to other companies that had to train their employees before switching to working remotely. Though remote working has played a pivotal role during this pandemic, some companies are not sure of its continuous use since especially when considering the effectiveness of their employees (Aitken-Fox et al., 2020). There is therefore the fear for employees' productivity and effectiveness. However, with Eni, due to the fact that smart working had been in existence over the last couple of years, working remotely during the pandemic was not much different. In view of this, the effectiveness and productivity of the employees were not adversely affected. Judging from this scenario, it is prudent to conclude that, with sufficient

training, most businesses can embrace smart working in the future. The pandemic helped to provide organizations with the chance to maximize the utilization and cut down costs of their resources like office space (Liu, Lee, and Lee, 2020). The use of innovation and technology as a tool also helped to cut down commutation time, enabled the opportunity for job control and flexibility for employees (Prasad and Vaidya, 2020).

### 5.2.2 Training:

Human resources professionals have strategic duties to play when a crisis happens; and how prepared they are will plummet anxiety throughout the organization (Varderlier, 2016). HR of Eni focuses on training their workforce because they believe it is the way to embed in them the right skills and capabilities to support the business (Head of Education and Training, 2021). Pineda (2010) argues that training is an essential strategy for the development of human resources and in accomplishing the objectives of the organization. It is also worth saying that not all employees and even managers have the right technological know-how (Hamouche, 2021). According to Shipton et al (2005), career development seminars and meetings, when conducted regularly, help to showcase a non-threatening environment to enable employees to gain the right skills needed to work effectively to meet the organization's needs in times of crisis. This agrees with the steps taken by Eni during the pandemic situation. However, the success of an organization depends on the full involvement of all employees. In lieu of this, constant communication with employees by the stakeholders is crucial to help make them feel part of the business and also to help them to be less stressed (Hamouche, 2020). Bae and Lawler, (2000), argued that extensive training on the job has the ability to improve the knowledge needed to create the link between diverse stimuli. As such training is one of the innovative techniques used by HRM in times of crisis. This agrees with what the Head of education and training, (2021) said. She stated that they experimented with innovation in different ways of training people. To her, training is considered pivotal and that is why Eni has established a centre of excellence called Eni Corporate University (ECU), which seeks to spearhead all the training activities in the organization. In order to enhance innovation within the employees, it is important to

offer training. Training during pandemics is very crucial (Hamouche, 2020); to help people to effectively and efficiently work in a way that is in accordance with the measures outlined by World Health Organization to prevent the spread of the virus (Quaedaackers et al., 2020). According to Przytula et al., (2020), businesses are battling with reskilling and upskilling employees. However, at Eni, measures are in place to reduce these challenges. According to the Head of Education and Training, Eni believes in the value of training and also the value of internal training. In this manner, the company has vibrant internal faculty which aside from undertaking their usual operational duties, devote part of their time to training other colleagues. These faculty have the right know-how and also are able to speak the same language (Eni language) with the students. This also confirms what the Development Department (2021) said. She made it clear that training in Eni is a way to spread the culture of the company and to also reach the set goals and objectives of Eni. It is worth noting that training should not be fixed, however, it should be flexible and diverse, and it should meet current needs. Innovative Methodologies Department (2021) affirmed that for instance, virtual training is a new trend that is supposed to continue to help broaden the scope of the training experience. This can be attributed to continuous learning based on the new learning flow of the work or life. “My Change” is an example of a training program that has been initiated by Eni as a way of helping the training activities (Education and Training, 2021). Eni has been evolving and has constantly fine-tuned its training activities to meet the growing global trend. For instance, Innovative Methodologies Department (2021), stated that they are now convinced that currently, training should be a mix of a new design, new formats, new technologies; a harmony of all these will make the training experience to be completely built around people and their training needs. Together with some colleagues from Eni corporate university, I am developing a course on how to use Facebook to enable us to get in touch with other people (HR Trends and Future Competence, 2021). In Eni, training is perceived as a continuous learning process that has propelled them to researching new trends.

### 5.2.3 Implications of training.

Training has been seen to be very important in every sector of business operation. It has been reported that training helps to provide the needed skills employees need especially during a transition period. Hamouche S, (2021), stated that during the pandemic, most organizations supported their employees to transit successfully into the remote working environment. For example, most employees were trained on the use of necessary IT skills to enable them to carry their work efficiently and effectively. For instance, 20 years ago, it was just email and also face-to-face communication that was the tool used to exchange communication with colleagues. However, a lot has changed. Social networks have changed communication so much and Eni has introduced some social networks for the people within the company. Unfortunately, and for some people, it is really hard to get close to social networks because perhaps they were used to doing something else like exchanging ideas around the table, in a meeting room, and among others. In order to override this obstacle, training was organized for such people so that they can work effectively and efficiently (HR Trends and Future Competence, 2021). Training in Eni has helped to provide the employees with resources and the needed tools to make the most use of the Eni Facebook course which has been developed (HR Trends and Future Competence, 2021). According to innovative Methodologies Department (2021), due to the pandemic situation, they are focusing more on distance learning in terms of approach not only to meet the growth in demand but to maximize didactic effectiveness with a focus on immersive reality (Virtual Reality and Mixed Reality). A virtual field trip was also organized in order to understand and better study the rocks and mountains even when physical trips were not possible (Head of Education and Training, 2021). Training also provides flexibility and alleviates transitions between tasks and projects (Danowsky and Poll., 2005). According to the Head of Education and Training, training contributes to enhancing innovation within the employees or people. For instance, during the energy transitions and the era of COVID-19, it was through training that was used to embed in the resources, the knowledge, and the right skills to adapt to the new environment and the change (Antonella C., Head of Education and Training, 2021). The “My Change” training program created awareness for all employees to help them understand the roles each has to play and contribution towards the transition period (Head of Education and Training, 2021). Training also facilitated innovation to take place during the pandemic era. It provided the opportunity

for the employees to either upskill or reskill their competencies (Innovative Methodologies Department, 2021). In general, the training activities have really been beneficial to the company and have offered opportunities for future development and planning.

### 5.3 Human Focus.

In every competitive business, it becomes prudent for the organization to have the means to harness exceptional achievement through its peculiar structure to succeed more than others within the same market (Halbast & Tarik, 2019). Putting in place strategies that would create value to the business that is not being implemented simultaneously by others in the same market is deemed to have a competitive advantage (Kuncoro & Suriani 2018; Mahdi & Almsafir, 2014). Eni is going through a moment of change that requires the contribution of each of its human resources. This transition caused them to update the Eni model of excellence that is the tool to guide management and development of skills and behaviours in line with Eni's strategy. This model is the Human Focus (Development dept, 2021). Various scholars have confirmed that the major source of an organization in achieving a strategic competitive advantage is from its employees (Halbast & Tarik, 2019). O'reily and Pfeffer (2000) posit that in today's world, intellectual capital and knowledge are of greater importance than physical capital. It is becoming glaring that people can become very effective and efficient in developing innovative products in today's business (Halbast & Tarik, 2019). Human Focus is a framework that is founded on the centrality of people (employees), which is meant to emphasize new abilities, skills, and competencies needed to overcome the new challenges of the organization and make it competitive (Development Department, 2021). It is believed that an integrative framework that blends resources-based view, behavioural-based view, and social exchange theories are seen as the right technique to strategic HRM and to achieve competitive advantage (Halbast & Tarik, 2019). This confirms the reason behind the establishment of Human Hocus. According to Development Department, the Human Focus is aimed to be applied to all management and development processes at Eni which will enable assessment of behaviour and skills

in order to consolidate strengths and work on areas for improvement. Additionally, Human Focus is a big basket with many capabilities that refers to the person, the behaviour, the action, capabilities, and so on needed to address the complexities the company is facing and to help achieve the overall objectives. The interrelationships and connections that exist between people are considered key in achieving organizational goals (Lazarov, 2020). Human capital is a key factor for the organization, it depicts the collection of professional skills, coupled with creativity and initiative of every single person, together producing essential resources and services that would bring forth profit to the organization. Lazarov, (2020) goes on to say each organization makes adequate investment to form and develop human capital to generate specialists for the organization. This can be linked to what was discussed during the interview with Antonella Caruso, she stated that with a Human Focus, they wanted to emphasize the new skills and abilities needed to overcome new challenges. We can achieve a real change of pace if we work on self-awareness, competencies, and the ability to assume responsibility and tackle difficulties with a constructive attitude, also, learning from our mistakes and acting with maximum respect towards each other (Development Department, 2021).

### 5.3.1 Implications of Human Focus.

The competencies that are needed for an organization to attain business excellence are a very crucial question (Fundin, Bergquist, Eriksson, & Gremyr, 2018). An organization's success can be attributed to the combined resources and capabilities that an organization possesses which differ from what its competitors have (MF. Ollala, 1999). It is believed that a firm is a focal point where resources and capabilities that cannot be easily bought and sold are located. To a larger extent, firm-specific resources produce economic benefits which can't be imitated by competitors and would eventually aid the company to have a competitive edge over its rivals (MF. Ollala, 1999). All these scholars are of the view that concentrating on the employees of the organization and designing some activities aimed to improve upon skills and knowledge of the employees would propel the productivity of the organization. Having

this in mind, Eni established a framework to enhance the skills and behaviours of its employees. This framework called Human Focus is a guide to develop and share the company's culture based on a shared language that revolves around a single strong identity. This framework integrates the methodology for explaining the behaviours that we expect our people to have, making them resilient, hence becoming nearly impossible for them to be laid off (Department of Development, 2021). The Human Focus model helped reduce employee turnover to the minimum because the model focuses on the right skills employees are to have and helps to work on their weaknesses. It also helps them to have the right mindset, which requires commitment and team spirit. Human Focus creates a learning environment because it emphasizes new abilities (openness to change and diversity) needed to overcome new challenges (Head of Education and Training, 2021). This model can be assumed to be a lever for propelling originality and including everyone in how we work, a tool to develop a climate of mutual trust through dialogue. This will make the employees have a sense of belonging and would go a long way to make the employee give his/her all to making the organization achieve its overall goals. This framework helps to increase job satisfaction and reduces ennui which is associated with doing the same thing over and over again because it gives the employee the opportunity to transform and generate new value in novelty, being proactive and effective even when the outcome of the project is unknown.

#### 5.4 Collaboration and Inclusivity

With the current global pandemic, it is imperative for organizations to make their employees feel important and involved in the current workspace (Kuknor and Bhattacharya, 2021). Collaboration and inclusivity play an important role in the development of any business or organization. Numerous works have highlighted the need for inclusivity and collaboration in today's dynamic world. Kuknor and Bhattacharya, 2021, stated that encouraging inclusivity in the workplace is a way of solving curiosity and any trust-related issues in the minds of employees. Inclusivity can be thought of as accepting an individual's decisions, ideas, suggestions, respect, and

beliefs regardless of their background (Podsiadlowski et al., 2014). Cox (2001) made it even simpler by saying that inclusivity is the core of a multicultural institution whereby people with different identities are welcomed with their uniqueness. In effect, an organization's performance can be improved by leveraging on inclusivity (Van Kleef et al., 2008). According to Innovative Methodologies, 2021, innovation means opening up to diversity by looking at things from multiple points of view, collaborating with other stakeholders (either internal or external), and welcoming the contributions of other people. This agrees with the literature and hence it can be seen that Eni recognizes the need for collaboration and inclusivity. Also considering the need for transformation, Eni is engaged in activities that focus on culture, values, behaviours, skills, and competencies (Innovative Methodologies, 2021). Eni comprises people from different cultural backgrounds, levels of education, and others, hence collaboration and inclusivity are very necessary (HR trends and future competence, 2021). Most importantly, it is prudent to make sure that the employees get the right sensibility about inclusion. In terms of collaboration, the various departments within Eni join forces to help design the right activities for the employees (Development Department, 2021). These activities are normally carried out with the cooperation and management of Eni Corporate University. Also, based on growing trends, benchmarking within Eni Corporate University is normally carried out (Innovative Methodologies, 2021). According to Head of Education and Training, (2021), Eni collaborates both with its competitors and non-competitors as well. In addition, LFACTO was instituted as a result of collaboration. In this program, a group made up of 13-14 companies joined ideas together to come up with this initiative to support their leadership roles. It can be observed that collaboration and inclusivity form a formidable part of Eni's operation.

#### 5.4.1 Implications of Collaboration and inclusivity.

According to Kuknor and Bhattacharya (2021), inclusion focuses on the sense of belonging and acceptance with regards to the diversity of one's background. Inclusivity is noted to enhance open communications and collaborations with employee's acceptance regardless of their diversity (Kuknor and Bhattacharya, 2021). The

importance of inclusivity and collaboration to an organization can never be overemphasized. With this effect, Eni has recognized the need to enhance collaboration and inclusivity within their working environment. For instance, Head of Education and Training (2021) said that now Eni has experienced an increasing in diversity and collaboration than before since the idea of building connections is really pivotal. Collaboration helps to strengthen the relationship Eni has with its competitors and other stakeholders. It enables them to exchange knowledge and share best practices (HR trends and future competence, 2021). Development Department, (2021), emphasized that Eni takes part in professional networks with companies to enable them better their approaches and strategies. Eni Corporate University, which is a partner to the business, has also established connections with other universities and other departments within the company to help them work together and hence improving their services in achieving the goals and missions of Eni (Antonella C., Head of Education and Training, 2021). According to the Head of Education and Training, most of the other oil and gas companies do share similar contents with Eni and hence offering Eni a great opportunity to collaborate (Head of Education and Training, 2021). Collaboration among the various departments within Eni helps improve decision-making. For instance, in cooperation with other Eni departments, more specific market analyses on specific trends in terms of best practices are being carried out (Innovative Methodologies, 2021). In this particular period, strategic collaboration is key to make the company resilient (Development Department, 2021). For instance, together with other departments, the right activities for the employees in Eni are designed to provide the employees with the right know-how and attitude to produce desired results (Development Department, 2021). Through collaboration, LFACTO was initiated to help solicit good ideas from great minds from different companies to enhance their leadership roles (Head of Education and Training, 2021). Different kinds of diversity come with different types of views which are viewed as the right recipe needed by a company to reach good results especially in this period (Head of Education and Training, 2021). The ability to embrace diversity also facilitates good and open communication within the working environment (Innovative Methodologies, 2021). In the nutshell, Eni acknowledges the need for collaboration and inclusivity and hence strives at all costs to make it happen.

## 5.5 Management of Change.

The current global pandemic has challenged numerous aspects of our life and the way and manner in which organizations operate (Amis and Janz, 2020). The pandemic has indeed resulted in various companies reevaluating the nature of their operations (Amis and Janz, 2020). In an effort to meet and survive the current global pandemic, many businesses had to manage change effectively and strategically in order to remain on course and be competitive (Hartmann and Lussier, 2020). The process of adjusting meet current trends while running the business or organization in that same manner is seen as change management (Fusch et al., 2020). Following this global pandemic, a lot of uncertainties were created within organizations. Uncertainty in any working environment has the ability to create fear and loss of confidence in the minds of the employees, hence affecting productivity and efficiency (Fusch et al., 2020). It is worth saying that in bringing change, it should seek to address practical issues in the workplace (Naor et al., 2010). Failure to plan to initiate strategic changes especially during a pandemic is likely to make a business fail and remain less competitive (Bennis, 2009). The propensity to adapt to external forces, take advantage of new technologies, and adjust to meet customer satisfaction are a measure of how well organizations adapt to change (Kuckertz et al., 2020). The ability of a company to manage change efficiently helps to put trust in the employees. In such instances, employees feel as being taken seriously and not resources that are easily replaceable. This helps create a “safe” working environment for employees (Edmondson, 2019). During the pandemic, Eni initiated a lot of strategies to help with managing change and also make their employees feel safe. These can be seen to agree with what has been said in literature and what other companies have implemented. The Development Department, (2021), made it clear that management has been good to lead people throughout the change due to the organization and the way to work. For instance, the management of Eni was able to accompany and train the resources in line with the new way to work (Development Department, 2021). It is important also to know that development is key when managing change. For instance, Eni focuses on the value that the person would add to him or herself since the employees form the pivotal part of the company (Development Department, 2021). In this respect, developing employees must focus on personal growth in terms of both technical skills and experience skills (Development

Department, 2021). During the pandemic, the management of Eni established an initiative called the Eni Campus Life to aid its employees to live the moment and adapt to the change. For instance, through webinars and training, they were able to share with other colleagues some difficulties they were all facing at that moment and to come up with plans on how to survive together (Development Department, 2021). Issues on how to manage time effectively from home, the resilience to put in the various activities were thoroughly discussed (Head of Education and Training, 2021). Employees were given the opportunity to put forth their emotions and together, come up with solutions. It is evidently clear that no one in Eni was being left behind even in these difficult times. Clearly, the sense of belongingness and the need to feel safe, facilitate mental stability, and enhance productivity was vital to Eni (Head of Education and Training, 2021). In terms of carrying out some programs which were already on ground, smart working was introduced as a way of managing change during the pandemic era. In that way, training activities were able to continue even though it was not easy to manage initially. This was due to the fact that the training activities were initially designed to run on ground. However, through effective change management, smart working was able to run (Head of Education and Training, 2021). Another management initiative related to the management of change was to create content connected with remote relationships, thus how can we build and maintain relationships with our colleagues if we do not meet. This was crucial because managers were used to having everybody under their control and offices were not entirely empty even with the introduction of smart work before the pandemic era (Development Department, 2021). I believe things change and they can change really fast, and, in this sense, COVID-19 could be considered as a sort of an accelerator because it obliged us to change from one way to the other (Development Department, 2021). In the heat of the COVID-19 pandemic, we still had to carry out the operative work even though this work could not be carried out using virtual means. This required us to manage our workforce in a way that they can be safe carrying out their usual duties while respecting all the health instructions and COVID-19 protocols from the government. What we did was to reorganize ourselves with enlarged rotations on the field in order to never stop the work on the fields (Development Department, 2021).

In this particular moment, understanding each other, keeping communication open, and listening are considered great virtues, and are needed in managing the change (Development Department, 2021). In effect, activities put in place in managing change are all in accordance with what is found in literature.

## 5.6 Implications of Management of Change.

The management of change implemented during the crisis has had a long-lasting effect on the organization. The employees of Eni were able to adapt to the new way of life during the pandemic by making a common front joining forces and hence are able to sail through the pandemic easily. This was due to the management of change which was implemented by the company by training the resources to the new way to work (Development Department, 2021). Also, through the management of change, employees were equipped with new skills and experiences such as the ability to effectively utilize smart working tools to carry out their jobs effectively and efficiently from their homes (Development Department, 2021). The mindsets and the attitudes of the employees toward work were transformed (Development Department, 2021). This is because when people are given understanding, flexibility, and trust, they usually pay off with the responsibility of commitment and this was the right recipe that allowed the company to reach good results in this period (Development Department, 2021). Also, she stated further that people have shown to be responsible and able to keep and undertake their jobs even better as well demonstrated resilience and to be strong, reactive, and even adaptable to learning new things from the digital point of view. The Head of Education and Training, (2021), with the management of change in Eni, the operations of the company were still able to be carried on successfully to meet the demands of consumers (Head of Education and Training, 2021). Management of change made it possible for the various stakeholders in Eni, especially the head of departments, to come up with new ideas on how to manage their employees while working from home (Development Department, 2021). Both the employees and the various stakeholders at Eni have been able to understand, keep open communication and listen to each other through management of change. These are considered great

virtues and are needed in managing the change. In the end, managers were able to manage the workforce in a way that the employees can be safe carrying out their usual duties while respecting all the health instructions and COVID-19 protocols from the government. The overarching idea is that the lesson learned in managing the change of this period is, swift response to specific needs is fundamental since speed is strictly correlated with flexibility (Development Department, 2021). In effect, I believe things change and they can change really fast, and, in this sense, COVID-19 could be considered as a sort of an accelerator because it forces us to change from one way to the other.

## 6.0 Conclusion

Businesses are faced with crises daily which can have catastrophic effects on the company. Regardless of the numerous adverse effects which have come into play as a result of this pandemic, many organizations have been able to take advantage of the outbreak of the COVID-19 to the company's benefit. In doing so, many stakeholders in various companies have been able to devise innovative approaches to make the company stay competitive even in these tough times. This study focused on the role of HRM in innovative management during the economic crisis, with a special focus on Eni. This is due to the fact that HRM plays an integral role in handling the key resources (human resources) in the company.

The oil and gas sector have been under pressure to move to greener energy in response to calls on climate change. The pandemic brought another hurdle and thus HRM had to be innovative in modulating the affairs of the company. In addressing the key research questions which were raised in this study, the responses gathered from the interviews are well in line with important innovative strategies which have been implemented over time. It can be said that the management of Eni was able to effectively handle the pandemic situation in the best possible way. In effect, no one was left behind during this period. From this study, it can be said that the economic crisis has challenged the HRM to work with their employees in devising effective and efficient strategies which they never thought of. Also, by the HRM being people-centred and equipping the employees with new skills and experiences so that everybody can be part of the transformation chain, employees are hence not being laid off. Lastly, even though there are various approaches to adopt in handling economic crises, the various HRM in Eni had most things in common. They all considered management of change, training, innovation and technology, and Human Focus as key strategies to rely on in making Eni strong and resilient during the pandemic.

## 6.1 Recommendations

Much work has been done by the HRM in Eni in sustaining the company, however, with the growing need for change and digitalization, there are much more rooms for an

upgrade. For instance, there should be a very strong role within the company through strong collaborations with the employees. The HRM needs to also keep up with the pace of external changes and also with the company strategy. The HR department needs to be more agile, innovative, efficient, and also to increase the ability to network within the company and also with the external world. It is also recommended for HRM to explore and keep up with new technologies like machine learning, artificial intelligence, and among others to keep up with the ever-growing and changing economy. Future research can investigate the role of artificial intelligence and machine learning among other technologies as an innovative tool in the oil and gas industry.

## 7.0 References

- Abbaspour, P. (2015). Effect of strategic orientation and HRM strategies on organisational strategic performance: Examining mediating role of strategic learning and innovation. *An International Peer-Reviewed Journal (Trends in Life Sciences)*, 4(4), 125–132.
- Agolla, J. E. (2018). Modelling the relationship between innovation, strategy, strategic human resource management and organisation competitiveness. *African Journal of Business Management*, 12(14), 428-438.
- Ahmed, I., Mohammad, S. K., & Islam, T. (2013). The Relationship between Perceived Fairness in Performance Appraisal and Organizational Citizenship Behavior in the Banking Sector of Pakistan: The Mediating Role of Organizational Commitment. *International Journal of Management & Innovation*.
- Ahmed, U., Khalid, N., Islam, DMZ., & Abro, Z. (2019). Abuse, emotions, and workload in the distribution business: Implications for employees` engagement. *International Journal of Advanced and Applied Sciences*, 6(8), 90-99.
- Aitken-Fox, E., Coffey, J., Dayaram, K., Fitzgerald, S., Gupta, C., McKenna, S., & Wei Tian, A. (2020). COVID-19 and the changing employee experience. LSE Business Review. Retrieved from <https://blogs.lse.ac.uk/businessreview/2021/04/24/covid-19-and-the-changing-employee-experience/>
- Aktharsha, U. S., & Sengottuvel, A. (2016). Knowledge sharing behavior and innovation capability: HRM practices in hospitals. *SCMS Journal of Indian Management*, 13(1), 118.
- Al Adresi, A., & Darun, M. R. (2017). Determining relationship between strategic human resource management practices and organizational commitment. *International Journal of Engineering Business Management*, 9, 1–9. <https://doi.org/10.1177/1847979017731669>.

- Al-bahussin, S.A., & El-garaihy, W.H. (2013). The Impact of Human Resource Management Practices, Organisational Culture, Organisational Innovation and Knowledge Management on Organisational Performance in Large Saudi Organisations: Structural Equation Modeling with Conceptual Framework. *International Journal of Biometrics*, 8, 1.
- Amis, M.J & Janz, D. B. (2020). Leading Change in Response to COVID-19. *The Journal of Applied Behavioral Science*.
- Aryanto, R., Fontana, A., & Afiff, A.Z. (2015). Strategic human resource management, innovation capability and performance: An empirical study in Indonesia software industry. *Procedia – Social and Behavioural Sciences*, 211(1), 874–879. <https://doi.org/10.1016/j.sbspro.2015.11.115>
- Abury D (2011). Creating the conditions for Radical Public Service Innovation. *Australian Journal of Public Administration* 70(3), 227-235. Amabile TM (1996). Creativity in Context, Westview Press, Boulder, CO.
- Bae, J., & Lawler, J. (2000). Organizational and HRM Strategies in Korea: Impact on Firm Performance in an Emerging Economy Author (s ): Johnseok Bae and John J . Lawler Source: *The Academy of Management Journal*, 43, 502–517.
- Baedecker, C., Greiff, K., Grinewitschus, V., Hasselkuß, D., Keyson, D., Knutsson, J., et al. (2014). Transition through sustainable Product and Service Innovations in Sustainable Living Labs: application of user-centred research methodology within four Living Labs in Northern Europe. Paper for presentation at the 5th International Sustainable Transitions (IST) Conference, August 27–29, 2014 Utrecht, The Netherlands.
- Banbury, C. M., & Mitchell, W. (1995). The effect of introducing important incremental innovations on market share and business survival. *Strategic Management Journal*, 16 (S1), 161–182. doi:10.1002/smj.4250160922
- Baysal, A. C. (1993). Çalışma Yaşamında İnsan (Cilt 225). İstanbul: İstanbul Üniversitesi İşletme Fakültesi Yayını

- Bennis, W. (2009). *On becoming a leader* (4th ed.). Basic.
- Bento, F., & Garotti, L. (2019). Resilience beyond formal structures: A network perspective towards the challenges of an aging workforce in the oil and gas industry. *Journal of Open Innovation: Technology, Market, and Complexity*, 5(1). <https://doi.org/10.3390/joitmc5010015>
- Beardwell, J. & Clark, I. (2007). *Human Resource Management: A Contemporary Approach*, FT/Prentice-Hall, Harlow.
- Bendoly, E., Croson, R., Goncalves, P., & Schultz, K., (2010). Bodies of knowledge for research in behavioural operations. *Production and Operations Management. Journal of Operations Management* 19 (4), 434–452.
- Berthoud, R., Falkingham, J., Hills, J., Mcknight, A., Scott, A., Survey, P., House, B., & Univer-, O. (2005). *Equalization for the Extra Costs of Disability. 1*, 89–114.
- Blas, J. and E. Pismennaya (2020). Saudis Boost Oil Output, Defying Trump’s Plea To End Price War, <https://www.bloomberg.com/news/articles/2020-04-01/saudi-arabia-resists-trump-s-attempt-to-broker-an-oil-war-truce> (accessed on 12 March 2021).
- BNP Paribas. (2030). “Great Expectations for ESG: What’s Next for Asset Owners and Managers?”
- Bourgeois, L.J. (1981). On the measurement of organizational slack. *Academy of Management Review*, 6(1), 29–39.
- Bourne, H., & Jenkins, M. (2013). Organizational Values: *A Dynamic Perspective. Organization Studies*, 34(4), 495–514. doi:10.1177/0170840612467155
- Brito, d. R.P and Oliveira, L.B. (2016). The Relationship Between Human Resource Management and Organizational Performance. *Brazilian Business Review*. 13, 90-110.

- Brockner, J., & James, E. H. (2008). Toward an understanding of when executives see crisis as opportunity. *The Journal of Applied Behavioral Science*, 44(1), 94-115.
- Brower, D. (2020). Why the record OPEC cut is no match for coronavirus hit to demand? Financial Times, Available at <https://www.ft.com/content/2a91fd26-c337-427f-8b24-9f53bc321bb2>. (Accessed 24 March, 2021).
- Brown, S.L. and Eisenhardt, K. (1998). Competing on the edge: Strategy as structured chaos. *Harvard Business School Press*, Boston, MA.
- Bryman, A., & Bell, E. (2011). *Business Research Methods*, 7(5), 23-56, New York, Oxford University Press.
- Buller, P. F., & McEvoy, G. M. (2012). Strategy, human resource management and performance: Sharpening line of sight. *Human resource management review*, 22(1), 43-56.
- Bulsink, P., De Miguel Mercader, F., Sandström, L., Van De Beld, B., Preto, F., Zacher, A., Oasmaa, A., Dahmen, N., Funke, A., & Bronson, B. (2020). Results of the International Energy Agency Bioenergy Round Robin on the Analysis of Heteroatoms in Biomass Liquefaction Oils. *Energy and Fuels*, 34(9). <https://doi.org/10.1021/acs.energyfuels.0c02090>.
- Caligiuri, P., De Cieri, H., Minbaeva, D., Verbeke, A., & Zimmermann, A. (2020). International HRM insights for navigating the COVID-19 pandemic: Implications for future research and practice. *Journal of International Business Studies*. doi:10.1057/s41267-020-00335-9.
- Canman, D., (1995). Contemporary Personnel Management. Ankara: TODAIE Publications.
- Caplow, T. (1955). The definition and measurement of ambiances. *Social Forces*, 34(1), 28–33. <https://doi.org/10.2307/2574256>
- Çetin, C., & Özcan, E. D. (2014). Human Resources Management. Istanbul: Beta Press

- Ceylan, C. (2013). Commitment-based HR practices, different types of innovation activities and firm innovation performance. *International Journal of Human Resource Management*, 24(1), 208–226. <https://doi.org/10.1080/09585192.2012.680601>
- Chaney, P. K., & Devinney, T. M. (1992). New Product Innovations and Stock Price Performance. *Journal of Business Finance & Accounting*, 19(5), 677–695. doi:10.1111/j.1468-5957.1992.tb00651.
- Chang, S., Gong, Y., & Shum, C. (2011). Promoting innovation in hospitality companies through human resource management practices. *International Journal of Hospitality Management*, 30(4), 812–818. <https://doi.org/10.1016/j.ijhm.2011.01.001>.
- Chang, S., Gong, Y., Shum, C., Maier, A., Brad, S., Nicoară, D., Maier, D., Kay, A., Coombs, W. T., Laufer, D., Song, J., Almeida, P., Wu, G., Macduffie, J. P., Kochan, T. A., Persson, S., Shrivastava, P., Bryson, A., Stokes, L., ... Caplow, T. (2016). Strategic Human Resource Management, Innovation Capability and Performance: An Empirical Study in Indonesia Software Industry. *Procedia - Social and Behavioral Sciences*, 34(2), 874–879. <https://doi.org/10.1016/j.sbspro.2015.11.115>.
- Channa, N. A., Shah, S. M. M., & Ghumro, N. H. (2019). Uncovering the Link between Strategic Human Resource Management and Crisis Management: Mediating Role of Organizational Resilience. *Annals of Contemporary Developments in Management & HR*, 1(2), 15–27. <https://doi.org/10.33166/acdmhr.2019.02.003>.
- Chesbrough, H. (2003). The Logic of Open Innovation. *California Management Review*, 45(3), 33–58. doi:10.1177/000812560304500301.
- Chuang, L.-M. (2005). “An empirical study of the construction of measuring model for organizational innovation in Taiwanese high-tech enterprises”, *The Journal of American Academy of Business*, 9(2), 299-304.

- Chuang, C. H., Chen, S. jer, & Chuang, C. W. (2013). Human resource management practices and organizational social capital: The role of Industrial Characteristics. *Journal of Business Research*, 66(5), 678–687. <https://doi.org/10.1016/j.jbusres.2012.04.002>.
- Chuang, C. H., Jackson, S. E., & Jiang, Y. (2016). Can Knowledge-Intensive Teamwork Be Managed? Examining the Roles of HRM Systems, Leadership, and Tacit Knowledge. In *Journal of Management*, 42(2), <https://doi.org/10.1177/0149206313478189>.
- Clark, M.A., Amundson, S. D., & Cardy, R. L. (2002). Cross-functional team decision-making and learning outcomes: A qualitative illustration. *Journal of Business & Management*, 8(3), 217. <http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=8566985&site=ehost-live>
- Cohen, W.M. & Levinthal, D.A. (1990). Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly*, 35, 128–52.
- Cohn, J., Katzenbach, J. & Vlak, G. (2008). “Finding and grooming breakthrough innovators”, *Harvard Business Review*, 86(12), 62-70.
- Connelly, L. M. (2016). *Trustworthiness in qualitative research. Medsurg Nursing*, 25(6), 435-437.
- Coombs, W. T. (2014). State of crisis communication: Evidence and the bleeding edge. *Research Journal of the Institute for Public Relations*, 1(1), 1–12. <https://instituteforpr.org/wp-content/uploads/CoombsFinalWES.pdf>
- Coombs, W. T. (2015). The value of communication during a crisis: Insights from strategic communication research. *Business Horizons*, 58(2), 141-148.
- Coombs, W. T., & Laufer, D. (2018). Global crisis management—current research and future directions. *Journal of International Management*, 24(3), 199-203.

- Cooper, R. G., & Kleinschmidt, E. J. (1993). Major new products: What distinguishes the winners in the chemical industry? *The Journal of Product Innovation Management*, 10(2), 90–1.
- Cox, T. Jr (2001). *Creating the Multicultural Organization: A Strategy for Capturing the Power of Diversity*, Jossey-Bass, San Francisco, CA.
- Cyert, R.M. & J.G. March, (1963). *A behavioral theory of the firm*. Englewood Cliffs, NJ: Prentice-Hall.
- Dalota, M. D., & Perju, A. (2010). Human resources management and the company's innovation. *Romanian Economic and Business Review*, 5(4), 122.
- Damanpour, F. (1990). *The evolution of foreign banking institutions in the United States: Developments in international finance*. Greenwood Publishing Group.
- Danowsky, J., & Poll., E. (2005). Enlarging the scope of disaster plans: Accounting for lawyers. *Law Journal Gazette*, 10-13.
- Delery, J. E., & Doty, D. H. (1996). Modes of theorizing in strategic human resource management: Tests of universalistic, contingency, and configurational performance predictions. *Academy of management Journal*, 39(4), 802-835.
- Demirkaya, H., & Aydın, A. (2006). The strategic management and reorganization of human resource management in crisis processes. *Paper presented at the International Strategic Management Conference, Dedeman Oteli, İstanbul*.
- DeNisi, A. S., & Pritchard, R. D. (2006). Performance appraisal, performance management and improving individual performance: A motivational framework. *Management and organization review*, 2(2), 253-277.
- Dessler, G. (2013). *Fundamentals of human resource management*. Pearson.
- Di Maggio, P. J., & Powell, W. W. (1983). The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields. *American Sociological Review*, 48(2), 147. doi:10.2307/2095101

- Duncan, L. E, Florian, K. & Karoline S. R. (2019). The co-evolution of policy mixes and socio-technical systems: Towards a conceptual framework of policy mix feedback in sustainability transitions. *Research Policy*. 48:10
- Dutton, J. E., & Jackson, S. E. (1987). Categorizing strategic issues. In *Academy of Management Review*, 12(1), 76–90.  
<https://s3.amazonaws.com/academia.edu.documents/46954786/catagorizingstrategic>
- Edmondson, A. C. (2019). *The Fearless Organization: Creating psychological safety in the workplace for learning, innovation and growth*. Wiley.
- Elidemir, S. N., Ozturen, A., & Bayighomog, S. W. (2020). Innovative behaviors, employee creativity, and sustainable competitive advantage: A moderated mediation. *Sustainability (Switzerland)*, 12(8).  
<https://doi.org/10.3390/SU12083295>
- Elgouacemi, A. et al. (2020). *The fiscal implications of the low-carbon transition*, <https://doi.org/10.1787/6cea13aa-en>.
- Engebretsen, R., & Anderson, C. (2020). *The impact of Coronavirus (COVID-19) and the global oil price shock on the fiscal position of oil-exporting developing countries*. 1–18. [https://www.oecd-ilibrary.org/development/development-assistance-committee-members-and-civil-society\\_51eb6df1-en](https://www.oecd-ilibrary.org/development/development-assistance-committee-members-and-civil-society_51eb6df1-en)
- Engida, G. (2013). Reforms of the public sector in the light of the new public management: A case of Sub-Saharan Africa. *Journal of Public Administration and Policy Research*, 5(1), 1–7. <https://doi.org/10.5897/jpapr11.019>
- Esu, B. B., & Inyang, B. J. (2009). A case for performance management in the public sector in Nigeria. *International Journal of business and management*, 4(4), 98-105.

- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5, 1-4.
- Fairlie R. (2020). The impact of COVID-19 on small business owners: Evidence from the first 3 months after widespread social-distancing restrictions. *Journal of economics & management strategy*, 10.1111/jems.12400. Advance online publication. <https://doi.org/10.1111/jems.12400>.
- Filippetti, A., & Archibugi, D. (2010). Innovation in times of crisis: The Uneven Effects of the Economic Downturn across Europe. *Italian National Research Council*.
- Filippetti, A., & Archibugi, D. (2011). Innovation in times of crisis: National systems of innovation, structure, and demand. *Research Policy*, 40(2), 179–192. <https://doi.org/10.1016/j.respol.2010.09.001>
- Filippetti, A., & Guy, F. (2016). Skills and social insurance: Evidence from the relative persistence of innovation during the financial crisis in Europe. *Science and Public Policy*, 43(4), 505–517. <https://doi.org/10.1093/scipol/scv036>
- Fundin, A. Bergquist, B, Eriksson H., and Gremyr I., (2018). Challenges and propositions for research in quality management. *International Journal of Production Economics*, 199,125-137
- Fusch, P., Fusch, G.E. and Ness, L.R. (2018). Denzin's paradigm shift: revisiting triangulation in qualitative research. *Journal of Social Change*, 10(1), 19-32.
- Galdeano, D., Ahmed, U., Fati, M., Rehan, R., & Ahmed, A. (2019). Financial performance and corporate social responsibility in the banking sector of Bahrain: Can engagement moderate? *Management Science Letters*, 9(10), 1529-1542.
- Gatherer, J., & Craig, D. (2010). I am talent: A comprehensive guide to optimise your potential and achieve your personal and career aspirations. Randburg: Knowres Publishing.

- Ghazzawi, K. and Accoumeh, A., (2014). Critical Success Factors of the E-Recruitment System. *Journal of Human Resources Management and Labor Studies*. (2), 159-170.
- Giauque, D., Anderfuhren-Biget, S., & Varone, F. (2013). HRM Practices, Intrinsic Motivators, and Organizational Performance in the Public Sector. *Public Personnel Management*, 42(2), 123-150. doi:10.1177/0091026013487121
- Gittell, J. H., Cameron, K., Lim, S., & Rivas, V. (2006). Relationships, layoffs, and organizational resilience: Airline industry responses to September 11. *The Journal of Applied Behavioral Science*, 42(3), 300-329.
- Gituma, M., & Beyene, T. (2018). Strategic Human Resource Management Practices and Organizational Performance: A Case of National Insurance Corporation of Eritrea (Nice). *Global Journal of Management and Business Research: Administration and Management*, 18(1).
- Gounaris, S. P., Papastathopoulou, P. G., & Avlonitis, G. J. (2003). Assessing the importance of the development activities for successful new services: Does innovativeness matter? *International Journal of Bank Marketing*, 21(5), 266-279. <https://doi.org/10.1108/02652320310488448>
- Gracia, L. (2006). Alternative formats.
- Grasso, M. (2019). *Oily politics: A critical assessment of the oil and gas industry's contribution to climate change*. *Energy Research & Social Science*, (50), 106-115. doi: 10.1016/j.erss.2018.11.017
- Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. *Handbook of qualitative research*, 105(2), 163-194.
- Guellec, D., & Van Pottelsberghe de la Potterie, B. (2001). The internationalisation of technology analysed with patent data. *Research Policy*, 30(8), 1253-1266.
- Gulati, R. (2016). Is Slack Good or Bad for Innovation? *Author (s): Nitin Nohria and Ranjay Gulati Source: The Academy of Management Journal* , 39(5), 1245-1264

*Published by : Academy of Management Stable URL : [http://www.jstor.org/stable.39\(5\), 1245–1264](http://www.jstor.org/stable.39(5), 1245–1264).*

- Guthrie, J. P. (2001). High-involvement work practices, turnover, and productivity: Evidence from New Zealand. *Academy of management Journal*, 44(1), 180-190.
- Hall, B. R. E. (2005). Employment Fluctuations with Equilibrium Wage Stickiness  
*Author (s): Robert E . Hall Source: The American Economic Review ,95(1), 50-65.*
- Halbast, H. H., & Atan, T. (2019). The Impact of Strategic Human Resource Management Practices on Competitive Advantage Sustainability: The Mediation of Human Capital Development and Employee Commitment. In *Sustainability. 11(20), 1-19.*
- Hamouche, S, (2021). Human resource management and the COVID-19 crisis: implications, challenges, opportunities, and future organizational directions. *Journal of Management and Organization.*
- Hartmann, N. N., & Lussier, B. (2020). Managing the sales force through the unexpected exogenous COVID-19 crisis. *Industrial Marketing Management*, 88, 101–111. <https://doi.org/10.1016/j.indmarman.2020.05.005>
- Hayton, J. C. (2015). Editor-in-Chief's note. *Human Resource Management*, 54(3): 385-388.
- Heathfield, S.M. (2008). How to Change Your Culture: Organizational Culture Change.
- Hermann, C. F. (1963). Some consequences of crisis which limit the viability of organizations. *Administrative Science Quarterly*, 61-82.
- Herold, D. M., Jayaraman, N., & Narayanaswamy, C. R. (2006). What is the relationship between organizational slack and innovation. *Journal of Managerial Issues*, 18(3), 372–392. (16) (PDF) *Slack and innovation: The role of human resources in nonprofits.* Available from:

[https://www.researchgate.net/publication/325637804\\_Slack\\_and\\_innovation\\_The\\_role\\_of\\_human\\_resources\\_in\\_nonprofits](https://www.researchgate.net/publication/325637804_Slack_and_innovation_The_role_of_human_resources_in_nonprofits) [accessed Jun 05 2021].

- Ilja, V. B., Gerben, A., Van, K., & Dijk, V. E. (2008). The Interpersonal Effects of Anger Communication in Multiparty Negotiation, *Journal of Experimental Social Psychology*, 44, 993-1002.
- Ishak, A. W., & Williams, E. A. (2018). A dynamic model of organizational resilience: adaptive and anchored approaches. *Corporate Communications*, 23(2), 180–196. <https://doi.org/10.1108/CCIJ-04-2017-0037>
- J., E. A. (2018). Modelling the relationship between innovation, strategy, strategic human resource management and organisation competitiveness. *African Journal of Business Management*, 12(14), 428–438. <https://doi.org/10.5897/ajbm2017.8378>
- Jaw, B. S., & Liu, W. (2003). Promoting organizational learning and self-renewal in Taiwanese companies: The role of HRM. *Human Resource Management: Published in Cooperation with the School of Business Administration, The University of Michigan and in alliance with the Society of Human Resources Management*, 42(3), 223-241.
- Jensen, M. C. (1993). The modern industrial revolution, exit, and the failure of internal control systems. *Journal of Financial Economics*, 3, 305-360.
- Jiménez-Jiménez, D., & Sanz-Valle, R. (2005). Innovation and human resource management fit: an empirical study. *International journal of Manpower*.
- Kalyani, M. and Sahoo, M. P., (2011). Human Resource Strategy: A toll of managing change for organizational excellence. *International Journal of Business and Management*.
- Kamin, J. Y., & Ronen, J. (1978). The effects of corporate control on apparent profit performance. *Southern Economic Journal*, 181-191.

- Kamien, M.I., Schwartz, N., (1979). Optimal Capital Accumulation and Durable Good Production. *Zeitschrift fur National V Okonomie* 37, 25–43.
- Kane, B., Crawford, J., & Grant, D. (1999). Barriers to effective HRM. *International Journal of Manpower*, 20(8), 494–516. <https://doi.org/10.1108/01437729910302705>
- Kaplan, G. (2012). *Moving Back Home: Insurance against Labor Market Risk*. *Journal of Political Economy*, 120(3), 446–512. doi:10.1086/666588
- Kaplan, R. S. (2005). *How the balanced scorecard complements the McKinsey 7-S model*. *Strategy & Leadership*, 33(3), 41–46. doi:10.1108/10878570510594442
- Katila, R., & Ahuja, G. (2002). Something Old, Something New: A Longitudinal Study of Search Behavior and New Product Introduction. *Academy of Management Journal*, 45(6), 1183–1194.
- Katou, A. A. (2008). Measuring the impact of HRM on organizational performance. *Journal of Industrial Engineering and Management (JIEM)*, 1(2), 119-142.
- Kim, D., & Choi, Y. (2014). Social exchange model between human resource management practices and innovation in software engineering. *Seoul Journal of Business*, 20.
- Koryak, O., Mole, K. F., Lockett, A., Hayton, J. C., Ucbasaran, D., & Hodgkinson, G. P. (2015). Entrepreneurial leadership, capabilities and firm growth. *International Small Business Journal: Researching Entrepreneurship*, 33(1), 89–105. <https://doi.org/10.1177/0266242614558315>.
- Kuckertz, A., Brändle, L., Gaudig, A., Hinderer, S., Reyes, C. A. M., Prochotta, A., Steinbrink, K. M., & Berger, E. S. C. (2020). Startups in times of crisis—A rapid response to the COVID-19 pandemic. *Journal of Business Venturing Insights*, 13, 1–13. <https://doi.org/10.1016/j.jbvi.2020.e00169>

- Kuknor, S., & Bhattacharya, S. (2021). Organizational Inclusion and Leadership in Times of Global Crisis. *Australasian Accounting, Business and Finance Journal*, 15(1), 93-112. doi:[10.14453/aabfj.v15i1.7](https://doi.org/10.14453/aabfj.v15i1.7)
- Kuncoro W & Suriani W. O. (2018). Achieving Sustainable competitive advantage through product innovation and market driving. *Asia Pacific Management Review*, 23,186-192.
- Laforet, S. (2011). A framework of organisational innovation and outcomes in SMEs. *International Journal of Entrepreneurial Behavior & Research*, 17(4), 380–408. doi:10.1108/13552551111139638.
- Lahn, G., & Bradley, S. (2020). How COVID-19 is changing the opportunities for oil and gas-led growth.
- Landsman Miriam, J. (2004). Evaluating Training To Improve Staff Retention. *European Journal of Economics, Finance and Administrative Sciences*, 6(4), 58-176.
- Lankeu, M. R. & Maket, J.L. (2012). Towards a Results-Oriented Public Service in Kenya: The Modern Human Resource Management Perspective. *International Journal of Business and Social Science*, 3(21), 265-270.
- Latorre, F., Guest, D., Ramos, J., & Gracia, F. J. (2016). High commitment HR practices, the employment relationship and job performance: A test of a mediation model. *European Management Journal*, 34(4), 328–337. <https://doi.org/10.1016/j.emj.2016.05.005>
- Laursen, K., & Foss, N. J. (2003). New human resource management practices, complementarities and the impact on innovation performance. *Cambridge Journal of Economics*, 27(2), 243–263. <https://doi.org/10.1093/cje/27.2.243>
- Lazarov, Alexandru-Sebastian. (2020). The Importance of Human Capital and the Human Organization Management in a Crisis Situation. *Proceedings of the International Conference On Business Excellence*, 14(1), 906–914.

- Le Bas, C., & Lauzikas, M. (2009). The combination of innovation and human resource strategies: The case of information technology sector in Lithuania. *Intellectual Economics*, 2(6), 18–29.
- Lee, S. C., Lim, W. H., & Suh, E. K. (2014). Youth startup firms: A case study on the survival strategy for creating business performance. *The Journal of Distribution Science*, 12(6), 81-88.
- Lee, K. L., Singram, S. A. L., & Felix, C. L. (2015). The relationships between Human Resource Practices on Employee Retention in Malaysian Industrial Settings. *Global Journal of Business and Social Science Review*, 1, 143–155.
- Leibenstein, H. (1969). Organizational or frictional equilibria, X-efficiency, and the ratio of innovation. *Quarterly Journal of Economics*, 83, 600-623.
- Lengnick-Hall, C. A., Beck, T. E., & Lengnick-Hall, M. L. (2011). Developing a capacity for organizational resilience through strategic human resource management. *Human Resource Management Review*, 21(3), 243–255. <https://doi.org/10.1016/j.hrmr.2010.07.001>.
- Leonard-Barton, D. (1995). Wellsprings of knowledge: Building and sustaining the sources of innovation. *Harvard Business School Press*, Boston, MA.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic Inquiry*, 75.
- Lindenau, M., & Böhler-Baedeker, S. (2014). Citizen and Stakeholder Involvement: A Precondition for Sustainable Urban Mobility. *Transportation Research Procedia*, 4, 347–360. doi:10.1016/j.trpro.2014.11.026
- Ling, T.C., & Nasurdin, A.M. (2011). Human resource management practices and organisational innovation: Assessing the mediating role of knowledge management effectiveness. *Electronic Journal of Knowledge Management*, 9(2), 155–167.

- Liu, Y., Lee, J. M., & Lee, C. (2020). The challenges and opportunities of a global health crisis: The management and business implications of COVID-19 from an Asian perspective. *Asian Business & Management*, 19, 277–297.
- Lockwood, B. (2005). Fiscal Decentralization: A Political Economy Perspective. *Warwick Economic Research Papers*, 721, 1–34.
- MacDuffie, J. P. (1995). Human resource bundles and manufacturing performance: Organizational logic and flexible production systems in the world auto industry. *ilr Review*, 48(2), 197-221.
- Mahdi, O.R., and Almsafir, M.K. (2014). The role of strategic leadership in building competitive advantage in the academic environment. *Procedia - Social and Behavioural Sciences*, 129, 289-296.
- Matookchund, N. G., & Steyn, R. (2019). Performance appraisal as an antecedent to innovation: An analysis of its importance relative to other human resource practices. *SA Journal of Human Resource Management*, 17, 1–11. <https://doi.org/10.4102/sajhrm.v17i0.1219>.
- McCracken, M., & Wallace, M. (2000). Towards a redefinition of strategic HRD. *Journal of European Industrial Training*, 24(5), 281–290. <https://doi.org/10.1108/03090590010372056>.
- McGrath, R.G. (2001). Exploratory learning, innovative capacity and managerial oversight. *Academy of Management Journal*, 44, 118–31.
- McKinsey & Company (2020). McKinsey & Company. COVID-19: Implications for business.2021. <https://www.mckinsey.com/business-functions/risk/our-insights/covid-19-implications-for-business> (accessed April 13, 2021)
- MENSCH G. (1979). Stalemate in Technology: Innovations Overcome the Depression. Ballinger, Cambridge/Mass.
- Merril, P. (2008). The Need for Knowledge. *Innovation Generation, Creating an Innovation Process and an Innovative Culture*, 13-25.

- Metters, R., Zhao, X., Bendoly, E., Jiang, B., & Young, S. (2010). The way that can be told of is not an unvarying way: Cultural impacts on Operations Management in Asia. *Journal of Operations Management*, 28(3), 177–185. <https://doi.org/10.1016/j.jom.2009.10.004>.
- Meyer, A. D. (1982). Adapting to environmental jolts. *Administrative science quarterly*, 515-537.
- Nahapiet, J., & Ghoshal, S. (2017). Social Capital , Intellectual Capital , and the Organizational Advantage Author ( s ): Janine Nahapiet and Sumantra Ghoshal Source. *The Academy of Management Review*, 23(2), 242-266.
- Naor, M., Linderman, K., & Schroeder, R. (2010). The globalization of operations in Eastern and Western countries: Unpacking the relationship between national and organization culture and its impact on manufacturing performance. *Journal of Operations Management*, 28(3), 194–205. <http://doi.org/10.1016/j.jom.2009.11.001>
- Nasurdin, A. M., Ling, T. C., & Fun, L. S. (2011). Service-Oriented Organizational Citizenship Behavior: Assessing the Predictive Role of Human Resource Management Practices. *International Journal of Arts & Sciences*, 4(09), 381–394. <http://proquest.umi.com/pqdweb/?did=2614680161&Fmt=7&clientId=27905&RQT=309&VName=PQD>
- Nathaniel N. Hartmann, Bruno Lussier, (2020). Managing the sales force through the unexpected exogenous COVID-19 crisis. *Industrial Marketing Management*, 88,101-111.
- Nohria, N., & Gulati, R. (1996). Is slack good or bad for innovation? *Academy of Management Journal*, 39(5), 1245–1264. <https://doi.org/10.2307/256998>
- Maier, A., Brad, S., Nicoară, D., & Maier, D. (2014). Innovation by Developing Human Resources, Ensuring the Competitiveness and Success of the Organization. *Procedia - Social and Behavioral Sciences*, (109), 645–648. doi:10.1016/j.sbspro.2013.12.521

- Olalla M.F (1999). The resource-based theory and human resources. *International Advances in Economic Research*, 5, 84-92.
- O'Reilly, C.A, and Pfeffer, J. (200). Cisco Systems: Acquiring and retaining talent in hypercompetitive markets. *Human Resource Planning*, 23, 38-52.
- Organization for Economic Cooperation and Development. (2009). Annual Report. *International Organization*.
- Ostroff, C., & Bowen, D. E. (2015). Academy Of Management Review Reflections on the 2014 Decade Award : Is There Strength in the Construct of HR System Reflections On The 2014 Decade Award : Is There Strength in the Construct of HR System Strength ? *Cheri Ostroff University of South Austral*, 41(2), 196–214.
- Ozigbo, N. C. (2012). The Implications of Human Resources Management and Organizational Culture Adoption on Knowledge Management Practices in Nigerian Oil and Gas Industry. *I2*(1), 91–105.
- Paauwe, J., & Boselie, P. (2005). HRM and performance: what next?. *Human resource management journal*, 15(4), 68-83.
- Penn, A., Desyllas, J., & Vaughan, L. (1999). *The Space of Innovation: Interaction and Communication in the Work Environment. Environment and Planning B: Planning and Design*, 26(2), 193–218. doi:10.1068/b4225.
- Pearson, C. M., & Clair, J. A. (1998). Reframing crisis management. *Academy of Management Review*, 23(1), 59-76.
- Pineda, P. (2010). Evaluation of training in organisations: a proposal for an integrated model, *Journal of European Industrial Training*, 34,673-693. <https://doi.org/10.1108/03090591011070789>.
- Pisano, G. P., Teece, D. J., Pisano, G. P., & Teece, D. J. (2007). *Management*.

- Podsiadlowski, A. , Gröschke, D. , Kogler, M. , Springer, C. and van der Zee, K. (2014). Managing a culturally diverse workforce: diversity perspectives in organizations. *International Journal of Intercultural Relations*, 37(2), 159-175.
- Prasad, K., & Vaidya, R. W. (2020). Association among Covid-19 parameters, occupational stress and employee performance: An empirical study with reference to the agricultural research sector in Hyderabad Metro. *Sustainable Humanosphere*, 16(2), 235–253.
- Pretty, D., Knight, R. F., & Templeton Coll., (1997). Impact of catastrophes on shareholder value. Oxford (United Kingdom), *TREASURER*, 27-30.
- Przytuła, S., Strzelec, G., & Krysińska-Kościańska, K. (2020). Re-vision of future trends in human resource management (HRM) after COVID-19. *Journal of Intercultural Management*, 12(4), 70–90.
- Quaedackers, J. S., Stein, R., Bhatt, N., Dogan, H. S., Hoen, L., Nijman, R. J., ... & Bogaert, G. (2020). Clinical and surgical consequences of the COVID-19 pandemic for patients with pediatric urological problems. Statement of the EAU guidelines panel for pediatric urology. *Journal of Pediatric Urology*. <https://doi.org/10.1016/j.jpuro.2020.04.007>.
- Quarantelli, E. L. (1988). Disaster crisis management: A summary of research findings. *Journal of Management Studies*, 25(4), 373-385.
- Rajapathirana, R. P. J., & Hui, Y. (2017). Relationship between innovation capability, innovation type, and firm performance. *Journal of Innovation & Knowledge*, 3(1), 44–55. doi:10.1016/j.jik.2017.06.002.
- Rasool, S. F., Samma, M., Wang, M., Zhao, Y., & Zhang, Y. (2019). How Human Resource Management Practices Translate Into Sustainable Organizational Performance: The Mediating Role Of Product, Process And Knowledge Innovation. *Psychology research and behavior management*, (12), 1009–1025. <https://doi.org/10.2147/PRBM.S204662>.

- Rijpma, J. A. (1997). Complexity, tight-coupling and reliability: Connecting normal accidents theory and high reliability theory. *Journal of Contingencies and Crisis Management*, 5(1), 15-23.
- Robert W . W. (2007). Creativity; Understanding innovation in problem solving, science, invention, and the arts. (2), 251–253.
- Rogers, M., (1998). The Definition and Measurement of Innovation. *Melbourne Institute Working Paper 10/98*.
- Runfeng, Y. (2011). Influence of Goal Orientation in Performance Appraisal on Staff Innovative Behavior: Mediating Effect of Innovative Climate. *Proceedings of the 8Th International Conference on Innovation and Management*, 445–451.
- Sardi, A., Sorano, E., Garengo, P., & Ferraris, A. (2020). The role of HRM in the innovation of performance measurement and management systems: a multiple case study in SMEs. *Employee Relations*. <https://doi.org/10.1108/ER-03-2020-0101>.
- Schumpeter, J. (1934). The theory of economic development: an inquiry into profits, capital, credit, interest and the business cycle. *Harvard Economic Studies*, 46, Redvers Opies (translator).
- Sepúlveda-Loyola, W., Rodríguez-Sánchez, I., Pérez-Rodríguez, P., Ganz, F., Torralba, R., Oliveira, D. V., & Rodríguez-Mañas, L. (2020). Impact of Social Isolation Due to COVID-19 on Health in Older People: Mental and Physical Effects and Recommendations. *The Journal of Nutrition, Health & Aging*. doi:10.1007/s12603-020-1469-2.
- Shahnaei, S., & Long, C. S. (2015). The review of improving innovation performance through human resource practices in organization performance. *Asian Social Science*, 11(9), 52–56. <https://doi.org/10.5539/ass.v11n9p52>
- Shahnaei, S., Long, C. S., Vardarlier, P., Kay, A., Coombs, W. T., Laufer, D., Song, J., Almeida, P., Wu, G., Macduffie, J. P., Kochan, T. A., Persson, S., Shrivastava, P.,

- Bryson, A., Stokes, L., Wilkinson, D., Katou, A. A., Aryanto, R., Fontana, A., ... Tylecote, A. (2016). The Effects of Organizational Culture, Structure and Market Expectations on Technological Innovation: A Hypothesis. *Procedia - Social and Behavioral Sciences*, 3(3), 503–524. <https://doi.org/10.1287/mnsc.49.4.351.14429>
- Shafi, M., Liu, J. & Ren, W. (2020). Impact of COVID-19 pandemic on micro, small, and medium-sized Enterprises operating in Pakistan. *Research in Globalization*.
- Shalley, C. E., Gilson, L. L., & Blum, T. C. (2009). Interactive Effects of Growth Need Strength, Work Context, and Job Complexity On Self-Reported Creative Performance. *Academy of Management Journal*, 52(3), 489–505.
- Shipton, H., Fay, D., West, M., Patterson, M., & Birdi, K. (2005). Managing People to Promote Innovation. *Creativity and Innovation Management*, 14(2), 118–128. <https://doi.org/10.1111/j.1467-8691.2005.00332.x>
- Shipton, H., Sparrow, P., Budhwar, P., & Brown, A. (2017). HRM and innovation: looking across levels. *Human Resource Management Journal*, 27(2), 246–263. <https://doi.org/10.1111/1748-8583.12102>.
- Shrivastava, P. (1993). Crisis theory/practice: Towards a sustainable future. *Industrial & Environmental Crisis Quarterly*, 7(1), 23-42.
- Shrivastava, S., Sonpar, K., & Pazzaglia, F. (2009). Normal accident theory versus high reliability theory: a resolution and call for an open systems view of accidents. *Human Relations*, 62(9), 1357-1390.
- Song, J., Almeida, P., & Wu, G. (2003). Learning-by-hiring: When is mobility more likely to facilitate interfirm knowledge transfer?. *Management science*, 49(4), 351-365.
- Srivastava, P., Bhatnagar, J., & Acquisition, T. (2009). *T 1999*.
- Stokes, P., Smith, S., Wall, T., Moore, N., Rowland, C., Ward, T., & Cronshaw, S. (2018). Resilience and the (micro-) dynamics of organizational ambidexterity:

- implications for strategic HRM. *The International Journal of Human Resource Management*, 1-36.
- Su C. W., Zhang Y.C. and Qin M., (2020). The essential role of pandemics: A fresh insight into the oil market. *Energy Research Letters*.
- Subramaniam, M., & Youndt, M. A. (2005). The influence of intellectual capital on the types of innovative capabilities. *Academy of Management Journal*, 48(3), 450–463. <https://doi.org/10.5465/AMJ.2005.17407911>.
- Sułkowski, Ł., Przytuła, S., Borg, C., & Kulikowski, K. (2020). Performance Appraisal in Universities—Assessing the Tension in Public Service Motivation (PSM). *Education Sciences*, 10(7), 174. MDPI AG. Retrieved from <http://dx.doi.org/10.3390/educsci10070174>.
- Sutcliffe, K. M., & Vogus, T. J. (2003). Organizing for resilience. Positive organizational scholarship: *Foundations of a new discipline*, 94, 110.
- Tan, C. L., & Nasurdin, A. M. (2011). Human Resource management practices and organizational innovation: Assessing the mediating role of knowledge management effectiveness. *Electronic Journal of Knowledge Management*, 9(2), 155–167.
- Teece, D. J. (2007). The role of managers, entrepreneurs and the literati in enterprise performance and economic growth. *International Journal of Technological Learning, Innovation and Development*, 1(1), 43-64.
- Thornhill, A., Saunders, M., & Lewis, P. (2009). *Research methods for business students*. Prentice Hall: London.
- Tiwari, P., & Deo, M. (2012). Compositional and kinetic analysis of oil shale pyrolysis using TGA–MS. *Fuel*, 94, 333–341. doi:10.1016/j.fuel.2011.09.018
- Tohidi, H., & Tarokh, M. J. (2006). Productivity outcomes of teamwork as an effect of information technology and team size. *International Journal of Production Economics*, 103(2), 610–615. doi:10.1016/j.ijpe.2005.12.002.

- Trista, H. (2016). Case study research design and methods. *Review. Canadian Journal of Program Evaluation*. 30(1).
- Tsai, W. (2001). Knowledge Transfer in Intraorganizational Networks: Effects of Network Position and Absorptive Capacity on Business Unit Innovation and Performance. *Academy of Management Journal*, 44(5), 996–1004. doi:10.5465/3069443.
- Tylecote, A. (1992). The Long Wave in the World Economy: The Present Crisis in Historical Perspective, *London: Routledge*.
- Unsworth, K. L., & Clegg, C. W. (2010). Why do employees undertake creative action? *Journal of Occupational and Organizational Psychology*, 83(1), 77–99. doi:10.1348/096317908x398377.
- Uyargil, C., & vd. (2010). İnsan Kaynakları Yönetimi. İstanbul: Beta Basım Yayın.
- Uzkurt, C., Kumar, R., Kimzan, H. S., & Eminoğlu, G. (2013). Role of innovation in the relationship between organizational culture and firm performance. *European Journal of innovation management*.
- Van Kleef, G.A., van Dijk, E., Steinel, W. (2008). Anger in social conflict: Cross-situational comparisons and suggestions for the future. *Group Decis Negot* 17, 13–30. <https://doi.org/10.1007/s10726-007-9092-8>.
- Vardarlier, P. (2016). Strategic Approach to Human Resources Management During Crisis. *Procedia - Social and Behavioral Sciences*, 235(9), 463–472. <https://doi.org/10.1016/j.sbspro.2016.11.057>.
- Vermeeren, B., Kuipers, B., & Steijn, B. (2013). Does Leadership Style Make a Difference? Linking HRM, Job Satisfaction, and Organizational Performance. *Review of Public Personnel Administration*, 34(2), 174–195. doi:10.1177/0734371x13510853.
- Wagner J and Watch D., (2017) “Innovative Spaces: The New Design of Work”

- Walpole, H. (1754). Letter to Horace Mann, January 28. *The Correspondance of Horace Walpole, The Yale Edition (1960)*, 20, 407-8.
- Warsi, S., Fatima, N., & Sahibzada, S. A. (2009). Study on Relationship Between Organizational Commitment and its Determinants among Private Sector Employees of Pakistan. *International Review of Business Research Papers*, 5(3), 399–410.
- Weisberg, R. W. (2006). Creativity: Understanding innovation in problem solving, science, invention, and the arts. *John Wiley & Sons*.
- West, M. A., & Farr, J. L. (Eds.). (1990). Innovation and creativity at work: Psychological and organizational strategies. *John Wiley & Sons*.
- West, M. A., Hirst, G., Richter, A., & Shipton, H. (2004). Twelve steps to heaven: Successfully managing change through developing innovative teams. *European journal of work and organizational psychology*, 13(2), 269-299.
- Wood, S. (1999). Human resource management and performance. *International Journal of Management Reviews*, 1(4), 367–413. doi:10.1111/1468-2370.00020.
- Wooten, L. P., & James, E. H. (2008). Linking Crisis Management and Leadership Competencies: The Role of Human Resource Development. *Advances in Developing Human Resources*, 10(3), 352–379. <https://doi.org/10.1177/1523422308316450>.
- Yin, R. K. (2011). Qualitative research from start to finish 3rd ed. *Thousand Oaks, CA: Sage*.
- Zaidi, R. M. (2005). HR Contribution to Crisis Management: A Key Role in Employee Defense and Business Sustainability.
- Zehir, C., Üzmez, A., & Yıldız, H. (2016). The Effect of SHRM Practices on Innovation Performance: The Mediating Role of Global Capabilities. *Procedia - Social and Behavioral Sciences*, 235(October), 797–806. <https://doi.org/10.1016/j.sbspro.2016.11.088>.

## 8.0 Appendix

### 8.1. Appendix 1: Interview Guide for First Respondent.

#### QUESTION FOR EDUCATION AND TRAINING DEPARTMENT.

1. As an HR, what do you make of what an innovation is and how helpful is it to the business?
2. As an HR, what are some of the crucial roles to play in ensuring innovation happens?
3. The pandemic has affected many organizations in every aspect of their businesses. What major role did you play to ensure that Eni survives the impacts of the pandemic and what have been some of the challenges faced?
4. I believe the mandate of Eni Corporate University is to train resources of the company, as an HR, what strategies did you put in place to ensure the contribution from the training becomes an asset to help manage the pandemic situation.
5. Did you have the structures in place to swiftly move activities online and has the content of the training changed?
6. What was the content of the training program before, during and after the Covid-19? Did you have training activities designed specifically to respond to the crisis and how has the impact been?
7. Why are you much particular about training of employees and how often do you modify the training contents and on what basis?
8. Do you perchance have a fair idea of what your competitors are doing and how is it different from yours?
9. With respect to the transition program, what has been your role in this direction, and did you have the internal faculty to equip the resources with the right knowledge and skill sets to achieve the goal of the company?
10. What is the future of Eni to you?

## 8.2 Appendix 2: Interview Guide for Second Respondent.

### QUESTIONS FOR DEVELOPMENT DEPARTMENT.

1. As an HR in charge of development, what exactly is your HR focus, what do you develop and how do you do it?
2. What is your view on what an innovation is and what are some crucial roles you play to ensure innovation happens and do you think it is beneficial to the business?
3. What do you think is the greatest skill and the competency an organization considers an asset and how do you work with Eni Corporate University to retain this asset?
4. Comparing the era of Covid-19 and now, and with the introduction of enormous innovation and digital technologies within the company, how has it affected HR management? How do you intend to use lessons learnt during the pandemic for future development?
5. The pandemic has affected many organizations in every aspect of their businesses, what major role did you play to ensure that Eni survives the impacts of the pandemic and what have been some of the challenges faced?
6. Did you organize any development program to equip your resources with the right skills and attitude specifically to adapt to the changes in the work environment due to the impact from Covid-19? Are these skills applicable to any future unforeseen crisis?
7. With respect to the transition program, how impactful has your role been in this direction to equip the resources with the right knowledge and skill sets to achieve the goal of the company?
8. How were you able to swiftly move your activities virtually and what role did you play in your capacity?
9. How do you keep your resources motivated even in the face of adversities and what is that one thing you do to improve the performance of your resources?
10. In developing a resource, is it always that the development may be consistent with the person's career, or can it sometimes deviate and take a different path?

11. What becomes of the resources whose activities cannot be undertaken via distance mode.

### 8.3 Appendix 3: Interview Guide for Third Respondent.

#### Questions for Innovative Methodologies.

1. In your role as an HR in charge of innovation, what does innovation mean to you and how does it help your organization?
2. What do the processes or approaches of innovation with respect to training look like in your organization and what crucial role do you play to ensure innovation happens?
3. Can you evaluate some indications that depict you have been successful or made your company very competitive due to your innovative ideas which are embedded in the training?
4. The pandemic took every business by surprise of which your company was not an exception and hence your innovative ideas which you may have outlined prior to the pandemic got affected. In lieu of this, what innovative measures have you implemented that make you survive this moment while still producing quality products to serve the public. How do you intend to sustain these new innovative measures even after the pandemic?
5. How does innovation support training in terms of technology having in mind new ways and approaches of imparting knowledge and undertaking training?
6. Do you have an idea of what your competitors are doing, and do you perceive any significant variations?
7. How are you able to blend innovation with training, what significant role did your department play to support the company to face the pandemic moment, what are some benefits and challenges of your initiative and how significant has your contribution been?
8. In your quest in searching for new trends in the energy system, what key parameters do you look out for before you adopt these new trends? Do you place much weight on the immediate benefit of this new trend or on the future benefits?
9. How do you see the future of Eni in general?

#### 8.4 Appendix 4: Interview Guide for Fourth Respondent.

##### HR TRENDS AND COMPETENCE OF THE FUTURE.

1. What is your take on what an innovation is and how beneficial is it to the business?
2. When we talk of HR trends and future competence, what does it mean and how is it peculiar to other roles?
3. What exactly does management mean to you and do innovation and digital technology have any effect on HR management?
4. The current global pandemic has triggered the need for almost all companies to innovate their way to survival. What innovative approaches did you adopt and how successful has it been?
5. Did the pandemic bring to light some strengths and weaknesses in innovation and digital technologies on HR management and how does this affect HR trends and future competence?
6. How do you see the future of Eni with respect to the HR management of innovation and technology even when this pandemic is finally over?
7. Do you have any idea of what your competitors are doing, and could you identify significant variations?

## List of Tables

Table 1 - Various definitions of innovation by respondents. Source: Produced by the author... 41

## List of Figures

Figure 1- Exponential Increment of Training. Source:( Innovative Methodologies Dept.) .....51.

## Summary of Research

TOPIC: THE ROLE OF HRM IN INNOVATION MANAGEMENT DURING ECONOMIC CRISIS: A FOCUS ON THE OIL AND GAS INDUSTRY USING ENI AS A CASE STUDY.

### 1.0 Introduction:

There has been heightening evidence that proves that practices of human resource management are key predictors of organizational performance (Giauque et al, 2013). According to a report by the Organization for Economic Cooperation and Development (2009), major economic crises have propelled organizations' management to adopt strategies to live up to the major threat these crises pose to their business. With increasing worldwide competition and ever-increasing environmental turbulence, the ability of the organization to innovate is seen as a key factor to ensure their success (McGrath, 2001). The increasing rise of the industrial crisis opens the opportunity for the HRM to implement innovative strategies to solve problems posed by the crisis. In this study, we will consider the extent to which HRM's role in innovation can serve as a tool to help maintain the organization in moments of crisis.

### 1.1. Proposed Research Question:

The functions of the HRM are delicate and narrowing it down to the oil and gas companies raises a lot of concerns. The oil and gas companies play a crucial role in sustaining and fuelling our economy. With the very little glitch in their operation, other driving sectors of economic development will be affected. Human resource management has the potential to implement policies for the growth of an organization even in the time of crisis. While it is evidently clear that much can be said, it is imperative to address the key research questions listed below for the sake of time and scope of the research.

1. How has the economic crisis increased the effectiveness of HRM roles?
2. What are the most effective innovative strategies employed by HRMs in the Oil and Gas business for increasing survival during crises?
3. In the event of an economic crisis, what innovative approaches are employed by the HRM to manage their employees?

In the wake of this current global pandemic, it is relevant to pinpoint that I found myself writing a master thesis covering HRM's role in innovation management during a crisis. From this scenario, it appeared logical and of substantial relevance, considering this aspect in my thesis. The second line of reasoning can be drawn:

1. How has the economic crisis increased the effectiveness of HRM roles?
2. What is the impact of HRM's innovative approach on the total performance of the organization?
3. Can the findings obtained using ENI as a case study be applied to other oil and gas companies and even non-oil and gas operating companies?

## 1.2. Significance of the study:

There have been many studies that depict a positive relationship between human resource management and organizational performance (Brito & Oliveira, 2016). Studies are now beginning to explore the role of human resources management in ensuring organizational innovation (Rasool et al., 2019). Many issues remain unexplored such as the innovative role HRM plays in moments of crisis.

The relevance of the study stems from the analysis of the opportunities and challenges the innovative ideas of the HRM pose to the organization as well as the implication of the crisis. It may open discussions in many areas like the relevance of HRM to businesses. This study's findings will redound to the Oil and Gas industries benefit, considering that the industry is faced with numerous crises every now and then. The greater task HRM plays in an organization justifies the need for the HRM to be more innovative, to steer the change of events towards a positive end in an organization. Thus, companies, especially the oil and gas industries that apply the recommended

approach derived from the results of this study will remain competitive even in the wake of a crisis as they may incur no significant loss. The HRM would be guided on what innovative approaches should be hammered on during a crisis and how to deploy those innovative ideas. For researchers (if it is a group) or an independent researcher, the investigation will unveil critical areas in the oil and gas operations that need to be taken a closer look at, hence pinpointing ways to help sustain the industry.

### 1.3 Motivation:

The COVID-19 has undoubtedly affected all organizations, leading to a maze and challenging environment for human resource managers to devise ingenious solutions to ensure the sustainability of their businesses (Hamouche, 2021). It is evidently clear that there are very few studies that have tried to address the impact of COVID-19 on HRM in general (Hamouche, 2021). However, studies on the effect of this crisis on HRM especially in the oil and gas industry are sparse. Considering the pressures mounted on the oil and gas industries by the environmental and climate change advocates and other stakeholders and the current global pandemic, there is no doubt that HRM needs to be innovative, invent outside-the-box master plans to support their business to remain competitive. As a result, it is worth considering the role of HRM in innovation management during an economic crisis.

## 2. Literature Review:

This chapter will present the theoretical foundation of the study. This study aims to analyse the innovative strategies the HRM put in place during crises. A comprehensive presentation of Human Resource Management and innovative strategies of HRM in crisis covering the definition, the relationship between innovative process and growth, the different measures the HRM adopts to make the industry resilient in the face of challenges amongst others will be looked at. Empirical literature acknowledged the strong relationship between innovation and long-term economic growth (Maier, Brad, Nicoara, & Maier, 2014). Most studies on innovation in crisis management are geared towards reducing the damage or salvaging the industry from difficult times temporarily. Human resources managers are deemed poised to have been given the mandate to implement policies that aim at growing the company. Human resource managers should be able to put in place methods that could help them to forecast crises and implement preventive measures to reduce the impact of the forecasted risk. With the increasing rise of the industrial crisis, it opens the opportunity for the HRM to implement innovative strategies to solve problems posed by the crisis. Many previous pieces of research focus on the relationship between HRM practices and organizational performance (Shipton, Fay, West, Patterson, & Birdi, 2005). Nevertheless, only a few focuses on the strategic HRM practices in the event of a crisis. We cannot deny the importance HRM plays in most organizations, but these traditional roles are not enough in severe economic downturns and that the aim is to find the innovative roles HRM plays during those difficult times.

Most research has been done on the innovative approaches HRM use during the crisis (Caligiuri *et al.*, 2020). In most instances, the crisis is either financial or geared towards a specific sector of the economy. However, there has not been any crisis so vast and wider than the COVID-19. The global pandemic affected every part of the world. The global economy was badly hit, and all the various parts of the economy were affected. Previous innovative approaches were not robust to tame this global pandemic. The pandemic tested every part of the economy and won. The innovative approaches used, needed to be revisited and revised to meet the current pandemic. My research is to understand innovative approaches used by the HRM during this pandemic and the strategies they hope to adopt to handle future pandemics of this nature or even worse.

It can be inferred that judging from the gravity of this pandemic, any effective and efficient innovative approach which is a solution to this crisis can be used against most unforeseen crises yet to come.

### 3. Methodology:

In this chapter, the summary of how the research was done, the methodology and the reasoning behind the choice and the merits and drawbacks that are associated with it are elaborated. In choosing what kind of research strategy (qualitative or quantitative) to conduct, the nature of the research questions needs to be the determinant according to Bryman and Bell, (2011). In this study, a qualitative research method presents to be more appropriate in answering the research questions. The merits derived from this method stand in the flexibility necessitated to investigate such specific context and, in the likelihood, to keenly observe respondents and ascertain subjective opinions. There will be application of reliable analysis tools to minimize potential bias since this focus will be much on perceptions and human behaviour.

An exploratory case study approach will be considered in the design aspect of this work. An exploratory case study seeks to find correlations between theories already in existence and case studies. This will make room for an in-depth exploration into complex context by way of a thorough and intensive analysis. The data collection will follow an iterative process that will make use of both secondary data and primary data collected through interviews. Structured or semi-structured interviews would be applied as well as possible use of internal documents or actual observations by participating in the company's meetings.

A thematic approach will be utilized to analyse the data since by adopting this rigorous analysis, it will allow me to carefully comprehend in-depth each part of the data, while I avoid the error of missing out key information. Throughout the analysis, all effort would be made to ensure that there is no bias in the data collected and interpreted so that the result obtained will as much as possible be a true reflection of what is in reality, hence making it more applicable and reliable.

#### 4. Data Analysis and Discussions:

The results of the qualitative study are established on interviews of four Human resources managers from Eni. All the HR managers voluntarily participated in the study. All participants were contacted through the Department of Technical Training at Eni Corporate University. Upon Elisabetta's contact with these managers, they then subsequently agreed to be a part of the study.

All participants of the study are employees of Eni holding various human resources management positions at Eni centre of excellence thus "Eni Corporate University". Since I found myself writing this thesis in the era of a global pandemic, each participant was interviewed using Microsoft Teams and this was very convenient because it also helped us to overcome the issue of distance since some of the respondents were located in other regions. Upon approval from the respondents, the interviews were recorded using the recording device on Microsoft Teams and this also allowed for convenient transcription of the recorded interviews. The experiences and responses of the respondents added insight to the research questions that are posed in the research. Three research questions are tackled supported with evidence, in addition to feedback from the respondents.

In this work, four themes were highlighted concerning the innovative approaches used by HRM during crisis management. Innovation and technology, management of change, human focus, collaboration, and inclusivity are the themes gleaned from this study. The responses from the participants are compared with what is found in the literature. The necessary connections and relations are made, hence arriving at a scholarly conclusion.

##### 4.1 Innovation and Technology

Innovation has been deemed as a crucial drive in every sphere of human life. Innovation and technology are key areas that form the basic determinant in innovation circles. Innovation is sometimes seen as "the use of purposive inflows and outflows of knowledge to accelerate internal innovation and expand the markets for external use of innovation respectively" according to Chesbrough, (2003). This means that outsourcing

and experiments most likely give birth to innovation. These two concepts as found in the literature agree with what Innovative Methodologies, (2021), said. She confirmed that innovation is all about creativity and curiosity. Innovation should be based on a circularity (trend identification, experience, and implementation). To her, the ability to curiously explore contexts and worlds of diversity from oneself and find the connection to your activity forms the basis for developing innovation. For instance, innovation can be born from mistakes as in the case of how Amarone Della Valpolicella wine was created as a result of a mistake in the timing of the fermentation of the grapes of the Recioto Della Valpolicella wine. Innovation may not necessarily have to do with only products or services but also the way and manner of thinking (Head of Education and Training, 2021). The Head of Education and Training (2021) stated that innovation has to do with the ability to embrace diversity by looking at things from different perspectives. Innovation and technology can be seen to run hand in hand. HR Trends, and Future Competence, (2021), hinted that innovation is seen after attempting and failing on things differently. She emphasized that technology is actually the enabler and lifeblood of innovation because it helps to create amazing things which otherwise would not have been created.

It is worth remembering that COVID-19 has presented to HRM a ton of challenges, yet it has paved the way for other unforeseen opportunities. Knowing and understanding this does create the avenue for the organization to help make better decisions tomorrow (Hamouche, 2021). Innovation and technology have played an undeniable impact on the HRM during the pandemic. Based on the data gathered from this study, it was very clear that innovation and technology are pivotal in helping companies thrive during crises. The HR Trends, and Future Competence, (2021) stated that through innovation and technology, companies are able to catch up with rapid paces to gain a competitive advantage. It also allowed companies to be more agile, more integrated, and more efficient in their operations and processes. Also, the use of innovation and technology as a tool has helped to cut down commutation cost, enabled the opportunity for job control and flexibility for employees (Prasad & Vaida, 2020). According to HR Trends, and Future Competence (2021), Eni had already started smart work a couple of years back before the pandemic surfaced. It was, therefore, easier for the employees to transition into their new working platform because of innovation

incorporated. It is therefore evidently clear that innovation is much appreciated and observed when one is prepared for it.

#### 4.2 Training:

Human resources professionals have strategic duties to play when a crisis happens; and how prepared they are will plummet anxiety throughout the organization (Varderlier, 2016). HR of Eni focuses on training their workforce because they believe it is the way to embed in them the right skills and capabilities to support the business (Head of Education and Training, 2021). To her, training is considered pivotal and that is why Eni has established a model of excellence called Eni Corporate University (ECU), which seeks to spearhead all the training activities in the organization. Pineda (2010) argues that training is an essential strategy for the development of human resources and in accomplishing the objectives of the organization. It is also worth saying that not all employees and even managers have the right technological know-how (Hamouche, 2021). Bae and Lawler (2000) argued that extensive training on the job has the ability to improve the knowledge needed to create the link between diverse stimuli. As such training is one of the innovative techniques used by HRM in times of crisis. Eni has been evolving and has constantly fine-tuned its training activities to meet the growing global trends. For instance, Innovative Methodologies Department (2021), stated that Eni is now convinced that currently, training should be a mix of new design, new formats, new technologies; a harmony of all these will make training experiences to be completely built around people. It has been reported that training helps to provide the needed skills employees need especially during a transition period. Salima Hamouche, (2021) stated that during the pandemic, most organizations supported their employees to transit successfully into the remote working environment. According to Innovative Methodologies, due to the pandemic situation, Eni is focusing more on distance learning in terms of approach not only to meet the growth in demand but to maximize didactic effectiveness with a focus on immersive reality (Virtual Reality and Mixed Reality). A virtual field trip was organized as part of the training activities to understand and better study the rocks and mountains even when physical trips were not possible

(Head of Education and Training, 2021). The “My Change” training program is an initiative that was introduced with the intent to create awareness for all employees to help them understand the roles each must play and contribute towards the transition period (Head of Education and Training, 2021). Training, according to Innovative methodologies, provides the opportunity to either upskill or reskill their competencies. In general, training activities have really been beneficial to the company to offer the opportunity for future development planning and growth.

#### 4.3 Human Focus:

In every competitive business, it becomes prudent for the organization to have the means to harness exceptional achievement through its peculiar structure to succeed more than others within the same market (Halbast & Tarik, 2019). Putting in place strategies that would create value to the business that is not being implemented simultaneously by others in the same market is deemed to have a competitive advantage (Kuncoro & Suriani 2018; Mahdi & Almsafir, 2014). Eni is going through a moment of change that requires the contribution of each of its human resources. This transition caused them to update the Eni model of excellence that is the tool to guide management and development of skills and behaviours in line with Eni's strategy. This model is the Human Focus (Development Department, 2021). O'reilly and Pfeffer (2000) posit that in today's world, intellectual capital and knowledge are of greater importance than physical capital. It is becoming glaring that people can become very effective and efficient in developing innovative products in today's business (Halbast & Tarik, 2019). Human Focus is a framework that is founded on the centrality of people (employees), which is meant to emphasize new abilities, skills, and competencies needed to overcome the new challenges of the organization and make it competitive (Development Department, 2021). Human capital is a key factor for the organization; it depicts the collection of professional skills, coupled with creativity and initiative of every single person, together producing essential resources and services that would bring forth profit to the organization. The competencies that are needed for an organization to attain business excellence are a very crucial question (Fundin,

Bergquist, Eriksson, & Gremyr, 2018). An organization's success can be attributed to the combined resources and capabilities that an organization possesses which differ from what its competitors have (MF. Ollala, 1999). It is believed that a firm is a focal point where resources and capabilities that cannot be easily bought and sold are located. To a larger extent, firm-specific resources produce economic benefits, which cannot be imitated by competitors and would eventually aid the company to have a competitive edge over its rivals (MF. Ollala, 1999). The framework called Human Focus is a guide to develop and share the company's culture based on a shared language that revolves around a single identity. The framework integrates the methodology for explaining the behaviours that we expect our people to have, making them resilient, hence becoming nearly impossible for them to be laid off (Department of Development, 2021). The Human Focus model helped reduce employee turnover to the minimum because the model focuses on the right skills employees are to have and helps to work on their weaknesses. It also helps them to have the right mindset, which requires commitment and team spirit. Human Focus creates a learning environment because it emphasizes new abilities (openness to change and diversity) needed to overcome new challenges (Head of Education and Training, 2021). This model can be assumed to be a lever for propelling originality and including everyone in how we work, a tool to develop a climate of mutual trust through dialogue. This model helps to increase job satisfaction and reduces ennui which is associated with doing the same thing repeatedly because it gives the employee the opportunity to transform and generate new value in novelty, being proactive and effective even when the outcome of the project is unknown.

#### 4.4 Collaboration and Inclusivity:

With the current global pandemic, it is imperative for organizations to make their employees feel important and involved in the current workspace (Kuknor and Bhattacharya, 2021). Collaboration and inclusivity play an important role in the development of any business or organization. Numerous works have highlighted the need for inclusivity and collaboration in today's dynamic world. Kuknor and Bhattacharya, (2021), stated that encouraging inclusivity in the workplace is a way of

solving curiosity and any trust-related issues in the minds of employees. Inclusivity can be thought of as accepting an individual's decisions, ideas, suggestions, respect, and beliefs regardless of their background (Podsiadlowski et al., 2014). Cox (2001) made it even simpler by saying that inclusivity is the core of a multicultural institution whereby people with different identities are welcomed with their uniqueness. In effect, an organization's performance can be improved by leveraging on inclusivity (Van Kleef et al., 2008). Eni comprises people from different cultural backgrounds, levels of education, and others; hence collaboration and inclusivity are very necessary (HR Trends and Future Competence, 2021). Most importantly, it is prudent to make sure that the employees get the right sensibility about inclusion. In terms of collaboration, the various departments within Eni join forces to help design the right activities for the employees (Development Department, 2021). According to the Head of Education and Training (2021), Eni collaborates both with its competitors and non-competitors as well. It can be observed that collaboration and inclusivity form a formidable part of Eni's operations. The importance of inclusivity and collaboration to an organization can never be overemphasized. Eni recognizes the need to enhance collaboration and inclusivity within their working environment. For instance, the Head of Education and Training (2021), said that Eni is experiencing increasing number in areas of diversity and collaboration than it was in the past since the idea of building connections is pivotal. Collaboration helps to strengthen the relationship Eni has with its competitors and other stakeholders. It enables them to exchange knowledge and share best practices (HR Trends and Future Competence, 2021). The Development Department, (2021) emphasized that Eni takes part in professional networks with companies to enable them better their approaches and strategies. Eni Corporate University, which is a partner to the business has also established connections with other Universities and other departments within the company to help them work together hence improving their services and to achieve goals and missions of Eni. Also, through collaboration, "LFACTO" which is an initiative through the collaborative effort of 13-14 different companies came to fruition. The "L" means leadership and this initiative is meant to enhance the leadership roles of the partners (Head of Education and Training, 2021). In the nutshell, Eni acknowledges the need for collaboration and inclusivity and hence strives at all costs to make it happen.

#### 4.5 Management of Change:

The current global pandemic has challenged numerous aspects of our life and the way and manner the organizations operate (Amis and Janz, 2020). The pandemic has indeed resulted in various companies reevaluating the nature of their operations (Amis and Janz, 2020). In an effort to meet and survive the current global pandemic, many businesses had to manage change effectively and strategically in order to remain on course and be competitive (Hartmann and Lussier, 2020). The process of adjusting to meet current trends while running the business or organization in that same manner is seen as change management (Fusch et al., 2020). Following this global pandemic, a lot of uncertainties were created within organizations. Uncertainty in any working environment can create fear and loss of confidence in the minds of the employees, hence affecting productivity and efficiency (Fusch et al., 2020). It is worth saying that in bringing change, it should seek to address practical issues in the workplace (Naor et al., 2010). The ability of a company to manage change efficiently helps to put trust in the employees. During the pandemic, Eni initiated a lot of strategies to help with managing change and make their employees feel safe. The Development Department (2021), made it clear that management has been good to lead people throughout the change due to the organization and the way to work. For instance, the management of Eni was able to accompany and train the resources in line with the new ways to work. During the pandemic, the management of Eni established an initiative called the Eni Campus Live to aid its employees to live the moment and adapt to the change. For instance, through webinars and training, they were able to share with other colleagues some difficulties they were all facing at that moment and to come up with plans on how to survive together (Development Department, 2021). Issues like how to manage time effectively from home, the resilience to put in the various activities were thoroughly discussed (Head of Education and Training, 2021). Another management initiative was to create content connected with remote relationships, thus how can we build and maintain relationships with our colleagues if we do not meet. This was crucial because managers were used to having everyone under their control and offices were not entirely empty even with the introduction of smart work before the pandemic era (Development Department, 2021). In the heat of the COVID -19 pandemic, we still had to carry out

the operative work even though this work could not be carried out using virtual means. This required us to manage our workforce in a way that they can be safe carrying out their usual duties while respecting all the health instructions and COVID-19 protocols from the government. What Eni did was to reorganize the employees with enlarged rotations on the field to never stop the work on the fields (Development Department, 2021). The management of change implemented during the crisis has had a long-lasting effect on the organization. It helped to transform employees' mindsets and were also embed with new skills and experiences such as the ability to effectively utilize smart working tools to carry out their jobs effectively and efficiently from their homes (Development Department, 2021). The overarching idea and the lesson learned in managing the change of this period is, swift response to specific needs is fundamental since speed is strictly correlated with flexibility.

In sum, I believe things change and they can change really fast, and, in this sense, COVID-19 could be considered as a sort of an accelerator because it forces us to change from one way to the other.

## 5.0 Conclusion and Recommendation:

Businesses are faced with crises daily which can have catastrophic effects on the company. Regardless of the numerous adverse effects which have come into play as a result of this pandemic, many organizations have been able to take advantage of the outbreak of the COVID-19 to the company's benefit. In doing so, many stakeholders in various companies have been able to devise innovative approaches to make the company stay competitive even in these tough times. The oil and gas sector have been under pressure to move to greener energy in response to calls on climate change. The pandemic brought another hurdle and thus HRM had to be innovative in modulating the affairs of the company. In addressing the key research questions which were raised in this study, the responses gathered from the interviews are well in line with important innovative strategies which have been implemented over time. It can be said that the management of Eni were able to effectively handle the pandemic situation in the best possible way. From this study, it can be said that the economic crisis has challenged the HRM to work with their employees in devising effective and efficient strategies which they never thought of. They all considered management of change, training, innovation and technology, collaboration and inclusivity and Human Focus as key strategies to rely on in making Eni strong and resilient during the pandemic.

It is recommended that the HR needs to also keep up with the pace of external changes and with the company strategy. The HRM department needs to be more agile, innovative, efficient, and to increase the ability to network within the company and also with the external world. It is also recommended for HRM to explore and keep up with new technologies like machine learning, artificial intelligence and among others to keep up with the ever growing and changing economy. Future research can investigate the role of artificial intelligence and machine learning among other technologies as an innovative tool in the oil and gas industry.