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in Partial Fulfilment of the requirements for the degree of
MBA (IT)

***A study on the implementation of Knowledge Management
for Contact Center to improve the team leader's performance
at Ooredoo Oman.***

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Abstract

The study paper reviews the knowledge management practice at Ooredoo Oman Contact Center which related to the team leaders and the influence of this system on the team manager's performance. Contact center team leaders require the knowledge management to be conscious of managing team performance related matters such as knowledge on low-performance escalation process, quality coaching session and how to handle the monthly one to one performance meeting with the agents. Appending to that the team leaders managing the daily operational task which is challenging to manage due to the multi-tasks during each shift. They need to be knowledgeable of different products and service information as they have experienced customer's complaints when the agent is not able to solve the problem.

The study paper presents information about knowledge management practice which used currently for Ooredoo call center leaders and the deficit of knowledge that they have. It illustrates the different types of knowledge management required to be practiced in Ooredoo contact center which can solve the team leader's knowledge concerns.

The research paper adopts a different type of methods to collect the information required to study the current situation for Ooredoo call center team leaders such as Interviews with agent leaders, leaders' heads. Conducting questioner related to the type of current knowledge management system implemented for the leaders and the system which is more suitable to solve their knowledge issue and using some data and records from different sources at the company. Furthermore, it including a useful compression with another call centers from other industries The research paper study come up with some findings such as team leader's skill is below the average, low-performance scores, not meeting the coaching and performance sessions target and lack of knowledge on the product and services provides by the company, additionally, they have a lack of knowledge on the tasks of the daily duty. Enhancing the knowledge of the call center team leaders is very necessary and that can be accomplished by using a proper knowledge management system as the tacit knowledge and explicit knowledge both are useful for

them. The research paper is striving to solve the knowledge problem with Ooredoo call center team leaders to perform well and to obtain easy work life during their duty day. This study will provide the best practice for knowledge management that can be applied to solving the Ooredoo contact center leader's knowledge crisis.

Furthermore, it conducts a valuable comparison with the different call centers from different industries. The research paper comes up with some findings such as team leader's productivity is below the average, low-performance scores, not meeting the coaching and performance sessions target and lack of knowledge on the product and services provided by the company, additionally, they have a lack of knowledge about the daily tasks of the duty. Enhancing the knowledge of the call center team leader's is very necessary and this can be achieved by using a proper knowledge management system. Tacit knowledge and explicit knowledge both are beneficial for them. The research paper is attempting to solve the knowledge issue with Ooredoo call center team leaders to perform well and to make their job life simple during their duty day. This study will provide the best practice for knowledge management that can be used for solving the Ooredoo contact center leader's knowledge case.

Keywords: Knowledge Management, Contact Center, Leadership, Telecommunication, Contact center agents, performance.

MBA DISSERTATION

Declaration of Originality

This project is all my own work and has not been copied in part or in whole from any other source except where duly acknowledged. As such, all use of previously published work (from books, journals, magazines, internet etc.) has been acknowledged within the main report to an item in the References or Bibliography lists.

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MBA (IT) Dissertation

Declaration by Examiners

I / We have examined this report titled '**A study on the implementation of Knowledge management for contact center to improve the team leader's performance at Ooredoo Oman**' submitted by **Khawla Suleiman Ali Al-Mamari**, ID No. **PG17F1861** in partial fulfillment of the requirements of MBA(IT) Course during **Summer 2019** semester.

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CHAPTER 1: INTRODUCTION

CHAPTER 1: INTRODUCTION

1.1 Introduction

The chapter will introduce the research aspects including the background of the study, research problem statement, the aim of the study and research objectives. It touches on research questions. The chapter is highlighting the scope of the study and discusses the significance of the study along with the limitation of the study and the structure of the study.

1.2 Background of the Study

“Knowledge has become the key economic resource and the dominant – and perhaps even the only source of competitive advantage.” Peter Drucker

A significant change that occurs in the societies and economic during this era especially in the middle east. According to (AlMaha 2012) Telecommunication industry is an important sector in Oman, and it is one of the most advanced sectors and it had developed rapidly since 2005. Call Centers is one of the important functions for telecom companies as in Oman the First call center started to operate GTO company as a government telecom company managed by the ministry of telecommunication. In 2004 Ooredoo Oman started operates as a private telecommunication company with more new ideas and Knowledge for the telecom sector. One of the areas that Ooredoo focused on is exploring the excellent customer experience, Hence the call center is one of the functions that are important to help the company to achieve that goal. Call centers still growing is Oman and some of the government's originations started to adopting customer services through Call centers. The team leader layer is one of the most important roles because of carrying multiple responsibilities, operational and managerial works.

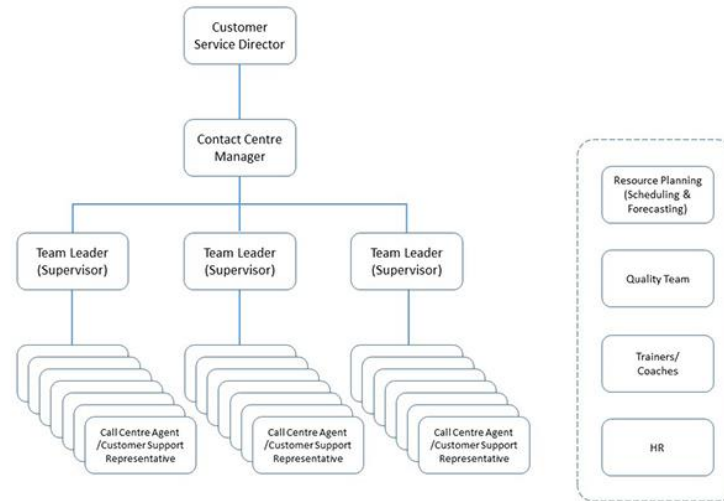


Figure 1 : Roles within the call center: (Call center helper 2019)

The team leader is responsible for the call center agent performance and develops their skills and knowledge along with handling the critical issues of the customers which not resolved by the agents. Additionally, call center TL must report the daily call center events to the management at the end of each shift working hours. TL should set the agent KPI targets but currently, the Ooredoo call center management suggests to not give this responsibility to the TL in the main time. (Al-Lawatti 2019) pointed out that currently, they have only 2% of the TL performing the average on KPI out of 15 leaders in call center and the agent's performance was declined by 60% on the quality of calls and other KPI areas where the team leader should improve the agent performance and give more attention to his team. According to (A I-Ryami 2019) as he is a TL at the call center that they don't have enough tools or sources to enable the TLs to do their job properly as he started his work at call center since 2004 and up to date he did not receive any guide related to his job. Knowledge management practice in Ooredoo call center is started on 2014 with a small manual created by one of the TLs but it has a very low level of information which did not help the leaders to gain more knowledge on company product and services, team coaching and performance development and customer support as well. The existence of knowledge management for call center team leader is very important for the call center TLs to support them on their daily work.

1.3 Problem statement

In Oman not only the private sector is using contact centers but also the government organization started to build a contact centers to answer people inquiries and serve them through different services, hence, knowledge management plays an important role when come to organizations developments to ensure the business continues to grow and this can be achieved by making sure that company using the suitable knowledge management methods and tools. The contact center is an important function as it is exploring the organization's image because its role is to deal with customers on a daily bases to receive their enquires and solve the issues. Team leaders on contact center playing and major role to enhance the service provided by the contact center, either by running the daily operation work or by leading contact center agents. Currently, Ooredoo Oman's contact center leader's average performance rating is between 2-3 out of 5 which is due to knowledge issues in different areas especially they are handling a different type of tasks, managerial tasks, and operational tasks. Team leasers facing a lot of challenges because of the missing information or wrong knowledge that they have related to their tasks. Contact Centre TL does not have a special tool to guide them on their daily tasks, team management, product, and services information and new offers and promotions. Due to this lack of knowledge TLs are not able to answer or solve customer's issues as well as front office agents' inquiries. In 2013 assessment been conducted to the TLs to examine their knowledge and to check their abilities to manage front office agents by the external consultant company, the report shows that only two team leaders out of thirteen are succeeded and the rest are failed due to the lack of knowledge. Contact center leaders currently are not ready to respond to agents enquires, customer's inquiries because of many reasons such as Multitasks, real-time observation and lack of knowledge in many areas especially the one that related to the product and services or any other promotions. As mentioned, there is a gap with TL's knowledge which is impacted the agent's performance and service level to customers.

1.4 Aim and objectives of the Study Overview

1.4.1 Aim of the study

This study aims to influence information about the impact of knowledge management on the contact center team leader's performance at Ooredoo Oman company and why knowledge management is important in enhancing their performance. Also, it is discussing the current knowledge management types that use by the company for the contact center leaders. Additionally, comparing the contact center leader's knowledge management style at Ooredoo company with different organizations in Oman from the same industry.

1.4.2 Research Objectives

The research objectives as follows:

1. Study the existing knowledge management system related to Contact Centre leaders which are implemented at Ooredoo company using the qualitative and quantitative methodology.
2. Analyze the present system of knowledge management using different tools of analysis and graphs & provide useful insights.
3. Provide a comparative study of knowledge management systems used for Contact Centre leaders by different organizations in different industries.
4. Provide recommendations on the best practice of knowledge management that can be used by Ooredoo call Centre to solve the leader's contact center issues.

1.5 Research Questions

1. Knowledge Gaps in providing better customer service at the Call Centre by the team leaders: if the contact Centre leader doesn't have enough knowledge of the products and services provided by the company, he will not be able to handle any customer enquiries.
2. Call Centre team leader's performance gaps: if the team leader does not know how to coach calls quality to his agents and explain the areas of agent strength and areas of

improvement this can reflect negatively to the agent performance as well as the team leader's performance.

3. Contact Centre agent's performance gaps when the team leader does not have a proper knowledge management system to guide him on improving his team performance.

1.6 Research Hypothesis

In this section 3rd objective while be investigate which to evaluate the relationship and significance of Knowledge management for contact center team leader's performance , based on the independent variable Knowledge management) and dependent variable (leader's performance), hypotheses that will be tested as follows:

H1: There is significant relationship between Knowledge management and contact center team leader's performance.

H0: There is no significant relationship between Knowledge management and contact center team leader's performance.

1.7 Scope of the study

The scope of the study covers some areas as follows:

1. Team leaders: level of their knowledge and how their performance is impacted.
2. Contact Center: Knowledge management practices used currently in Ooredoo Oman comparing to other organizations.
3. Contact center agents: how the agent's performance is impacted as a cause of TL's knowledge.
4. Customer service: how customer service impacted because of TL's knowledge

1.8 Significance of the study

The study approach to knowledge management is to design a perspective in which the contact center creates new knowledge as team leaders carry out their work practices. In Oman there is was a limited live call center but during this time many organizations especially form the government sector started to build its call center and most of them

from the services industry. Contact centers started to be more used in Oman to serve different customers in different industries and some of the government authorities started to implement the call center services , the study report is touch the pain area of the call center leader's performance due to the missing one of the important areas that can influence a big advantage to the leader's performance, additionally, it's converting the negative side of the workload due to multi-tasks to a positive thinking. Currently, Ooredoo call Centre team leaders not having a clear understanding of many areas and they don't have enough information about their tasks. On the other side, the government sector will benefit from the study report as a contact center is new functions on the government sector in Oman.

1.9 Limitation of the study

The study presents some findings on Knowledge management practices in the contact center, however, there is a limitation as well. This study is considered as a new study for contact center TL's knowledge in Oman. Besides that, the Contact Centers in Oman considered as a new function for both privet and government sectors. There is a lack in the availability of the kinds of literature and articles which are related to the history of the contact center in Oman. The response to the survey is one of the limitations due to the low number of people working in the Contact Center.

1.10 Operational Definition

- **Agents:** the employees on contact centers who are handling the customer's calls.
- **TLs:** Contact center team leaders who are managing the agents and handling the operational work.
- **Operational work:** the daily tasks of the team leaders such as solving customer issues, monitoring service level and calls, also monitoring agent's performance.
- **SL:** the daily service level during each shift.

1.11 Structure of the study

Below figure is presenting the structure of the study

Chapter1	Introduction
Chapter 2	Literature Review
Chapter 3	Research Methodology
Chapter 4	Project Management
Chapter 5	Survey Presentation, Analysis & Findings
Chapter 6	Conclusion & Recommendation
Chapter 7	Critical evaluation and reflection
	References
	Appendix

1.11.1 Chapter 1: Introduction

This chapter considered the initiatory chapter of the research. The chapter will introduce the research aspects including the background of the study, research problem statement, the aim of the study and research objectives. It touches on research questions. The chapter is highlighting the scope of the study and discusses the significance of the study along with the limitation of the study and structure of the study.

1.11.2 Chapter 2: Literature Review

This chapter is reviewing the academic literature that been conducted to discuss the problem research statement of the study. Research is providing some theoretical concepts and information related to similar studies concluding by critical evaluation and summary.

1.11.3 Chapter 3: Research Methodology

This chapter is providing information on the adopted research methodology that use to collect the data information, qualitative and quantitative which help to achieve the study objectives and answer the research questions. It contains information regarding the research design, data sampling and techniques and sampling size and research instruments.

1.11.4 Chapter 4: Project Management

This chapter is presenting the work plan to conduct the research study, it includes, introduction, project time management, WBS and risk management.

1.11.5 Chapter 5: Survey Presentation, Analysis & Findings

This chapter reveals the data presentation and analysis of the research data collected through the qualitative and qualitative research.it is contains all findings through collected data (interviews and questionnaire.)

1.11.6 Chapter 6: Conclusion &Recommendation

This chapter is presenting and discussing the findings based on the information presented through the previous chapter with providing a recommendation based on the findings.

1.11.7 Self- Reflection

This chapter is containing the critical evaluation and student reflection along with knowledge and experience gained.

1.11.8 References

This chapter is including the list of references used to complete this research study which is cited in the research report using CU Harvard referencing style.

1.12 Summary

This chapter presented a background of the research study and problem statement. It is discussed the scope of the study along with the study's aim and objectives with research questions. More, it is provided information about the significance of the study and limitations as well.

CHAPTER 2: REVIEW OF RELATED LITRATURE

CHAPTER 2 REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter refers to academic kinds of literature that been conducted to discuss the problem research statement of the study. Research is providing some thiouracils concepts and information related to similar studies concluding by critical evaluation and summary.

2.2 Definition of Knowledge Management

Some people might have a question about the difference between the data, information and the knowledge, they have a similar concept with some key difference. To highlight the unique role for each one, it is very curial to highlights the similarity , responsibilities and difference between the three concepts. Data can be defined as facts such as numbers and it can be used as inputs. According to (Daliker 2005) in today's economy, the ability to manage the knowledge becomes more crucial and more importance factor for the organizations to be more competitive in the market. (Daliker 2005) define the knowledge management as systematic coordination between people, technology, process and the organizational structure to add value through the innovation. Knowledge management defined through (KMT 2010) as 'systematic management of organizational knowledge assets for creating value'. In other side, the authors (Fernandez and Sabherwal 2015) determined that the Knowledge is helps to produce the high valuable information from less valuables one. The researcher (Sanders 2016) state that the data organized from information flow , and the information is constructed flow while the knowledge is give the input.

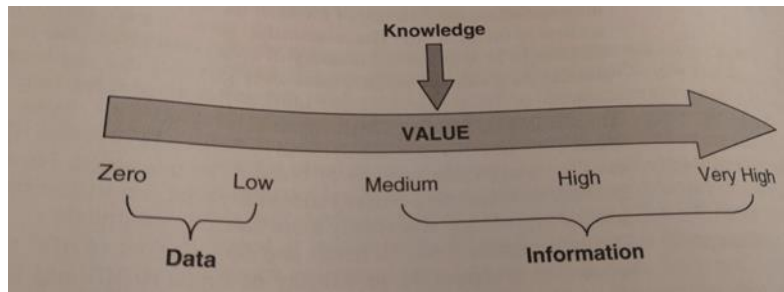


Figure2 Data, information and Knowledge(Fernandez and Sabherwal 2015)

According to (Mertins, Heisig and Vorbeck 2003) there are seven categories of knowledge been created by Krogh/Venzin to be used in organizations and management theory such as tacit , event , procedural , embedded , embrained , decoded and tacit , Hence it is not easy to define the term of Knowledge management as today there are numerous definitions of the Knowledge.

Knowledge management has become a necessity for any organization that aspires to success and continuity specially for organization which is adopting customer experience and customer services. Knowledge management focus on organization and making available important knowledge whenever it is needed (Becerra et al. 2004). It is very important for every organization from government or private sector to Adopting the Knowledge management to be a competitive organization in the market. In Oman knowledge management is follows two types: explicit and tacit knowledge, implementing the knowledge management is different from organization to another. The researcher (AlMedia 2018) introduce the knowledge management as a process that use for creating and sharing knowledge with managing it.

Based on (Filemon and Uriarte 2008) *'knowledge is increasingly been recognized as the new strategic imperative of organizations.*

2.3 Historical information on Knowledge management

Igbinovia and Ikenwe (2018) emphasize that the knowledge is used as a weapon for competitive advantages during the last decade and by 21st century become as electromotive force for the educational and economics. The authors (Figallo et al. 2002) mentioned in their book **"Building the Knowledge Management Network"** that there is a strong relation between the human history and knowledge sharing as human history is

dealing with knowledge sharing, but the communication of knowledge is much faster today than in the past. (Servin2005) believes that the knowledge management is appears to be between five to fifteen years old, it seems that KM is not a new concept , even In Oman it is not a new concept but it might due to budgets limitations organizations not implemented the knowledge management in a proper practices. Through the thinking of the pioneers and academic like Peter Darker in 1970 and Karl-Erik in 1980 the knowledge management evolved. During this period the technical changes, economic and social started the transformation for the working ways. In the beginning of 1980 knowledge management appears to be a new business practice due to the growing body of academics were mentioned about the knowledge management, in addition, it appears more conferences and business journals (Sevin 2005). In the mid of 1990s, the KM assets some of the world leading companies in the innovations and customer relationship, hence, knowledge management become as a business objective for most of the companies (Sevin 2005). (Barklay et.al 1997) argue that there are some of management theorists been contributed on the evaluation and discussion of the knowledge management like Peter Darker, Peter Senge and Paul Stressmann. The importance of explicit knowledge to be as a resource for the organization is stressed by Darker an Stressmann , while Peter Senge was more focusing on the learning organization as a culture of managing the knowledge In the year 1980s there was a significant development and enhancement of the systems that can managing the knowledge. In U.S many companies started to be keen to managing knowledge in 1989. (Barklay 1997).

2.4 Type of Knowledge

It is important that for the organizations to distinguish between the different categories of the knowledge (Squier 2003). The author Squier (2003) mentioned a different categories of knowledge management such as public knowledge, personal knowledge shared knowledge and organizational knowledge. Researchers classified the types of knowledge as tacit knowledge, explicit knowledge and implicit knowledge.

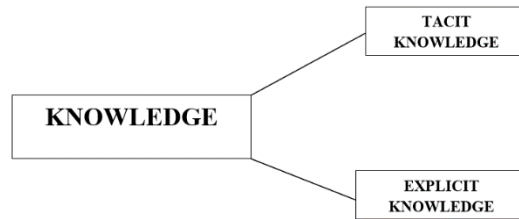


Figure3: Types of Knowledge (Igbinovia et al. 2018)

- **Tacit Knowledge**

Tacit knowledge is difficult to capture as it is stored in the brain so it is called hidden knowledge and it can only observe through actions. This type of knowledge is adding a positive value to the organization by its nature as it is difficult to capture by even competitors. Tacit knowledge not possible to find through a database and cannot be given in lectures or any manuals (Olomolaiye 2017). Tacit knowledge is about transferring knowledge and experience through individuals to people within the organization (Mahroeian *et al.* 2012). According to Igbinovia and Ikenwe (2018) it is very hard to encode and communicate the tacit knowledge as it is personal context. From researcher point of view that tacit knowledge it can be available if the experienced and expertise are ready to share that knowledge to the group among the organization. Cording to (Smith 2001) that tacit knowledge is the knowledge that comes with no written words it is come through the experts members to help the organization to take decisions. According to (Armaghan et.al 2017) the tacit knowledge considered as cultural background of what the person marginally aware.

- **Explicit Knowledge**

The explicit knowledge is easy to communicate and transfer as it is embedded in physical format such as electronic media, Database and books (Igbinovia and Ikenwe 2018) .The explicit knowledge called *‘Explicit knowledge–academic knowledge or “know-what” that is described informal language, print or electronic media, often based one stablished work processes, use people-to-documents approach’* (Smith 2001). Explicit knowledge is a documented knowledge that people can refer to it at any time. The explicit knowledge is mostly an academic data in a formal language.

2.5 Knowledge and Telecom sector

Knowledge management is considered to be a critical for all types of industries as the telecom organization operation work rely on the knowledge worker over the world, hence, it is important for the telecom companies to adopt knowledge investment to capture more knowledge from their works experience (WIKIBOOKS 2010). Knowledge management is exploiting the information to support organization productivity and help the firm to be a competitive in the telecom market, hence in telecom it is most important to apply the right knowledge in the right time as it is important to get enough knowledge during the daily operation work (WIKIBOOKS 2010).

According to Al-Lawatti , Motaz (2019) the department head of Oordeo contact center that people gain knowledge and enhance it in the day of born and onwards, knowledge in general is an important aspect in any sector as it can play a major role in the way of perceived from the customers, in telecommunication sector , it is important due to the dynamic nature of this sector , the technological aspect and customer expectation. Al-Qassabi (2019) the department head of contact center at Ooredoo Oman emphasize that the Knowledge management is very important for the telecom sector as it is a dynamic and growing sector which should adopting the knowledge to continue growing and organizations in telecom sector can lead the competition by adopting the knowledge management

2.6 Future trend of Knowledge management in Telecom sector

Telecom firms should meet the changes in the telecommunication market, and it can achieve that by adopting the knowledge management as element of the trainings as it is aiming to transfer the tacit knowledge to the groups and individuals among the organization. Intranet become a common tool that used to transfer and share the knowledge in the telecom industry (WIKIBOOKS 2010).

2.7 Importance of Knowledge management for organization and leader's performance.

Based on the visit to some of the organizations from the telecom sector it's been discovered that knowledge management plays a major role in team leader's performance.

According to (Al-Zadjaly 2019) contact center team leader at one competitive company he believes that KM is very important tool that should be used by the team leader especially for contact center leaders as many things depending on leader's knowledge such as his team performance, customer service level and many other things which are related to the team leader performance. From Ooredoo Oman based on (Al-Lawati 2019) department head on call center see that KM is very important to be adopted in contact center not only for team leaders but also for everyone such as customers, call center agents and managers as well. It is true for everyone that knowledge management helps the leaders to play a major role when coming to decision making, it supports the leaders to enhance their staff performance and show the excellent customer experience as well. Moreover, KM helps not only leaders but also the organization to be competitive in the market as a result of knowledge innovation. The founder of Knowledge Management Software company (Hajric 2018) mentioned in one of his articles that Knowledge management (KM) is also important for the organizations as it is helping the firm to learn what went wrong from previous mistakes, Also it helps to exploits the existing knowledge available in one department and re-deploying it to produce new projects and benefits to other department among the organization. In addition, knowledge management is helping the companies to promote the right skills and competencies for the long-term plan.

Further to the above, there are some benefits of the knowledge management which supports the contact center leaders such as : reduce the trainings required for the team leaders which is resulting to reduce the costs, improve the leaders response time to customer's related issues, help the leaders on making decision during the work day, increase agents satisfactions when they get a proper guide and support from the team leader, reduce the work load and stress on team leaders, finally , team leaders will get a full awareness on business process , rules and updates of products and services. Al-Lawatti .Motaz (2019) emphasize that the knowledge management have a big impact on contact center team leaders performance as they are the leaders of their team and agents are following them to purpose of objectives and KPIs, so lacking it could lead to negative results toward reaching the goals.

Some of academic authors like (Wu et.al 2011) argue that the adopting of knowledge management become a key enterprises strategy.

2.8 Knowledge management capabilities (KMC) to support companies' innovation

The Knowledge management capabilities (KMC) is referred to companies' ability to identify, mobilize and leverage knowledge sources with other capabilities or resources (AL-Jaafreh et al 2017). The KMC is very important as it is helping the organizations to adopting innovation, minimize the information and knowledge redundancy and enhancing the market responsiveness, further, its improving the organization performance. By reviewing the previous studies different dimensions of the knowledge management capabilities (KMC) been identified, Knowledge question, conversation, application and protection while, on other hand another categorization mentioned by (Al-Jaafreh et al. 2017) which is technology, culture and structure (Al-Jaafreh et al 2017). The ITS capabilities which is refers to the digital communication and computer related technology is called as IT infrastructure capability used to support the knowledge management capabilities as the high level of the IT infrastructure resources helps on creation of wide knowledge along with the highly skills and capabilities of the IT infrastructure capabilities which is refers to IT staff skills and capability among the organization (Al-Jaafreh et al 2017).

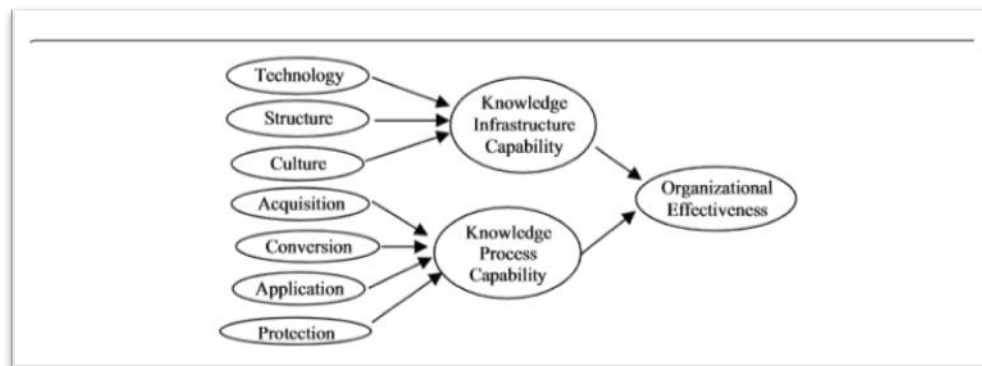


Figure 4: Knowledge management capabilities (Nan Chiu et al. 2016)

According to (AMEYO 2019) the knowledge management software's helps the organizations to practice the knowledge management using proper tool and direct access to the information. According to Saqib et.al (2016) Knowledge become a strategic

imperative for all the firms around the world to be a competitive organization as the knowledge is considered as a very powerful value asset for any organization.

Based on Igbinovia and Ikenwe (2018) that knowledge is an important and it is a priority for each organization to continues leading in the market, it is helps to enhance the organization's performance by increasing the efficiency and the productivity along with quality and innovation.

2.9 Importance of Knowledge management for Contact center

According to (CUCOVIĆ et al 2014) knowledge management is become an important area in today's business conditions and leadership as well, its leads to better interaction with customers through contact center. (CUCOVIĆ et al 2014) discuss the importance of the knowledge management as it is reduce the organizational management costs, increase profitability and improve the product and services. By referring to the above , contact center can benefit from knowledge management as it will helps to improve agents and team leaders knowledge on product and services , provide a good customer services through contact center, prompt actions on customer's issues and improve the productivity and service level in the contact center. Based on Al-Sheikh (2019) a department head of people development at Ooredoo Oman company that the knowledge management is very important for the contact center to enhance the level of the service and to support customers in short period of time, any lack on the knowledge it will cause an issue in customer's perspectives and trust along with declines on service level performance.

Based on Rasooli and Albadvi(2007) contact center agent to be able to deliver the information and answers to the customers they are often use the formal methods such as sticky notes , manuals and binders , however those methods are not promoting the knowledge sharing . The efficiency of the contact center cannot be achieved unless the by building structured knowledge from capturing the answers to previous asked questions. The contact center employees have a direct interaction with customers and before they provide any solution to the customers, they must understand the problem and how this can be solved so they need the right knowledge on the problem and solutions (Rasooli and Albadvi2007). In addition, new agents in contact center will not facing any

issues to find the required information to answer the customer's enquiries (Rasooli and Albadvi2007).

2.10 Barriers to knowledge management

(Igbinovia and Ikenwe 2018) emphasize that there are some barriers to the implementation of knowledge management such as organizational culture problem, improper organizational structure, improper planning, design and evaluation and Inadequate skill of knowledge managers and workers. In further to the above Igbinovia and Ikenwe (2018) state that there is another barriers to the knowledge transfer which are social barriers which is includes the lack of common language to sharing knowledge and organization strict formal procedures. Individual barriers such as loss of the knowledge power, lack of motivation, uncertainty of the value of knowledge that to be shared and poor revelation on knowledge sharing (Igbinovia and Ikenwe.2018).

2.11 Knowledge Management lifecycle

The class of information system which used to manage the organization knowledge, and this is an IT base system supports the knowledge process of creation, storage and transfer and sharing (Alavi et al. 2001) There are four process for knowledge management which are, capturing, organizing, and transforming. In other word the four process are supported by set of seven Knowledge management subprocess. In accordance with previous, there are five steps in knowledge management lifecycle, they are, creating, sharing, structuring, using and sharing. (Sagsan, 2006). Figure is exploring the KM lifecycle as follows.

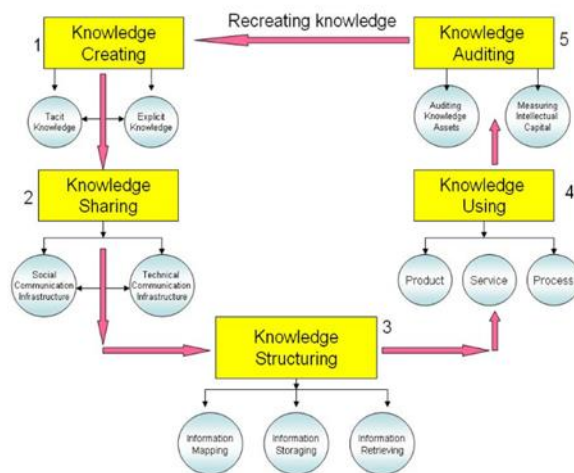


Figure5: Knowledge Management lifecycle module (Sagan 2006)

2.11.1 Knowledge Creation

Knowledge creation stage is considered as the first step on KM lifecycle that is required creating the “Knowledge Kitchen” to manage the organizational knowledge. While creating knowledge, two forms can appear called tacit and explicit knowledge; explicit knowledge is in the form of academic data and information and written documents; it can be also as a diagram that can be understood. The other form appears is tacit knowledge which is depending on individuals. Tacit knowledge includes standard operating procedures, values and relationship. It is difficult to be gathered and documented, however it is a suitable form to be used for competitive advantages. (Sagan 2006:3). In the knowledge management creation stage, there are some barriers which take place such as organizational and individual, in individual barriers it’s all about beliefs of not easy people will adopt the organization enough, while the organizational level barriers contains the need of firm paradigm, organizational stories and legitimate language. (Sagan 2006).

Alavi et al (2001) emphasize that knowledge creation is about to develop a new content or replace existing content in the organization’s explicit and tacit knowledge.

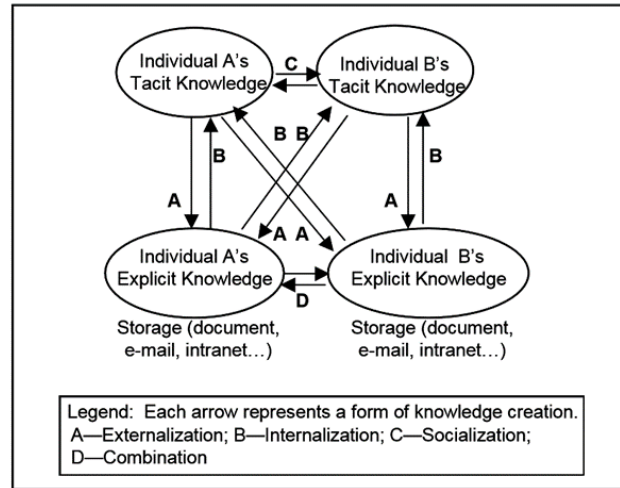


Figure6: Knowledge creation (Alavi *et al* 2001)

2.11.2 Knowledge Sharing

(Sagan 2006) emphasize that the sharing knowledge stage is the second and important stage in the knowledge lifecycle, the stage is involves creating the knowledge through individuals and groups with connectivity and interconnectivity. (Sagan 2006) agreed with Capar 2005 that there are some tools used for effective knowledge sharing such as, formal social communication network , community of practices, informal social communication network, organisational learning and formal structured technological such as emails , mobile and videoconferences. (Sagan 2006) argue that for effectively constructing these channels. Some of the academic Authors like (Jamshed et al.2018) emphasis that the significant facilitator of performance in all companies is through teams for competitive adoption.

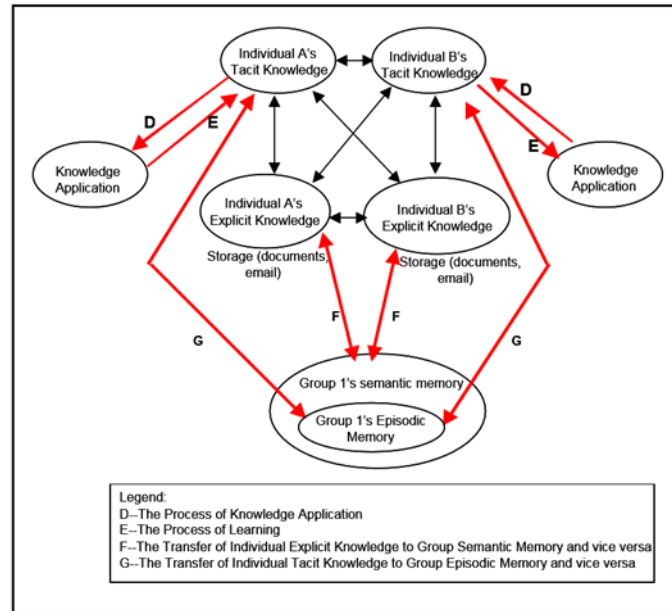


Figure 7: Knowledge transfer among the individuals and groups(Avali *et al* 2001)

2.11.3 Knowledge structuring

During knowledge structuring stage, data and information categorisation using certain classification tools take place for retrieving this information timely. This is concluded that the important component of the knowledge sharing is, mapping, storing and retrieving information (Sagan 2006). Avali *et al.* (2001) argue that based on empirical studies the companies create the knowledge and learn but they might forget this knowledge after sometimes, so the retrieving knowledge is referred to the organisation memory, it includes the residing of knowledge in different component forms that including structured information stored in the electronic database , written documents documented organisational process and procedure that enquired by individuals or groups and also codified human knowledge saved on experts systems.

2.11.4 Knowledge using

Using knowledge is important for the organisation to determine work process and designing the strategies, it can be used also for designing and marketing the products (Sagan 2006).

2.11.5 Knowledge auditing

Knowledge auditing stage is referred to the information capacity that should be used in the organisation. In other word it is refer to the amount of knowledge in process. Products and services. The question is when knowledge auditing can provide a value? This can be achieved in the organisation if devising a knowledge-based strategy, striving competitive weakness, seeking for leverage people assets, planning the research and development. The critical factor with knowledge auditing is the measuring the intellectual capital. (Sagan 2006).

2.12 Knowledge Management best practices

Researcher is argue with Al-Lawatti.Motaz (2019) on the best practices of knowledge management used in contact centre as Al-Lawatti .Motaz(2019) emphasize that there are a different practices which was implemented at contact centre , some of them were successful, other were its ok to have and some of them had to be eliminated to many factors such as utilization. In other side currently Ooredoo contact centre have only two types of knowledge practice which are, Kiss system and trainings.

2.13 Contact Center Overview

Based on (Aksin et.al 2007) call centre is the most important function in today's business serving the customers in different industries. Virtually companies and organisations interested to provide the information and assist the customers. In recent years, the cost of telecommunications and information technology has been decreased which is resulted to increase economical to consolidate the information delivery as it is leads to build groups that specialized in handling customers calls (Aksin et.al 2007). Contact centre is helping the companies to reducing the costs a d providing the a different services and increasing the sales, also it will help to support the customers in different caes (Al-Lawatti 2019). There are various between the contact centres which is depending on the different sectors in the economy with different operations, there are inbound and outbound contact centres (Phail et al. 2016).

In Oman many of the organisations started to build and use the contact centre to serve the peoples in different sectors. In 2018 the ministry of Endowments has started to operate contact centre to guide and serve people in different cases. Also, many of electricity companies build its own contact centres to answer customers' bills and electricity enquires. Telecom sector is one of the important industries which must have a contact centre to provide a multiple service related to telephonies services and to explore the best customer services and the competition in Oman telecon industry market is started to increase. According to (phail et al 2016) the Canadian economic considered the contact centre as a significant sector over the last 15 years as a technological condition companied the computer and telecom technologies.

Services industry	52,000
Retail and wholesale	39,000
Financial sector	33,000
Manufacturing	33,000
Telcos/utilities	20,000
Transportation	13,000
Health & education	11,000
Other	17,000
Total full-time	218,000
All industries part-time	330,000

Figure 8: employment in Canadian contact centres per sector (Phail *et al* 2016)

2.14 Ooredoo Contact Center Overview

According to (AL-Lawatti 2019) the contact centres in Oman considered as new as most of the organisations was using a normal operator which includes one or two staffs with manual phone with land line. Today, Ooredoo Oman is one of the organisations that have a big call centre with full setup of equipment's, systems and around tow hundreds of employees. Ooredoo contact Centre includes many divisions such as , Mass front office , Business centre , back office technical support , internal communication and support division. In 2011 a new division was build named customer experience division, it is tack

care of customer's feedback and satisfaction about the calls attended by the call centre agents. According to (Al-Sheikh 2019) there are around thirteen team leaders in Ooredoo call centre by end of 2018. While the head of call centre (Al-Lawati 2019) emphasize that contact centre is providing a multiple service for the customers and all employees should co-operate to achieve a good result. Ooredoo contact centre handling many tasks as follows:

- **Attending customer's calls:** call centre agents responsible to attend the customer's calls to answer all their enquiries and solving the issues. Also contact centre team leaders receiving customer's calls if the agent was not able to solve the case.
- **Create trouble tickets:** the front office agents creating the trouble tickets for the critical issues that customer facing and follow up till the issue resolved.
- **Up sales and cross sales:** this is one of the important task that contact centre is handling as there is a special team called outbound team who are responsible to call the existing customers to offer them the products and services.
- **Voice of the customer:** contact centre is also responsible for the surveys that send to customers to get their feedback and satisfaction about the product and services , network and the quality of agents services and stores as well.

Based on (Al-Lawatti 2019) the contact centre considered as a company image and it is a very important function that should have more care and support from the top management.

2.14.1 Ooredoo Contact Center Structure

Ooredoo contact center structure includes, the Chief Officer and belong this position there is a director who is managing three heads which are Operation head, front office head and communication head. Operation head is leading the operation leaders and the leaders managing the agents. The operation department is responsible for all technical issue's resolutions and complaints tickets. Front office department is like the operation department in the layers but the different is that front office function is to attend the incoming customer's calls to answer customers enquires.

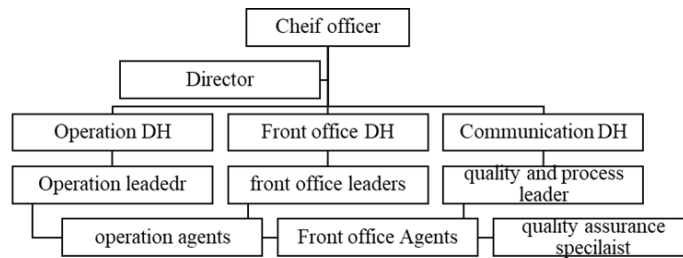


Figure9: Contact centre structure at Ooredoo Oman (Ooredoo 2008)

2.14.2 Ooredoo Contact Center team leaders' responsibilities and challenges

(Al-Lawatti 2019) emphasize that the role of the contact center team leaders is an important for the contact center as the leaders handling a different responsibility as follows:

- **Managerial responsibilities**

Team leaders responsible to build and manage the team of contact center agents as they have to coach the agents, conducting team meetings, conducting monthly performance communication, improving the team performance and reporting the team performance to the contact center department head.

- **Operational responsibilities**

Team leaders at Ooredoo contact center is handling a lot of the operational work such as, monitoring the Service level (SLA), monitoring the calls on queue, observing the agent's adherence time, receiving customers complains and sending the daily operation works and status to the contact center management.

Al-Lawatti (2019) mentioned that contact center team leaders facing many challenges at the workplace, work load is one of the biggest challenge as they have to manage the real time service level and to achieve that they have to be more focused and give more attention , the issue is that team leaders(TLs) are not able to control the real time service level (SLA) due to the multi tasks during one shift. Agents adherence is another challenge that leaders facing as sometimes some of the agents not follows their breaks time , calls handling time and calls on hold process as some of agents using to keep customers on hold for long time which is impacting the service level (SLA). Shortage is one of the challenges that reflecting on leaders productivity, either

it is the shortage on the numbers of leaders during the one shift or the shortage on the agents number for the same shift as cause of bad scheduling management or absenteeism.

In other side, and according to Al-Sheikh (2019) knowledge is another important area that can reflecting positively or negatively in the team leaders performance, as there is a lot of products and services along with new offers that leaders should be aware about all the information related to it. In addition agents coaching and appraisal knowledge is one of the areas that leaders lack to know more information on how to conduct coaching and set and communicate the appraisal as well.

2.15 Team leader Knowledge and team performance

The Team leader knowledge is very important to improve the team performance as it helps on improving the creativity of the team, problem solving and decision making. Gillespie (2010). Chouinard (2008) emphasize that the team leader is responsible to enhance each team member performance and he is meeting the productivity goals while serving the customer to meet the company expectations.

2.16 Knowledge Management (KM) Risks

Based on Lamb.Patric (2013) there are four types of knowledge management risks in the organization which are outsourcing risks, knowledge continuity risks, acquisition risks and articulation risks.

- **Knowledge continuity risks:** this type of risks is related to the ability of the organization to continue maintaining the performance, the embedded of the knowledge in people skills, expertise and experience is what this type of knowledge is can shows. (Lamb 2013).
- **knowledge Acquisition risk:** according to Lamb.Patric (2013) this type of risk is related to the ability of the organization to acquire the needed knowledge to support the organization strategic decision.
- **Knowledge outsourcing risk:** In some cases, contact centers outsourced to the external parties.

2.17 Future challenges for Knowledge Management (KM)

According to (Dalkir 2005) knowledge management always involves the changes either in group or individuals and organizational level, hence, critical challenges should be addressed in order to utilize a maximum value of the knowledge management investments values in term of people, time and budget. Based on (Fixer 2018) the forces driven knowledge been categorized as internal driven forces and external driven forces. In other side, Layer. L and Aronson. J. (2000) emphasize that the critical aspect which for facilitating sharing and creation of the knowledge is organization culture, if the culture is open to integrating the individual's experience and skills with the organizational knowledge this is will be very successful (Layer *et al* 2000).

2.18 Conclusion and Critical Evaluation

The chapter contains a discussion of academic literatures that provides information related to the knowledge management. The chapter started to define the meaning of knowledge management as it is a systematic coordination between people, technology, process and the organizational structure to add value through the innovation, Daliker (2005). To understand the meaning of knowledge, it is very important that to differentiate between data, information and knowledge. Through the literature's discussion it is found that they have similar concept with some differences. Researcher emphasize that any organization need to benefit from using the knowledge management, it is very important that to know what the knowledge management is about.

By referring to the knowledge management history, Igbinovia and Ikenwe (2018) emphasize that the knowledge is used as a weapon for competitive advantages during the last decade and by 21st century become as electromotive force for the educational and economics. It seems that there is a strong relation between the human history and the knowledge sharing as well. By 1989 many companies in U.S started to give more attention to managing the knowledge based on Barklay (1997). Tacit knowledge and explicit knowledge area types of the knowledge, through the research it been discovered that explicit knowledge is documented knowledge while the tacit knowledge is depending on the knowledge and experience if the seniors and expertise. The researcher discovered that the availability of explicit knowledge is more than tacit knowledge. Through the

research investigation, researcher found that the knowledge management is very important for the telecommunication industry because of the huge information and knowledge that has to be shared, especially in contact center where more interactions with customers. Further to the information in this chapter, knowledge management is very important for the contact center team leaders as it helps to improve their performance and their team performance as well.

In addition, the researcher found that the investigated academic research is discussing the knowledge management in general but now deep dive discussion on the importance of the knowledge management for contact center leaders' performance. This research study will solve this gap and provide more information related to the implementation of knowledge management in contact center to support leaders' performance.

CHAPTER 3: Research Methodology

CHAPTER 3 RESEARCH METHODOLOGIES

3.1 Introduction

By referring to legwenagu (2016) the research is required to solve the problems, get respectability, face challenges and to get intellectual joy. The research methodology considered as plan description which is designed and implement to support and addressing the research problem. It is containing an important information about the population of the study, data collection tools, types of methodologies and data sampling as well. To conduct the research of the study there are two main methods qualitative and quantitative method. The quantitative method is coming as a measurable form like numbers and percentages. Quantitative method is mainly data collection through conversations and interviews.

The chapter will provide an information on the research methodology used in order to address the research problem statement. This chapter: Research Methodology will provide the specific details of the research methodology adopted to address this research's intended objectives. It will cover the research design, population of the study, sampling and sampling technique, sample size, research instrumentations, the validity and reliabilities, and data collection and analysis techniques. Additionally, it will highlight the assumptions, limitations, and the ethical, legal, and social concerns of this study.

3.2 Research Design

According to (Akthar 2016) the research design defined as structure of the research and it is also called a plan and strategy followed to answer the research questions. The research design is not only about decisions carried out the data collection and analysis but also the logic of this decision. Figure is presenting the research framework designed for this research study.

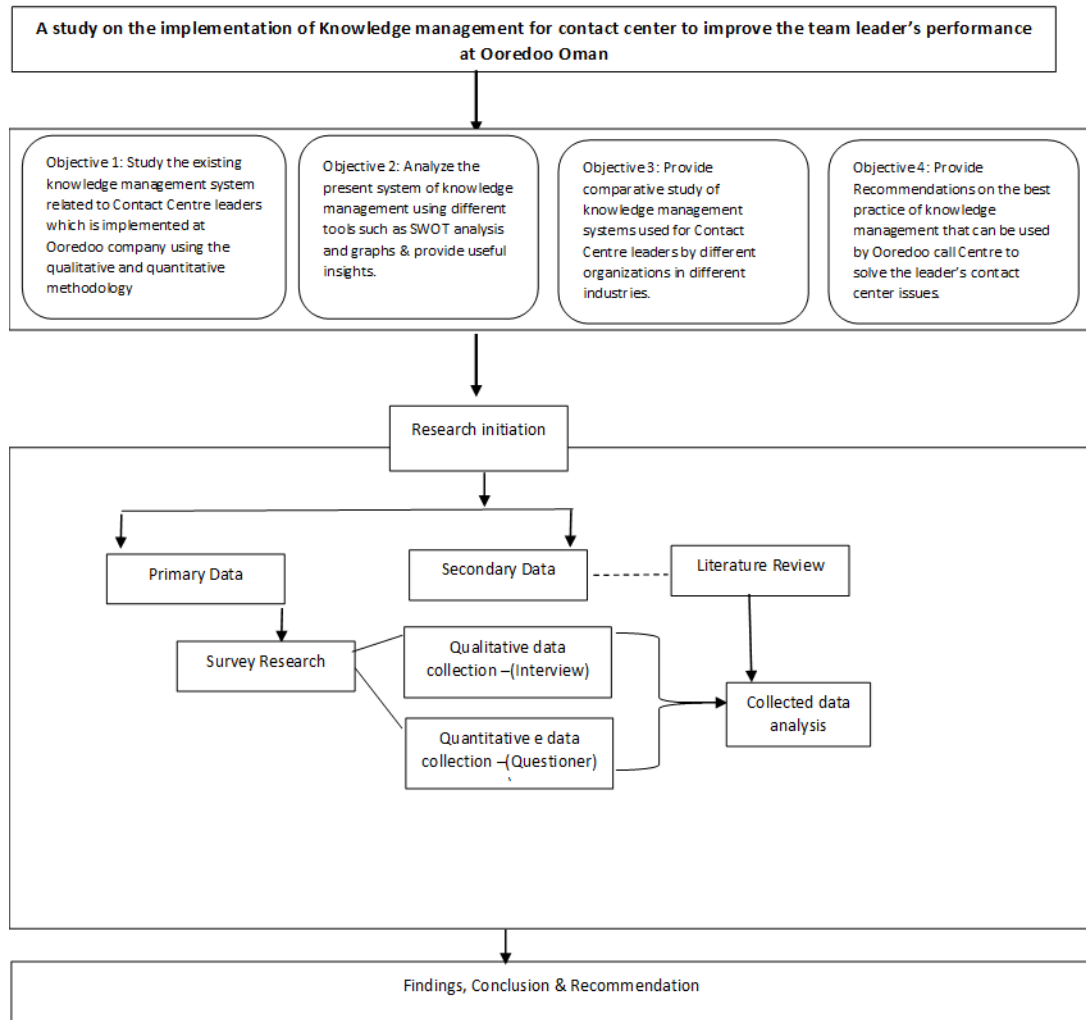


Figure10: Research framework

3.2.1 Primary Data

Survey designed to collect the primary data that supports this research, as it is one of the primary data sources which is used to collect the quantitative data (Ajavi 2016). Questioner is a part of the survey research which is distributed to the individuals in a form that they can response. Interviews is another primary data collection source and it is depending on one to one interview or called face mail. In evidence from the above, the primary data can be qualitative and quantitative as well.

3.2.1.1 Qualitative and quantitative survey method

Two of the survey methods been adopted to achieve the research objectives and to answer the research questions, qualitative and quantitative methods. The varied methods

enable the research to answer all questions related to the study topic in a meaningful and quantitative manner supported with qualitative information that helps to describe the answers.

3.2.2 Secondary data

Greenhoot (2012) says the existing data can be a very useful source to collect the secondary data to answer the research questions. For this research a literature review has been conducted based on previous studies related to the research problem. Research has been conducted using the journals publication, books, and guidelines. Further to the above, internal historical data from leader's manual has been used to support the research information.

3.3 Population of the Study

According to Majid (2018) population is the Population is entire of cases that belong a certain category with set of common characteristics. This research is targeting around 300 of the employees who are working with contact center in Oman such as, team leaders and agents, department heads, directors and quality assurance, response was from 200 employees. The research is targeting the employees with experience of minimum of one year to above 5 years. It's also targeting both male and female. The research has been conducted among the employees in Muscat contact center. The targeted employees all are from Muscat head office branch.

3.4 Data sampling techniques and sampling size

3.4.1 Sampling technique

Sampling is an important technique which is considered as essential step in the study helps to select the suitable populations that can respond to the study research and provide more valid information. According to (Singh and Masuku 2014) that there are different types of sampling purposive sampling and random sampling, the purposive sampling refers to the selection of units based on the purpose while the random sampling refers to each unit will have a certain chance of inclusion in the sample. The random sampling is the one that used for this research study. The decided sample size formula is Cochran's sample size formula as follows:

$$n_0 = \frac{Z^2 pq}{e^2}$$

The n_0 defined as the desired sample size and e represent the margin of, p is the Estimated proportion of the population which has the attribute, q is $1-p$.

$P=0.5$ as a consideration and the level of confidence is 95%, as per normal table Z value is 1.96 and margin of error is 5% more or less.

$$\begin{aligned} n_0 &= \frac{(1.96)^2 (0.5)(0.5)}{(0.05)^2} \\ &= \frac{3.8416(0.25)}{0.0025} \\ &= \frac{0.9604}{0.0025} \end{aligned}$$

$$n_0 = 385 \text{ Employees}$$

For this research the predetermined criterions been started to utilize this sampling techniques as:

Customer service experts with +1 years of experience and leaders who are working in the Contact Centers from telecom industry.

3.4.2 Sampling size

3.4.2.1 Interview sampling size

Qualitative data is very important for researcher to support the research study. the focus was on the team leaders and senior managers along with contact center agents. The criteria required to select the interviewees is that the experience between 1 year and above. The team leaders should get performance rating between 2 to 5 as performance rating, managing team minimum of 5 agents. The selection of senior managers based on years of experience which should be not less than 5 years and they should manage minimum of 5 leaders. Agents was another recommended selection for the interview as their performance depending on their leader performance, hence, the agents must have

minimum of 2 years of experience with performance rating from 2-5 in the year of 2018. The selection of the layers was based on the designed questions for the interview.

3.4.2.2 Questionnaire sampling size

According to Ooredoo HR department records the contact center contains 91 employees in different layers in call center, 55 calls agents, 13 team leaders, 2 department heads, 1 director and 20 employees of the call center quality assurance. The HR development team also has five employees but only one is meeting the criteria as a department head hence, the total expected is 92 employees. Researcher network was able to reach 61 employees as considering the summer annual leaves for most of the employees. The questioner designed from 18 questions, the questions helps to discuss the practice of knowledge management used in call centers, the impact of the knowledge management system in the team leader's daily work and tasks. In addition, it is measuring the impact on the contact center agents' performance due to the team leader knowledge level. Out of 92 invitations 61 participants are responding to the survey which is 66%.

3.5 Research instruments

The research will use the mixed survey method which contains interviews and questionnaire. The details of each as per follows

3.5.1 Interviews instruments

The quality data is required to make the research information more valid and this comes through using the qualify data information by utilizing the interviews with senior managers and some of the agents. In order to be able to fulfill the questions in the research in relation with the review of related literature that been mentioned and collected with evaluation in **Chapter 2**.

Due to the limited time available with the senior managers because of many meetings that should conduct in daily and also the summer annual leaves for the employees, the research interviews instruments served one objective along with one question except the objective no 1 as it was required more information to understand the current knowledge

system implemented at the organization as it comes with two questions in the interview. The following **table 1** is representing the interviews instruments.

Objective1	Q1. What is the current knowledge management practice implemented in Ooredoo call center? Q2. What is the impact of current knowledge management system in call center leader's performance?
Objective 2	Q3. What is the benefits and also the limitation of the current knowledge management system used at Ooredoo call center
Objective 3	Q4. Based on your information what is the different between the knowledge management system used by your organization and other organizations?
Objective 4	Q5. What is your suggestion to enhance the knowledge management system used at your organization?

4 Table1: Interviews instruments

Accordingly, the researcher decided the senior managers from contact center and HR development team as well.

3.5.1.1 Interview Instruments Pilot Test

The interview questions been designed and filtered to be aligned with the research study questions an objective and approved by the supervisor. The pilot test been done for the structured and organized interview questions after the confirmation by the supervisor. Therefore, test been done with the cooperation with some of the experienced managers and colleagues to find out the interview instruments which was a valuable test as the instruments been identified and the changes required is done.

3.5.2 Questionnaire instruments

Most of the researchers are adopting the use of the questionnaire in the different sectors, private or government sector. Rowley (2014) pointed out that questionnaire is a widely method that used to collect the research data from the people who are mainly relatively to the research topic. A systematic way used to develop this study research questionnaire. Based on the study objectives and the investigations that been done through reviewed literatures, researcher designed the questions which should aligned with the research objectives and also help to answer the study questions. As the

questions categorized from normal to important, the shortlisted questions been chosen to be published as a final questionnaire. **(Appendix A.1).**

3.5.2.1 Questionnaire design

Research questionnaire been designed to serve the study objectives each question is linked to one objective, the design as follows:

Section 1: this section is related to the demographic information which will help to define the results based on job title, age, years of experience and yearly performance rate.

Section 2: is referring to the four objectives as for each objectives there is a question, the objectives are study the existing knowledge management system related to Contact Centre leaders which is implemented at Ooredoo company, analyze the present system of knowledge management, Provide comparative study of knowledge management systems used for Contact Centre leaders by different organizations in different industries, provide Recommendations on the best practice of knowledge management that can be used by Ooredoo. There is a strong link between the questionnaire questions and the study scope as well.

3.5.2.2 Questionnaire instruments Pilot Test

Researcher tried to align the questions to meet the study objectives and scope, the first step was to choose the suitable questions, filter the shortlisted question and its been discussed with the supervisor to get his confirmation, after he conformed the questions, its ready to be designed through the system. After that design part is completed and start to send it to researcher network as test version to check how the targeted sample will be able to answer and response smoothly without any issue.

3.6 Validity and Reliability Test

Validity test is very important to ensure that the survey validity in terms of the languages that use which is enable the sample to understand the questions. Researcher was keen to use a suitable terminology which is suitable for the level of the targeted sample. It is easy for the respondents to end the survey if they not comfortable with the questions. To determine the time that required to response and finish the survey a pilot test was used.

3.7 Data Collection techniques

3.7.1 Questionnaire data collection technique

Questionnaire been designed to be aligned with the research objectives; the pilot test been conducted to facilitate the quickness of data collection through it. After the validation and facilitation of the questionnaire, the online google form was created to be used as a tool to distribute the questioner to the targeted people. By using the convenient ways, such as emails the questioner was sent directly to the sample of the research population. Data collection achieved from the response of the random sample which includes Contact Center team leaders, Contact center agents, directors, department heads (DH) , section heads(SH) and contact center quality assurance through email and online platform. Questionnaire was accessible from 15TH of May 2019 to 12th of July 2019 as the total response is 61, the full details of the questionnaire available as (**AppendixA.1.**)

3.7.2 Interviews data collection

Before the start of the interviews, there was an interview questions and topics preparation along with the selection of the type of groups involved in the interviews and schedule.

3.7.2.1 Interviews schedule

The selected people for the interview shows the interest to go through the interview by confirmed the interview email conformations sent to them as detailed in **AppendixB.2.** The researcher conducts the interview between 28 of May 2019 to 21 of June 2019 to reach 6 of the interviews. **Appendix B.4** presents the interviews schedule details.

There was a certain time and date for each interview has been set. Also, there was a confirmation email been communicated through the interviewees. Two days in advance, they received full details on the research study aim and objectives and the topics that will be discussed. Interviews conducted for people from different work layers and age at Ooredoo Oman contact center. The information that collected through the interviews was very helpful for the researcher to get more understanding of the current situation related to the research problem.

3.8 Data Analysis techniques

The researcher using the data analysis techniques to analyses the data collected through questionnaire and interviews.

3.8.1 Questionnaire Data analysis techniques

Using the quantitative manner for answering the research questions is the rule of the questionnaire, hence, it is an important to use **IBM SPSS 25** technique. Using the descriptive statistic form is helps to describe the data in quantitative manner.

3.8.2 Interview Data Analysis techniques

The collected data through the interview analysis will be through certain process. First, the information shared though the interview is noted using the system, after that researcher worked on categorized the data comes from the interviews based on the relation to the objectives of the research. The researcher filtered the all perceptions according to the data description and then perform the analysis with results. By referring to the reviewed literature the comparison take place between that literature explored in **chapter 2** with the data results came through the interview.

3.9 Legal Ethical & social consideration

Considering the ethical is very important while conducting a research hence, it is very important to provide the interviewees by all information related to the confidentiality and privacy as they have a limitation to share the confidential information from their workplace. To avoid any ethical issue for this study, the researcher provides the organization and the interviewees by the ethical form which contains all conditions and roles of the confidentiality in details to avoid any issue related to sharing the confidential information. The ethical form documented and signed as it is covered all the areas related to the confidentiality and it helped to identify if any risk will occur due to gathering the information through the organization either through qualitative or quantitative methods. In addition, the researcher used the mail method to get interviewees no objection conformation to conduct the interview and arrange for it after sharing the questions to make sure it is not impacting their work confidentiality. In other side the researcher considered the ethical

while designing and sending the questionnaire as there was no any personal information was mentioned such as names, phone numbers, workplace or email address, it was all related to the population information. This research study data collected and designed to not harm any organization confidentiality, but it will be very helpful and useful for most of the organizations who adopting customer services through call center. In addition, a formal letter been submitted to the Concern department which is human resource - development and relations to ensure that there is no objection from the organization to start collecting the required information through the targeted sample.

3.10 Summary

The chapter discussed the research methodology used for this research study. The mixed survey method was used to design the research study, questionnaire and the interviews to end up with a qualitative and quantitative data to be analyzed. The sample size of 200 participants in the survey and six interviews used for this research. The descriptive statistic been used also as an analysis framework to analyses the questionnaire. Through chapter five, the result presentation and analysis will be discussing.

CHAPTER 4: PROJECT MANAGEMENT

CHAPTER 4 PROJECT MANAGEMENT

4.1 Introduction

This chapter provides information about the research project management, as it is present the Gantt Chart that shows the timeline required to complete the project, Risk management

4.2 Time Management Plan

As the research must be completed in a limited time, it is important to plan the project timeframe to ensure that it is completed on time. According to (Hussain 2014) there are some process involved in project management such as define activities, sequence activities estimate activities resources, estimate activities duration and develop schedule.

4.3 Project WBS

The research project divided into smaller tasks which can easily managed and controlled, the technique used is Work Breakdown Structure (WBS) to define the activities.

4.4 Gantt Chart

Gantt Chart is one of the graphical formats used for this research activities to present the project activities timeframe and present the time to complete each activity with the sequence of activities as per **Appendix C.4**.

4.5 Risk Management

Risk planning is very important for each project, according to (Ssempebwa 2013) there are some risk planning actions that should take such as information buying as the risk can reduced or avoided by investigated more information. Contingency plan to be prepared and ready for any risk that can appear. For this research project to be ready for any risk can appear during the work with this research project each step was documented and approved to avoid any legal risk as an example.

4.6 Summary

The research study risks can be not meeting the deadline or legal issues due to data collection , to avoid this kind of risks there was a time plan to deliver the tasks on time and also there was a documented approvals and agreement for any data collection through the companies.

CHAPTER 5: SURVEY PRESENTATION, ANALYSIS AND FINDINGS

CHAPTER 5 SURVEY PRESENTATION, ANALYSIS AND FINDINGS

5.1 Introduction

This chapter is providing detailed information on the analysis and findings of the qualitative and quantitative research through questionnaire and Interviews which is already been explained and described on chapter3. The research focuses on Knowledge management practice for contact center team leader's performance, so it is targeted the people who working on contact center leaders.

5.2 Qualitative Research Presentation and Analysis

By referring to table 2 in chapter 3, the qualitative method that used to collect the data is the interviews. There was a number of six interviews conducted with leaders and senior managers in contact enter as each interview is summarized as following.

5.2.1 Interviews summary

- **Interview 1:** The first interview was conducted with Mr. Motaze Al-Lawatti the department head of Ooredoo Oman contact center with experience of 4 years, the interview scheduled and conducted on 16th of MAY 2019. through this interview it's been discovered that Ooredoo contact center team leaders still not have the ability to conduct a coaching sessions with their team members and this is because they don't know how to do it. The main issue is there is no proper guide for them to guide them on how to conduct a coaching session. The interviewee emphasizes the importance of the knowledge management for the telecommunications industry as this industry is a dynamic industry and every day there is a new technology.
- **Interview 2:** The second interview scheduled and conducted on 19th of May 2019 with the department head of people development Mrs. Samer Al-Sheikh, she has experience of 16 years. The interviewee emphasizes that currently the team leaders at the Ooredoo contact center they don't have enough knowledge on the products and services that provided by the company and many of them are not have the capability to answer the customer's enquiries related to the products. A proper knowledge management system is missing from the contact center.

- **Interview 3:** Third interview was with Mr. Ahmed Al-Qasabi the department head of the contact center technical support team, the interview scheduled and conducted on 16th of June 2019. Ahmed has 17 years of experience. The interviewee said that the main issue with contact center agents performance is the team leader knowledge , as the most of the team leaders in the contact center has a lack of knowledge in many areas such as , quality of calls coaching sessions, Ooredoo product and services information and how to manage the daily operation work and manage the managerial role.
- **Interview4:** on 17th of June 2019 the fourth interview been conducted with Mrs. Sabra Al-Alawi the department head at Ooredoo contact center for almost 15 years of experience. The interviewee confirmed that the current knowledge management system is not helping the team leaders you improve their performance in all areas as it is limited for specific things and also it is not including enough information.
- **Interview 5:** The fifth interview was with Mr. Jasim AlZedjali, team leader at AWASER Contact Center, the interview scheduled and conducted on 25th of June 2019. Jasim has 5 years of experience as a team leader. During this interview, the interviewee confirms that other organizations from telecommunication industry is still growing on knowledge management implementation which is related to contact center and for team leaders there is no knowledge tool to guide them on team performance management.
- **Interview 6:** this interview been conducted on 7th of July 2019 with Mr. Mazin ALRiyami the team leader at Ooredoo contact center, Mazin has 16 years of experience as contact center team leader. As the interviewee is one of the old team leaders at Ooredoo call center for almost 16 years, he explained very well the situation that he faced along with other team leaders. They had a very difficult time with their management because of the low performance by them and by f their teams. The interviewee explained clearly that most of the team leaders avoid conducting a coaching sessions or performance meetings because they don't have the knowledge on how to conduct such session. Moreover, the team leaders was not able to take customer's transferred calls to them because of the lack of knowledge on the products and services.

5.2.1 Analysis and findings through interviews

5.2.2.1 Research Q1: Knowledge Gaps in providing better customer service at the call Centre by the team leaders: if the contact Centre leader doesn't have enough knowledge on the products and services that provided by the company, he will not be able to handle any customers enquires.

Based on the interviewees who are seniors and experience at Ooredoo contact center, contact center team leaders facing a difficulty to answer customers' enquiries related to the product and services. One scenario, customer is calling related his mobile product issue as he activated a postpaid product package but he did not get the product facilities, if customer not convinced by what call center answer call will be transferred to the team leader, the issue here that team leader will not be able to answer the customer as he don't have enough knowledge to guide the customer (**Interview 1**). Contact center team leaders should get the full details on product and services specially the information related to the new offers and promotions that related to the product & services (**interview 4, interview 6**). The big gap on product and services that team leaders have is with fixed line products as the fixed line products has different names with complicated description, the awareness sessions that conducting is not enough as the information shared by trainers from HR who are not specialized in fixed line (**Interview 3**). Generally, Training on product & services is not enough for the team leaders as there is a multiple product with many information that difficult to the team leaders to memories (**Interview5**).

5.2.2.2 Research Q2: Call Centre team leader's performance gaps: if the team leader not having knowledge on how to coach calls quality to his agents and explain the areas of agent strength and areas of improvement this can reflect negatively to the agent performance as well as the team leader's performance.

Most of the contact team leaders not capable to conduct coaching sessions, as in monthly leader should conduct 3 to 4 coaching sessions with each champion, the issue that team leader not able even to explain the calls evaluation gaps to the agent as he don't have enough knowledge on the evaluation criteria (**Interview4**). Contact center team leaders don't have enough knowledge on how to conduct a successful feedback sessions with the agents, they don't have any guide or formal document with the correct criteria

(Interview 6). Some of the Contact center team leaders are seniors but still they have a difficulty to explain the strength and areas of improvement while they are conducting the calls quality coaching sessions **(Interview 2, Interview 3)**. Contact center agent's quality scores impacted in a negative way because of lack in team leader's knowledge on coaching and calls evaluation form criteria **(Interview 1, Interview 5)**.

5.2.3 Research Q3: Contact Centre agent's performance gaps when team leader is not having a proper knowledge management system to guide him on improving his team performance.

The agents are not aware on how to meet the yearly performance rate , they don't know how they can achieve that rate and this is team leader knowledge cause , as most of the contact center team leaders they don't have a proper guide on how to manage their team performance **(Interview 2, Interview 4)**. The new team leader facing a very difficult to manage his team performance because he did not get any guide or tool to guide him on how to manage his team performance, additionally , he is handling a daily operations tasks which is related to real time calls , service level and miniating the live adherence for all the agents available in one shift **(Interview 5, Interview 6)**. The problem is the internal communication emails is not helping the team leader in agents performance related issues , as the communication came through support team only if the agent is took long time break which is out if his break time, this kind of information the team leader can retrieve it from the internal system but because he don't have enough knowledge on how to do this , his team are not aware about their performance gap **(Interview 1, Interview 3)**.

5.3 Quantitative Data Presentation and Analysis

64 response examined through questionnaire; the follows is the description of the responses.

5.3.1 Presentation and description

5.3.1.1 Response Rate

Out of the sample size 91 around 64 who answered the questionnaire; hence, the response rate is 70%.

5.3.1.2 Quantitative *research validity and reliability testing*

According to (Yang et.al 2011) Coefficient alpha is applied to assess reliability of scales in psychology, they argue that the alternatives should be considered to coefficient alpha. The CRONBACH'S ALPHA been used to analyze and confirm the reliability of the research instrument, this been done using **IBM® SPSS® Statistics**. **Table3** shows that the validity of the quantitative research as 98.4%.

Case Processing Summary			
		N	%
Cases	Valid	62	98.4
	Excluded ^a	1	1.6
	Total	63	100.0
a. Listwise deletion based on all variables in the procedure.			

Table3: Research reliability and validity testing Summary

The below test is showing the reliability statistics of the quantitative research which the Cronbach's Alpha shows .884 as shown in **Table 4**.

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.884	.862	22

Table4: Research reliability Statistics from K1 to Q18

Scale Statistics			
Mean	Varianc e	Std. Deviation	N of Items
55.65	180.692	13.442	22

Table5: Scale Statistics from K1 to Q18

Item Statistics			
	Mean	Std. Deviation	N
K1	2.15	1.353	62
K2	1.50	.671	62
K3	3.15	1.099	62
K4	2.76	.468	62
Q1	2.69	1.466	62

Q2	2.90	1.376	62
Q3	2.61	1.136	62
Q4	2.89	1.189	62
Q5	2.85	1.365	62
Q6	2.87	1.287	62
Q7	2.84	1.231	62
Q8	2.87	1.361	62
Q9	2.68	1.277	62
Q10	1.82	.897	62
Q11	2.63	1.346	62
Q12	2.82	1.094	62
Q13	2.37	1.028	62
Q14	2.53	.844	62
Q15	2.27	.750	62
Q16	2.58	1.139	62
Q17	2.39	1.030	62
Q18	1.47	.844	62

Table6: Scale Statistics results for K1 TO Q18

Item-Total Statistics					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlatio n	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
K1	53.50	179.795	-.026	.382	.896
K2	54.15	177.339	.162	.447	.886
K3	52.50	177.828	.056	.472	.891
K4	52.89	179.512	.077	.367	.886
Q1	52.95	150.670	.774	.842	.869
Q2	52.74	151.900	.793	.791	.868
Q3	53.03	166.097	.454	.641	.880
Q4	52.76	156.481	.766	.859	.870
Q5	52.79	151.677	.807	.795	.868
Q6	52.77	152.735	.827	.913	.868
Q7	52.81	154.290	.814	.902	.868
Q8	52.77	150.801	.839	.903	.867
Q9	52.97	155.212	.749	.805	.870
Q10	53.82	176.050	.161	.504	.887
Q11	53.02	151.164	.838	.884	.867

Q12	52.82	158.640	.757	.819	.871
Q13	53.27	184.399	-.171	.538	.896
Q14	53.11	169.282	.487	.635	.880
Q15	53.37	171.909	.418	.649	.881
Q16	53.06	160.553	.653	.684	.874
Q17	53.26	182.424	-.100	.425	.894
Q18	54.18	183.263	-.144	.486	.893

Table7: Total Item Statistics results for K1 TO Q18

Scale Statistics			
Mean	Variance	Std. Deviation	N of Items
12.73	15.684	3.960	5

Table8: Scale Statistics results for K1 ,Q1,Q8,Q9&13

Inter-Item Correlation Matrix					
	K1	Q1	Q8	Q9	Q13
K1	1.000	-.004	.054	.063	-.059
Q1	-.004	1.000	.827	.752	-.203
Q8	.054	.827	1.000	.769	-.234
Q9	.063	.752	.769	1.000	-.167
Q13	-.059	-.203	-.234	-.167	1.000

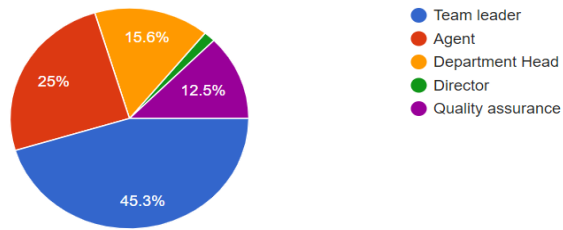
Table9: Correlation Matrix results for K1 ,Q1,Q8,Q9&13

5.3 Questionnaire Participate profile

The demographic data of the participants been collected through the first section , the data related to Age range , Job positions or title , years of experience and performance rate. The participants of 45.3% team leaders ,25% agents, 15.6% department heads,12.5% Quality assurance. The figure11 presenting demographic information response to the questionnaire.

Position

64 responses



6 Figure11: Participants Position

K1-Position					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Team Leader	28	44.4	44.4	44.4
	Agent	16	25.4	25.4	69.8
	Department Head	10	15.9	15.9	85.7
	Director	1	1.6	1.6	87.3
	Quality assurance	8	12.7	12.7	100.0
	Total	63	100.0	100.0	

Table10: Participants position

The Majority of the total, participants 64, are in the age range of (25 -35) years as there were 60.9% while 29.7% are in the range of the age (35-40), there are around 9.4% in age range (40-50). The figure 12 is presented the participates age.

Age

64 responses

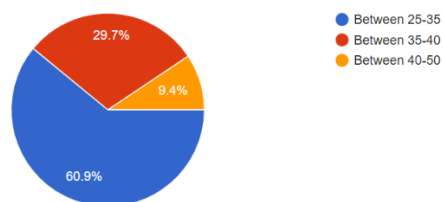


Figure12: Participants Age range.

K2-Age					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Between 25-35	38	60.3	60.3	60.3
	Between 40-45	19	30.2	30.2	90.5
	Between 50-55	6	9.5	9.5	100.0
	Total	63	100.0	100.0	

Table11: Participants Age Range

Figure13 is presenting the year of experience for the 64 participants, who has experience for more than 5 years were 54.7% , the participants who have experience of the range (2-3) are 18.8% , there are 15.6% of the participants who are with range (4-5) years of experience, finally there are only 10.9% of the participants with less than one year of experience.

Years of experience

64 responses

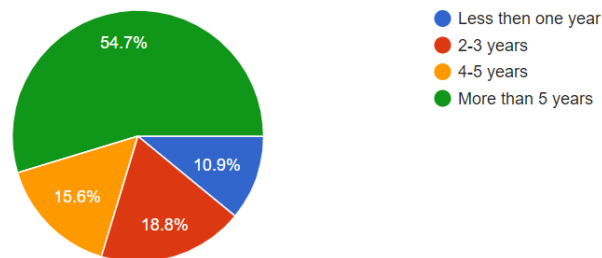


Figure13: Participants years of experience.

K3-Years of experience					
		Freque ncy	Percent	Valid Percent	Cumulative Percent
Valid	Less than one year	7	11.1	11.1	11.1
	2-3 years	12	19.0	19.0	30.2
	4-5 years	9	14.3	14.3	44.4
	More Than 5 years	35	55.6	55.6	100.0
	Total	63	100.0	100.0	

Table12: Participants years of experience

The total of 64 participants in various yearly performance rate as 39.1% in the performance range between (3-4) , 25% between (4-5) , also there are around 20.3% with yearly rate between (2-3) , finally , the participate of 15.6% with yearly performance rate between (1-2). The below figure is presenting the participates yearly performance rate.

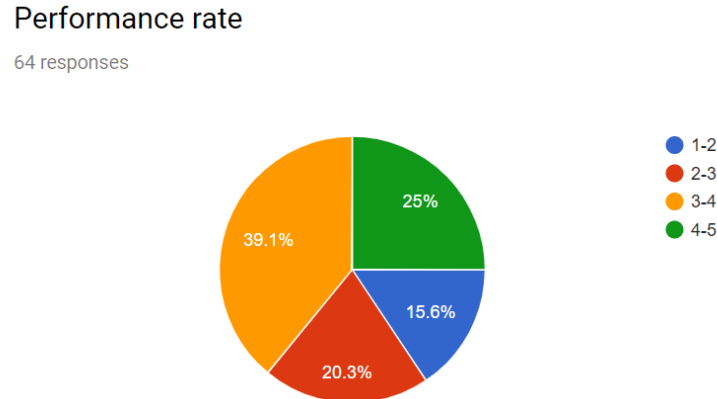


Figure14: Participants performance rate.

K4-Performance rate					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	16	25.4	25.8	25.8
	3	45	71.4	72.6	98.4
	4	1	1.6	1.6	100.0
	Total	62	98.4	100.0	
Missing	System	1	1.6		
Total		63	100.0		

Table13: Participants performance rate

5.3.1.4 Research Q1: Knowledge Gaps in providing better customer service at the call Centre by the team leaders: if the contact Centre leader doesn't have enough knowledge on the products and services that provided by the company, he will not be able to handle any customers enquires.

To study the knowledge gaps in providing better customer services at Ooredoo Call Center by the team leaders it's been asked through **Q2**, **Q5** & **Q9**. Through **Q2** that presented in Figure15 there are 17.5% of the participants agreed that the new products offer, and promotions knowledge is available for the contact center team leaders and 30.2% of the participants are agree. Were 22.2% are disagree with that, 15.9% strongly disagree and around 14.3% are they don't know as shows in figure15.

Q.2 Knowledge of the new offers and promotions is available for all team leaders
63 responses

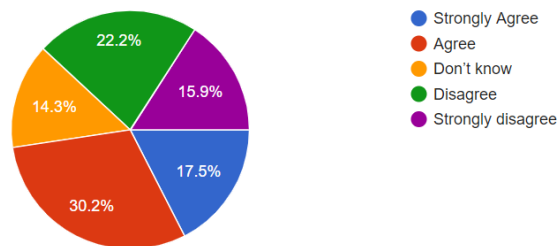


Figure15: Knowledge of the new offers and promotions is available for all team leaders.

Q2-Knowledge of the new offers and promotions is available for all team leaders					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	11	17.5	17.5	17.5
	Agree	19	30.2	30.2	47.6
	Don't know	9	14.3	14.3	61.9
	Disagree	14	22.2	22.2	84.1
	Strongly Disagree	10	15.9	15.9	100.0
	Total	63	100.0	100.0	

Table14: Q2- Knowledge of the new offers and promotions is available for all team leaders

For Q5 as presented in figure16 12.9% of the questionnaire participants strongly agree that current contact center has a knowledge management system to transferring information between team leaders who interact with customers and 41.9% agree. In other side 22.7% disagree with that supported by 16.1% of the participants that strongly disagree.

Q5. Current Contact Center has a knowledge management system to transferring information between team leaders who interact with customers

62 responses

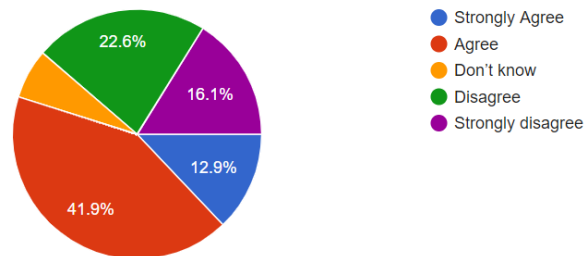


Figure16: Current contact center has a knowledge management system to transferring information between team leaders who interact with customers.

Q5- Current contact center has a knowledge management system to transferring information between team leaders who interact with customers.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	9	14.3	14.3	14.3
	Agree	26	41.3	41.3	55.6
	Don't Know	4	6.3	6.3	61.9
	Disagree	14	22.2	22.2	84.1
	Strongly Disagree	10	15.9	15.9	100.0
	Total	63	100.0	100.0	

Table 15: Q5- Current contact center has a knowledge management system to transferring information between team leaders who interact with customers.

In Q9 there are 14.8% of participants that strongly agree that team leaders in contact center have enough knowledge about company product and services while, 42.6% are agree as well. 27.9% disagree and 8.2% strongly disagree. Figure 17 is presented the response to Q9.

Q9. Team leaders in contact center have enough knowledge about company products and services

61 responses

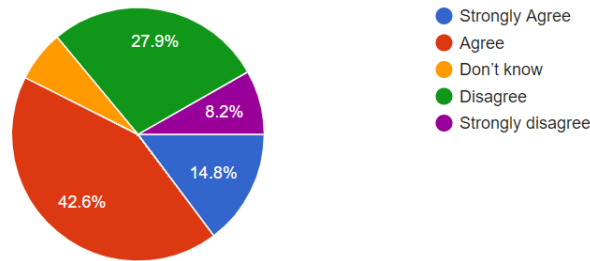


Figure17: Team leaders in contact center have enough knowledge about company products and services.

Q9- Team leaders in contact center have enough knowledge about company products and services					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	11	17.5	17.5	17.5
	Agree	26	41.3	41.3	58.7
	Don't Know	4	6.3	6.3	65.1
	Disagree	17	27.0	27.0	92.1
	Strongly Disagree	5	7.9	7.9	100.0
	Total	63	100.0	100.0	

Table 16: Q9- Team leaders in contact center have enough knowledge about company products and services

5.3.1.5 Research Q2: Call Centre team leader's performance gaps: if the team leader not having knowledge on how to coach calls quality to his agents and explain the areas of agent strength and areas of improvement this can reflect negatively to the agent performance as well as the team leader's performance.

To study the team leader's performance gaps through questionnaire it is through Q1, Q8 and Q10. in Q1 19.4% of the participants to the questions strongly agree that team leaders has enough knowledge on how to conduct the agent performance, 40.3% agree while 19.4% strongly disagree and 12.9% disagree.

Q1. Team leader has enough Knowledge on how to conduct the agent coaching sessions

62 responses

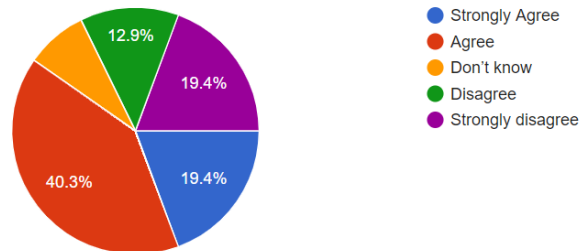


Figure18: Team leaders has enough knowledge on how to conduct the agent coaching sessions.

Q1- Team leaders has enough knowledge on how to conduct the agent coaching sessions.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	12	19.0	19.0	20.6
	Agree	25	39.7	39.7	60.3
	Don't know	5	7.9	7.9	68.3
	Disagree	8	12.7	12.7	81.0
	Strongly Disagree	12	19.0	19.0	100.0
	Total	63	100.0	100.0	

Table 17: Q1- Team leaders has enough knowledge on how to conduct the agent coaching sessions.

In Q8 that presented in figure19 14.3% of the participants strongly agree that team leaders ha sa good knowledge which is help to coach the team and 39.7% agreed . while 15,9% strongly disagree and 22.2% disagree.

Q8. Team leader has a good knowledge which is help to coach the team

63 responses

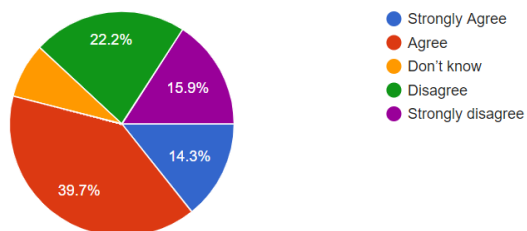


Figure 19: Team leaders has a good knowledge which is help to coach the team.

Q8- Team leaders has a good knowledge which is help to coach the team.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	9	14.3	14.3	14.3
	Agree	25	39.7	39.7	54.0
	Don't Know	5	7.9	7.9	61.9
	Disagree	14	22.2	22.2	84.1
	Strongly Disagree	10	15.9	15.9	100.0
	Total	63	100.0	100.0	

Table 18: Q8- Team leaders has a good knowledge which is help to coach the team.

Through Q10 41.3% Strongly agreed that the good performance of contact leader's can be achieved by the availability of knowledge management system and 42.9% agreed. While 7.9% not agreed.

Q10. Knowledge management system can help contact center team leaders to achieve good performance

63 responses

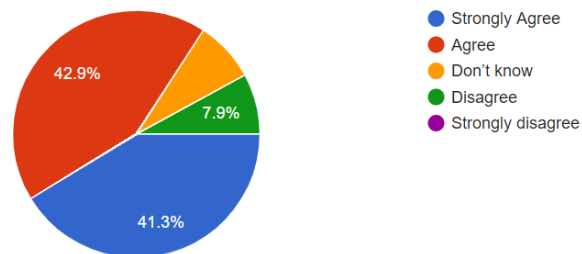


Figure20: knowledge management system can help contact center leaders to achieve good performance.

Q10- Knowledge management system can help contact center leaders to achieve good performance.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	26	41.3	41.3	41.3
	Agree	27	42.9	42.9	84.1
	Don't Know	5	7.9	7.9	92.1
	Disagree	5	7.9	7.9	100.0

	Total	63	100.0	100.0	
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Table 19: Q10- Knowledge management system can help contact center leaders to achieve good performance.

5.3.1.6 Research Q3: Contact Centre agent's performance gaps when team leader is not having a proper knowledge management system to guide him on improving his team performance.

To investigate and study the contact agent's performance gaps due to the lack of leader's knowledge it is been done via Q6, Q7. Q6 is discussing the performance escalation process knowledge with the team leaders as 12.7% strongly agreed that team leaders have this knowledge and 39.7% agree, while 11.1% strongly disagree and 28.6% disagree. Q6 shows in figure 21.

Q6. Team leader have enough knowledge of agent performance escalation process?

63 responses

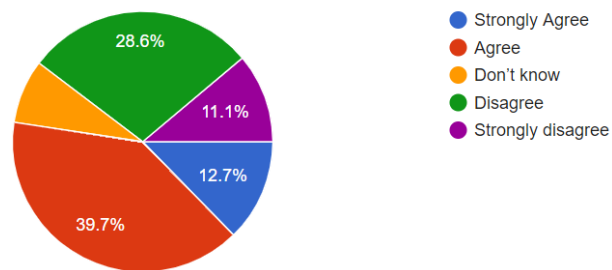


Figure21: Team leaders has enough of agent performance escalation process.

Q6- Team leaders has enough of agent performance escalation process.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	8	12.7	12.7	12.7
	Agree	25	39.7	39.7	52.4
	Don't Know	5	7.9	7.9	60.3
	Disagree	18	28.6	28.6	88.9
	Strongly Disagree	7	11.1	11.1	100.0
	Total	63	100.0	100.0	

Table 20: Q6- Team leaders has enough of agent performance escalation process.

Through Q7 presented in figure 22 which is discussing another area related to agent's performance gap which is the performance process if the team leader is not have enough

knowledge on performance process. 11.1% strongly agree that leaders have the knowledge, 41.3% agree , while 9.5% strongly disagree and 21% disagree.

Q7. Contact center team leaders have enough knowledge about performance process

63 responses

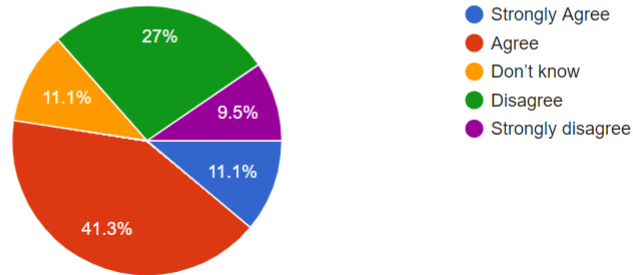


Figure22: Contact center team leaders have enough knowledge about performance process.

Q7- Contact center team leaders have enough knowledge about performance process.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	7	11.1	11.1	11.1
	Agree	26	41.3	41.3	52.4
	Don't Know	7	11.1	11.1	63.5
	Disagree	17	27.0	27.0	90.5
	Strongly Disagree	6	9.5	9.5	100.0
	Total	63	100.0	100.0	

Table 21: Q7- Contact center team leaders have enough knowledge about performance process.

5.3.2 Analysis and Findings

5.3.2.1 Research Validity and Reliability

Based on the results shows through Cronbach's Alpha reliability test, the level of the internal consistency is .884 which point out that the reliability is with high level.

5.3.2.2 Questionnaire participants profile

Through the results, the majority of the participants to the questionnaire are from team leaders mainly from the age range of 25-35 with more than 5 years of work experience and most of them with performance rate 3 which is acceptable, **Tables (21 , 22 & 23)** shows the team leaders response along with age range, work of experience and performance rate.

K1 * K2 Crosstabulation					
Count					
		K2			Total
		Between 25-35	Between 40-45	Between 50-55	
K1	Team Leader	15	10	3	28
	Agent	15	1	0	16
	Department Head	4	5	1	10
	Director	0	1	0	1
	Quality assurance	4	2	2	8
Total		38	19	6	63

Table 22: Participants Age &Position Crosstabulation

K1 * K3 Crosstabulation						
Count						
		K3				Total
		Less then one year	2-3 years	4-5 years	More Than 5 years	
K1	Team Leader	3	5	3	17	28
	Agent	2	5	5	4	16
	Department Head	1	1	0	8	10
	Director	0	0	0	1	1
	Quality assurance	1	1	1	5	8
Total		7	12	9	35	63

Table 23: Participants work experience &Position crosstabulation

K1 * K4 Crosstabulation					
Count					
		K4			Total
		2	3	4	
K1	Team Leader	9	17	1	27
	Agent	7	9	0	16
	Department Head	0	10	0	10
	Director	0	1	0	1
	Quality assurance	0	8	0	8
Total		16	45	1	62

Table 24: Participants Performance rate & Position Crosstabulation

5.3.2.3 Research Q1: Knowledge Gaps in providing better customer service at the call Centre by the team leaders: if the contact Centre leader doesn't have enough knowledge on the products and services that provided by the company, he will not be able to handle any customers enquires.

Based on the quantitative data (Questionnaire) description still there is a gap in contact center team leaders' knowledge about products and services information that provided by the company. Ooredoo contact center as per the data presented in **figures (16 & 17)** and also the data presented in **tables (14 & 15)** but it seems this system is not helping the team leaders to provide better customer service to the customers. Bu focus on **Q5** in the questionnaire some of participants agreed that there is a knowledge management system helping the team leaders to transforming information among them while the rest disagree on this as it is a manual email that is send in end of each shift and it is not related to products knowledge.

5.3.2.4 Research Q2: Call Centre team leader's performance gaps: if the team leader not having knowledge on how to coach calls quality to his agents and explain the areas of agent strength and areas of improvement this can reflect negatively to the agent performance as well as the team leader's performance.

The research Q2 is aiming to study the relation between the knowledge management and contact center team leader's performance and if the leader is eligible to communicate and

manage his team performance, through the response data for Q1,Q8 and Q10 from the questionnaire that the team leader's knowledge is not enough to achieve good performance as still they need a helpful knowledge tool to conduct the coaching sessions in a proper way and also to achieve the good performance.

5.3.2.5 Research Q3: Contact Centre agent's performance gaps when team leader is not having a proper knowledge management system to guide him on improving his team performance.

Research Q3 is aiming to study the contact center agent's performance according to their team leader performance and knowledge. Through the response to the Q6 & Q7 it seems that the contact center team leaders do not have enough knowledge on the performance escalation process to improve the low performers and the performance communication and communication. Also they don't have effective knowledge system to help them to support their agent's performance.

Hypothesis of this research was statistically tested using descriptive and inferential techniques. It is important that using both techniques to successfully examine the relation between the knowledge management system and the contact center team leaders performance were the independent variable (adopting knowledge management system for contact center) and the dependent variable (the impact on leaders performance).

H1: there is a significant relation between knowledge management system and contact center team leader's performance.

H0: there is no a significant relation between knowledge management system and contact center team leader's performance.

The regression analysis was done and as per the results that linear regression exists. This indicates that adopting the knowledge management system is statistically significant for contact center team leader's prediction, $F(1,61) = 5.426$, $p < .05$ as shows in **Table 24**

Model Summary ^b									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.286 ^a	.082	.067	.860	.082	5.426	1	61	.023
a. Predictors: (Constant), Q18									
b. Dependent Variable: Q10									

Table25: Linear regression analysis results

ANOVA results in **table 25** shows that regression model statistically significant, $F(1,61)=5.426$, $p=0.23$, it is statistically significant because $p<0.5$ this indicates that there is a significant linear relation.

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.009	1	4.009	5.426	.023 ^b
	Residual	45.070	61	.739		
	Total	49.079	62			
a. Dependent Variable: Q10						
b. Predictors: (Constant), Q18						

Table26: ANOVA analysis results

Moreover, to measure the strength of linear relationship direction between two variables coefficient r test been used as r values always between $+1$ which shows positive linear relationship and value -1 which shows the negative linear relationship. **Table 26** and **Table 27** is presented the correlation coefficient measure result which is $+1$ which indicates that there is a positive relationship between Knowledge management and leader's performance.

Correlations			
		Q10	Q18
Q10	Pearson Correlation	1	.286 [*]
	Sig. (2-tailed)		.023
	N	63	63
Q18	Pearson Correlation	.286 [*]	1

	Sig. (2-tailed)	.023	
	N	63	63
*. Correlation is significant at the 0.05 level (2-tailed).			

Table27: Correlation coefficient result

Correlations			
		Q10	Q18
Q10	Pearson Correlation	1	.286*
	Sig. (2-tailed)		.023
	Sum of Squares and Cross-products	49.079	13.238
	Covariance	.792	.214
	N	63	63
Q18	Pearson Correlation	.286*	1
	Sig. (2-tailed)	.023	
	Sum of Squares and Cross-products	13.238	43.714
	Covariance	.214	.705
	N	63	63
*. Correlation is significant at the 0.05 level (2-tailed).			

Table28: Correlation coefficient result2

In addition, to assess the relation between knowledge management and leader's performance Pearson's correlation was conducted. By referring to the Samuels (2014) on his article that related to the Pearson's correlation that this kind of test is measure the existence that given by P-value and strength of the linear relationship given by coefficient r measure results which is between -1 and +1, however , based on Samuels (2014) if the values result between $0.1 < |r| < 0.3$ coefficient will indicate a small correlation, if results between $0.3 < |r| < 0.5$ it is a medium correlation while the large correlation is $|r| > 0.5$. Through the visual inspection and the histogram of normal probability confirms that the normality and normal P-P plot also indicating the normally distribution of the residuals. **Figure 24** and **Figure 25** presented the normal probability histogram and Normal P-P Plot conducted for this research.

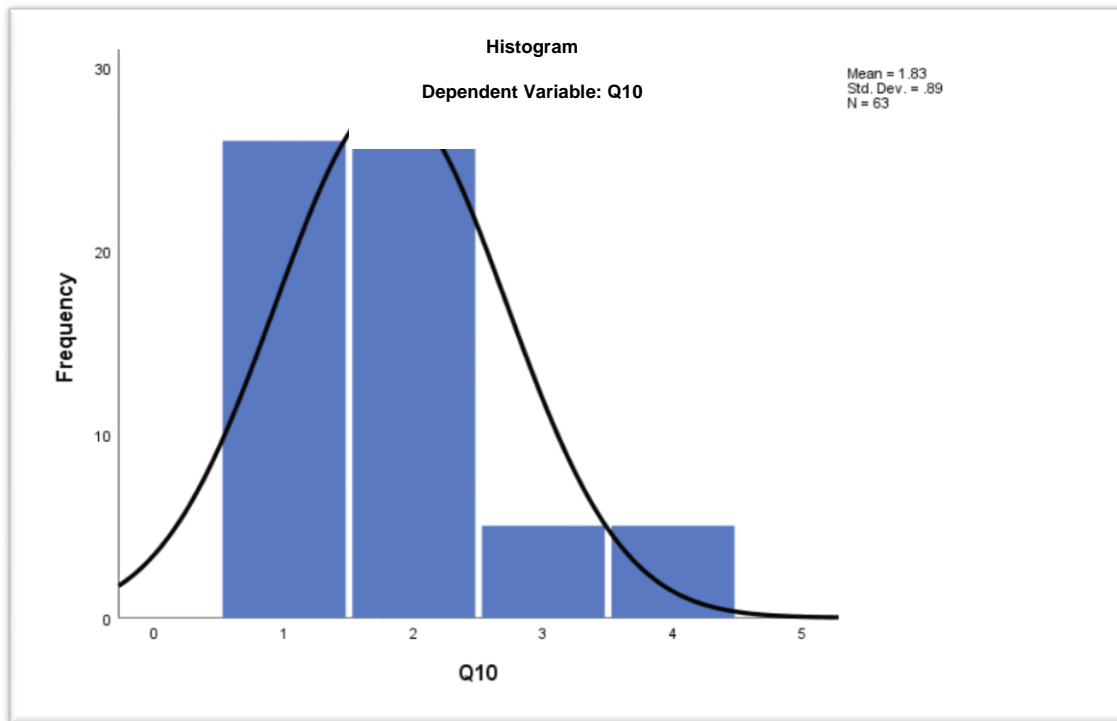


Figure 23: Variables normal probability histogram

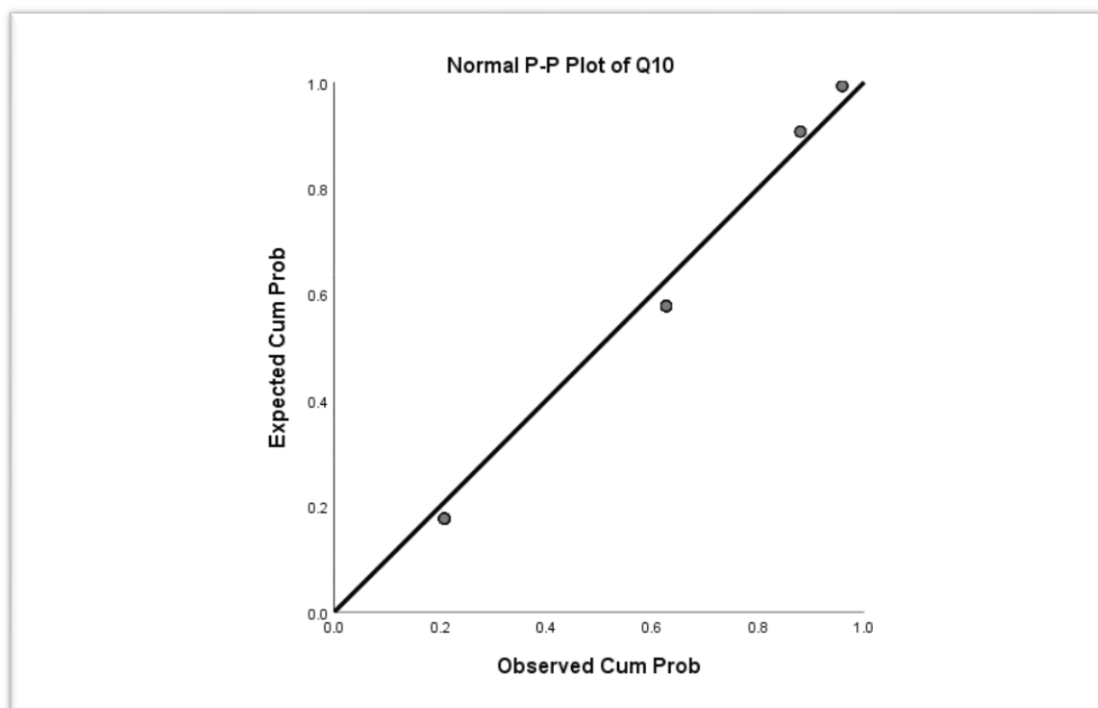


Figure 24: Normal P-P Plot

According to the above analysis it is clear that the variables has a statistically significant relationship and positive correlation, hence, the null hypotheses is rejected and the alternative hypotheses accepted which is *H1: there is a significant relation between knowledge management system and contact center team leader's performance.*

5.4 Summary

Qualitative and quantitative data presentation and findings which discussed above shows that the main findings that the availability of the knowledge management system is important in contact center to support team leaders in their performance as well as their team performance and to provide a good customer service. The descriptive and inferential statistical techniques used to produce the research outcome. Survey's findings were presented, discussed and analyzed by review if literature and the synthesis as well. Next chapter will present the summary of all findings and results along with conclusions and recommendations. In addition, it will highlight the risk management sustainability ending with student reflection report.

CHAPTER 6: CONCLUSION AND RECOMMENDSTION

CHAPTER 6 CONCLUSION & RECOMMENDATION

6.1 Introduction

The research study was aimed to study the knowledge management practices used at Ooredoo contact center which help to improve the contact center team leaders' performance. As discussed through (Chapter 1) there is a specific research objectives for the study ,(1) Study the existing knowledge management system related to Contact Centre leaders which is implemented at Ooredoo company using the qualitative and quantitative methodology,(2) Analyze the present system of knowledge management using different tools such as graphs & provide useful insights, (3) Provide comparative study of knowledge management systems used for Contact Centre leaders by different organizations in different industries , (4) Provide Recommendations on the best practice of knowledge management that can be used by Ooredoo call Centre to solve the leader's contact center issues. Through the recapping of the chapters from (chapter 1 to chapter3) the scope of study been discussed and identified the relation between the knowledge management and contact center team leaders' performance. The researcher provided a review of related literatures and described the data collection methodology and data analysis tools and techniques through previous chapters.

In this chapter, researcher will be summarizing the findings for the research questions using the data analysis results to come up with a conclusion and recommendations.

6.2 Conclusion

Through this chapter the interpretation of the results of each research question will be summarized for each question with the conclusion on the status for each one.

Research Question 1: Knowledge Gaps in providing better customer service at the call Centre by the team leaders: if the contact Centre leader doesn't have enough knowledge on the products and services that provided by the company, he will not be able to handle any customers enquires. The findings through the literature review identified that the efficiency of the contact centre cannot be achieved unless the by building structured knowledge from capturing the answers to previous asked questions. As the contact centre

employees have a direct interaction with customers and before they provide any solution to the customers, they must understand the problem and how this can be solved so they need the right knowledge on the problem and solutions Rasooli and Albadvi (2007). It has been discovered that the knowledge management is very important to support the team leader on answering the customer enquiries, currently there is an issue with Ooredoo contact center team leaders knowledge which is required to answer customers' enquiries based on the department head of the Ooredoo contact center Al-Lawatti (2019). Moreover, the availability of the knowledge management system is important to reduce the time required for trainings on the product and services information as due to the huge number of information it is difficult for the team leaders to memories all of them ,hence it is very necessary to have a knowledge management tool to enable the contact center leaders to answer the customers and agents enquiries in terms of product and services Al-Lawatti (2019) . Compared to Other organizations, most of the team leaders in contact centers having same issue which is lack of knowledge while responding to the customer enquiries Al-Zedjali (2019). knowledge management is very important for the contact center to enhance the level of the service and to support customers in short period of time, any lack on the knowledge it will cause an issue in customer's perspectives and trust along with declines on service level performance Al-Sheikh (2019). The researcher concluded that Ooredoo contact center team leaders has a big lack of knowledge, which is impacted their performance and agents productivity performance accordingly and this is a cause of lack on planning for a proper knowledge management tool which can help to cover this gap in knowledge.

Research Question 2: Call Centre team leader's performance gaps: if the team leader not knowledge on having how to coach calls quality to his agents and explain the areas of agent strength and areas of improvement this can reflect negatively to the agent performance as well as the team leader's performance. The researcher finds that there is a strong relation between the coaching knowledge and team leaders and his agents' performance as the contact center agents' performance is depending on their team leader knowledge Al-Lawatti (2019). agents coaching and appraisal knowledge is one of the areas that leaders has lack to know more information on how to conduct coaching and set and communicate the appraisal as well Al-Sheikh (2019). Researcher found that there

was no any kind of knowledge sharing been conducted to the contact center team leaders on how to conduct a coaching session to the contact center agents and what is the proper way to communicate the agent's performance. Also, the researcher found that the Ooredoo contact center are don't have a knowledge on the quality of calls areas details due to the missing of the proper knowledge management practice which can help them to cover this gap.

Research Question 3: Contact Centre agent's performance gaps when team leader is not having a proper knowledge management system to guide him on improving his team performance. the performance of the agents impacted if they managed by a new team leader as it is difficult for the team leader to start without any knowledge tool to guide him on how to mange team performance such as , coaching, quality of calls evaluations ..ext. AL-Riyami(2019).

6.3 Recommendation

Based on the conclusion in above, this section contains the recommendations as it is categorized as (1) Recommendations for knowledge gaps in providing better customer service at the call center by the team leaders. (2) Recommendations for contact center team leaders' performance gap. (3) Recommendations for contact center agents' performance gap.

Recommendation for knowledge gaps in providing better customer service at the contact center by the team leaders.

As Ooredoo company strategy is adopting the digitalization, IT strategy and business strategy should be aligned together, currently there is a different social media tools that enable the customer's to utilize Ooredoo services , but also they need a team leader's support in some cases , for that the recommendation is to develop a mobile app for contact center team leader which is contains all product and service information and also contains the new offers information's' updates in a way that is useful and readable and also easy to access. This recommendation will help to improve contact center team leader's knowledge and provide a quick answer to the customer which will save customer and team leaders time as well.

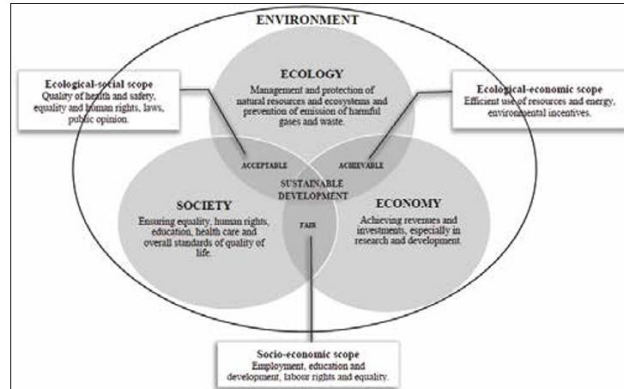
Recommendation for contact center team leader's performance gap. Team leader performance is always impacted by his team performance , currently Ooredoo contact center they don't have a proper system to give the team leader enough knowledge on how to coach their team ,hence the recommendation to solve this gap is to have a digital coaching, daily tasks and performance management guideline , and this guideline is should develop by IT as leaders knowledge link. The benefit of this link is to provide either the existing & new team leaders by the correct direction and enough knowledge on how to do their jobs smoothly.

Recommendation for contact center agents' performance gap. Agents performance is depending on their leader's performance and approach, if the leader is eligible to coach his team, the team will perform well. The recommendation to solve this gap is, describe the quality evaluation form for the team leader to be systematic. Create a clear process in the system to be use as process knowledge system to guide the leader on how to design a development plan for low performer and what is the correct escalation process.

6.4 Sustainability & Risk Management

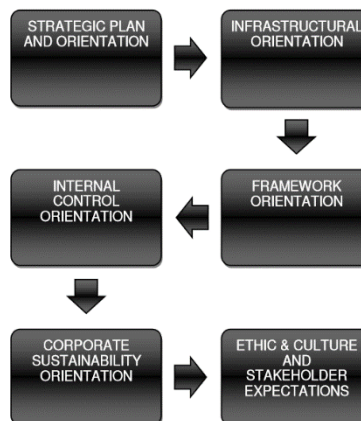
Through this research, it's been found that knowledge management is linked to Ooredoo's sustainability in the telecom industry especially when it's come to customer service and it can be a competitive organization if the knowledge management implemented properly in the contact center.

Yilmaz and Flouris (2010) emphasize that today's business strategy is need to integrate both sustainability and risk management which will help the companies to exploit a new business opportunities as it may include technologies. According to Klarin (2018) the sustainability development concept is popularized based on three pillars which are Social, economic and ecological pillar of sustainability. **Figure 24** is representing the pillars of sustainability.



Figures 25: Pillars of sustainability (Klarin 2018)

Based on (Talet 2014) the risk Management is processed to protect the organization from any risk that can occur which can impact the execution of the company mission. There are a different ways of sustainability focus by the corporates, however, strategic, operational collaborative and governance requirements are the most important to be addressed in the successful sustainability program Yilmaz and Flouris (2010).



Figures 26: Enterprise Sustainability Risk Management Framework Model (Yilmaz and Flouris 2010)

According to (Lenssen *et al.*2015) that the risks was considered as a cause of the sustainability challenges as the main factor of the risks is the human activities, political governance, natural disaster, physical infrastructure and technological development.

Self-Reflection

The experience gained through process of conducting such this research will showcases through the Self-Reflection section. To achieve the dissertation's requirements, it is required a lot of efforts specially if a lot of challenges appeared.

There are many benefits gained through the work in this research, selecting the research topic is one of them as it is showing how the researcher can select and link the research topic to be beneficial for the society and workplace as well. Conducting the literature review is another advantage as it is helped to find out the area of investigations and provides many useful information related to the research topic and objectives. The literature review was the first task that conducted which is helped to justify the research questions requirements and decide the methodologies that used in the research. knowledge gained about Sampling size and populations techniques was one of the benefits that gained through the work in the dissertation research. it was a challenging areas but with the support that got it from the dissertation supervisor and articles along with books and online education portals the sampling section completed. More information and knowledge gained about data collection techniques by using the mixed methods like questionnaire and interviews and what is the best way to present the collected information. The challenges while collecting the data that the time scheduled for this task as the difficulty to find the selected interviewees due to the annual leaves and summer time and the same was for conducting the questionnaire.

Using the analytical tools like IBM SPSS 25 to analyses the collected quantitative data was a challenging part as it required more time to understand the type of each test through SPSS what is it about and how can be done, it is a new experience gained as the learning was enjoyable through the articles and YouTube sessions that accessed to learn more about different type of the analysis test that required through IBM SPSS 25. Research analysis done successfully by learned and conduct the different analysis such as linear regression coefficient correlation, ANOVA and statistical tests. Many skills gained through the work with this research such as time management skills , planning the tasks , problem solving and the decision making .

Various workshops that conducted by Middle East college was helpful in supporting the work in the research study along with the follow up of progress of the research work.

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Appendix

This section presents all the related appendices to the research as follows:

Appendix A: Research Methodology- Questionnaire

- Appendix A.1: Instruments of the questionnaire.

Appendix B: Research Methodology – Interview

- Appendix B.1: The instruments of interview.
- Appendix B.2: Interviews emails communication.
- Appendix B.3: Interview No objections confirmation mails.
- Appendix B.4: Interviews Schedule.
- Add feedback emails about the validity of the research

Appendix C: Student work in research project

- Appendix C.1: Ethical Approval Form for the research.
- Appendix C.2: No objection letter from Ooredoo
- Appendix C.3 Dissertation Diaries by student.
- Appendix C.4: Gantt Chart
- Appendix C5: Importance of the research feedback from external Organization

Appendix A: Research Methodology- Questionnaire

Appendix A.1: Questionnaire Instruments

Appendix A.1: Questionnaire Instruments

Knowledge management implementation for contact center survey

The Survey is related to the importance of Knowledge management practices & implementation for contact center team leaders performance .

* Required

1. **Position *** *Mark only one oval.*

- ☐ Team leader
- ☐ Agent
- ☐ Department Head
- ☐ Director
- ☐ Quality assurance

2. **Age ***
Mark only one oval.

- ☐ Between 25-35
- ☐ Between 40-45
- ☐ Between 50-55

3. **Years of experience *** *Mark only one oval.*

- ☐ Less then one year
- ☐ 2-3 years
- ☐ 4-5 years
- ☐ More than 5 years

4. **Performance rate *** *Mark only one oval.*

- ☐ 1-2
- ☐ 2-3
- ☐ 3-4
- ☐ 4-5

5 **Q1. Team leader has enough Knowledge on how to conduct the agent coaching sessions** *Mark only one oval.*

- ☐ Strongly Agree
- ☐ Agree
- ☐ Don't know
- ☐ Disagree
- ☐ Strongly disagree

6. **Q.2 Knowledge of the new offers and promotions is available for all team leaders** *Mark only one oval.*

- ☐ Strongly Agree
- ☐ Agree
- ☐ Don't know
- ☐ Disagree
- ☐ Strongly disagree

7. **Q3. There is a knowledge management system for contact center team leaders implemented by your organization** *Mark only one oval.*

- ☐ Strongly Agree
- ☐ Agree
- ☐ Don't know
- ☐ Disagree
- ☐ Strongly Disagree

8. **Q4. Your organisation has effective knowledge management system for contact center team leaders**

Mark only one oval.

- ☐ Strongly Agree
- ☐ Agree
- ☐ Don't know
- ☐ Disagree
- ☐ Strongly disagree

9. **Q5. Current Contact Center has a knowledge management system to transferring information between team leaders who interact with customers** *Mark only one oval.*

- ☐ Strongly Agree
- ☐ Agree
- ☐ Don't know
- ☐ Disagree
- ☐ Strongly disagree

10 **Q6. Team leader have enough knowledge of agent performance escalation process?** *Mark only one oval.*

- ☐ Strongly Agree
- ☐ Agree
- ☐ Don't know
- ☐ Disagree
- ☐ Strongly disagree

11. **Q7. Contact center team leaders have enough knowledge about performance process** *Mark only one oval.*

- ☐ Strongly Agree
- ☐ Agree
- ☐ Don't know
- ☐ Disagree
- ☐ Strongly disagree

12. **Q8. Team leader has a good knowledge which is help to coach the team** *Mark only one oval.*

- ☐ Strongly Agree
- ☐ Agree
- ☐ Don't know
- ☐ Disagree
- ☐ Strongly disagree

13. **Q9. Team leaders in contact center have enough knowledge about company products and services**
Mark only one oval.

- ☐ Strongly Agree
- ☐ Agree
- ☐ Don't know
- ☐ Disagree
- ☐ Strongly disagree

14. **Q10. Knowledge management system can help contact center team leaders to achieve good performance**
Mark only one oval.

- ☐ Strongly Agree
- ☐ Agree
- ☐ Don't know
- ☐ Disagree
- ☐ Strongly disagree

15 **Q11. Team leader have enough knowledge about his daily tasks** *Mark only one oval.*

- ☐ Strongly Agree
- ☐ Agree
- ☐ Don't know
- ☐ Disagree
- ☐ Strongly disagree

16. **Q12. New team leader has a tool to guide him on his daily activities and responsibilities** *Mark only one oval.*

- ☐ Strongly Agree
- ☐ Agree
- ☐ Don't know
- ☐ Disagree
- ☐ Strongly disagree

17. **Q13. Currently Contact Center leader's productivity negatively impacted due to the current knowledge management system** *Mark only one oval.*

- ☐ Strongly Agree
- ☐ Agree
- ☐ Don't know
- ☐ Disagree
- ☐ Strongly disagree

18. **Q 14. Tacit Knowledge is more effective for team leader contact center performance** *Mark only one oval.*

- ☐ Strongly Agree
- ☐ Agree
- ☐ Don't know
- ☐ Disagree
- ☐ Strongly disagree

19. **Q15. Explicit Knowledge is more effective for the team leaders contact center** *Mark only one oval.*

- ☐ Strongly Agree
- ☐ Agree
- ☐ Don't know
- ☐ Disagree
- ☐ Strongly disagree

20 **Q16. The department is providing s full support for team leaders knowledge which can improve their performance** *Mark only one oval.*

- ☐ Strongly Agree
- ☐ Agree
- ☐ Don't know
- ☐ Disagree
- ☐ Strongly disagree

21. **Q 17. Operational Work is impacted negatively because of the low level of leaders knowledge.** *Mark only one oval.*

- ☐ Strongly Agree
- ☐ Agree
- ☐ Don't know
- ☐ Disagree
- ☐ Strongly disagree

22. **Q18. It is important to have a knowledge management practice for contact center team leaders** *Mark only one oval.*

- ☐ Strongly Agree
- ☐ Agree
- ☐ Don't know
- ☐ Disagree
- ☐ Strongly disagree

Appendix B: Research Methodology – Interview

Appendix B.1: The instruments of interview.

Appendix B.2: Interviews communication email Templet

Appendix B.3: Interview No objections confirmation mails .


Appendix B.4: Interviews Schedule

Appendix B.1: The instruments of interview.

Interview Questions: “A Study on the implementation of Knowledge management for contact center to improve the team leader’s performance at Ooredoo Oman”

Objective1	Q1. What is the current knowledge management practice implemented in Ooredoo call center? Q2. What is the impact of current knowledge management system in call center leader’s performance?
Objective 2	Q3. What is the benefits and also the limitation of the current knowledge management system used at Ooredoo call center
Objective 3	Q4. Based on your information what is the different between the knowledge management system used by your organization and other organizations?
Objective 4	Q5. What is your suggestion to enhance the knowledge management system used at your organization?

Appendix B.2: Interviews communication email Templet

 Send	From	PG17F1861@mec.edu.om
	To	Sabra.Al-Alawi@ooredoo.om
	Cc	KHAWLA SULAIMAN ALI AL MAAMARI
	Subject	No Objection for Interview

Dear Sabra,

The interview is one of the methods that use for collecting information to support my MBA -IT dissertation report, I would like to arrange for an interview with you to gather some information if you don't have any objection.


Thanks

Khawla Al-Mamari
MBS-IT Student

Appendix B.3: Interview No objections confirmation mails.

AA	Ahmed Al-Qassabi <Ahmed.Al-Qassabi@ooredoo.om>	KHAWLA SULAIMAN ALI AL MAAMARI
----	--	--------------------------------

RE: No Objection for Interview


 Click here to download pictures. To help protect your privacy, Outlook prevented automatic download of some pictures in this message.

Hi Khawla,



It is fine with me. Let's do it Sunday morning.

Thank you
Regards,

Ahmed Al-Qassabi
Department Head - Service Improvement



P.O Box: 874
P.C: 111
Central Post Office
Sultanate of Oman


 Ahmed.Al-Qassabi@ooredoo.om
 +96895103314



Mazin Al-Riyami <Mazin.Al-Riyami@ooredoo.om>

KHAWLA SULAIMAN ALI AL MAAMARI

RE: No Objection for Interview

 Click here to download pictures. To help protect your privacy, Outlook prevented automatic download of some pictures in this message.

Dear Khawla,

I have no objection. Please set the interview.

Mazin Al-Riyami

Team Leader - FTTH




P.O Box: 874

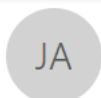
P.C: 111

Central Post Office

Sultanate of Oman

 Mazin.Al-Riyami@ooredoo.om


 +96895103431



Jassim Al Zadjali <jasim.alzadjali@awasr.com>

KHAWLA SULAIMAN ALI AL M

RE: No Objection for Interview

 This message was sent with High importance.

Dear Khawla,

No objection for the interview.

Regards,

Jassim Al Zadjali / Supervisor Customer Service

Jasim.ALZadjali@awasr.com

www.awasr.om



Appendix B.4: Interviews Schedule

Interview No	Name	Position	Years of experience	Qualifications	Organization	Date & Time
1	Mr. Motaz Al-Lawatti	Department Head - Contact center	4 years	Master	Ooredoo	16 th of MAY 2019.
2	Mrs. Samar Al-Shikah	Department Head - Contact center	16 years	Master	Ooredoo	19 th of May 2019
3	Mr. Ahmed Al-Qasabi	Department Head- Contact center	17 years	PHD	Ooredoo Oman	16th of June 2019
4	Mrs. Sabra Al -Alawi	Department Head- Contact center	15 years	Bachelor	Ooredoo	17th of June 2019
5	Mr. Jasim Al-Zedjali	Team leader- Contact Center	5 years	Bachelor	AWASER Oman	25th of June 2019
6	Mr. Mazin Al-Riyami	Team leader- Contact Center	16 years	Deploma	Ooredoo Oman	7th of July 2019

Table 2: Interview Schedule

Appendix C: Student work in research project

Appendix C.1: Ethical Approval Form for the research.

Appendix C.2: No objection letter from Ooredoo

Appendix C.3 Dissertation Diaries by student.

Appendix C.4: Gantt Chart

Appendix C5 : Importance of the research feedback



Document Name & Type	Research Ethics and Bio-Safety Approval Form	Author/Department	Centre for Research & Consultancy
Approval Date	26/02/2018	Effective Date	27/02/2018
Review Date	24/02/2019	Next Review Date	23/02/2020

RESEARCH ETHICS AND BIO SAFETY APPROVAL FORM

You should use this checklist only if you are carrying out a research project through Middle East College. This normally applies to:

- ☒ Undergraduate students
- ☒ Postgraduate students
- ☐ All faculty members

Summary of the project (Maximum 120 words):

Research Objectives

- Research Design (e.g. Experimental, Desk-based, Theoretical etc.)

Methods of data collection

Research Ethics and Biosafety Approval Checklist

Applicant Details

Name Khawla Al-Mamari	E-mail
Department	Date
Course Name MBA	Title of Project A Study on the implementation of LKM for Contact Center to improve the leaders Performance at cosreeloo

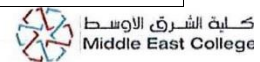
Project Details

Summary of the project (Maximum 120 words):

Research Objectives

- Research Design (e.g. Experimental, Desk-based, Theoretical etc.)

Methods of data collection





Document Name & Type	Research Ethics and Bio-Safety Approval Form	Author/Department	Centre for Research & Consultancy
Approval Date	26/02/2018	Effective Date	27/02/2018
Review Date	24/02/2019	Next Review Date	23/02/2020

Participants in your research

1. Will the project involve human participants?	Yes	No
2. Will this project involve animals or plants?		No

Risk to Participants

3. Will the project involve human patients/clients, health professionals, and/or patient (client) data and/or health professional data?	Yes	No
4. Is there a risk of physical discomfort to those taking part?	Yes	
5. Is there a risk of psychological or emotional distress to those taking part?	Yes	No
6. Is there a risk of challenging the deeply held beliefs of those taking part?	Yes	No
7. Is there a risk that previous, current or proposed criminal or illegal acts will be revealed by those taking part?	Yes	
8. Will the project involve giving any form of professional, medical or legal advice, either directly or indirectly to those taking part?	Yes	No
9. Is there any possibility that this project put humans, animals and plants at risk of their health and survival?	Yes	No
10. Is there any risk of toxic/infectious agents in conjunction with animals or plants that could harm participants and/or environment?	Yes	No

كلية الشرق الأوسط
 Middle East College

Document Name & Type	Research Ethics and Bio-Safety Approval Form	Author/Department	Centre for Research & Consultancy
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Approval Date	26/02/2018	Effective Date	27/02/2018
Review Date	24/02/2019	Next Review Date	23/02/2020

Risk to Researcher

1. Will this project put you or others at risk of physical harm, injury or death?	Yes	No
12. Will this project put you or others at risk of abduction, physical, mental or sexual abuse?	Yes	No
13. Will this project involve participating in acts that may cause psychological or emotional distress to you or to others?	Yes	No
14. Will this project involve observing acts which may cause psychological or emotional distress to you or to others?	Yes	No
15. Will this project involve reading about, listening to or viewing materials that may cause psychological or emotional distress to you or to others?	Yes	No
16. Will this project involve you disclosing personal data to the participants other than your name and the University as your contact and e-mail address?	Yes	No
17. Will this project involve you in unsupervised private discussion with people who are not already known to you?	Yes	No
18. Will this project potentially place you in the situation where you may receive unwelcome media attention?	Yes	No



19. Could the topic or results of this project be seen as illegal or attract the attention of the security services or other agencies?	Yes	No
20. Could the topic or results of this project be viewed as controversial by anyone?	Yes	No

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Middle East

Document Name & Type	Research Ethics and Bio-Safety Approval Form	Author/Department	Centre for Research & Consultancy	
Approval Date	26/02/2018	Effective Date	27/02/2018	
Review Date	24/02/2019	Next Review Date	23/02/2020	
21 . Does your project involve the use of biohazardous material or produce biohazardous waste that may put you or others at risk of diseases?			Yes	No

Informed Consent of the Participant

22. Are any of the participants unable mentally or physically to give consent?	Yes	No
--	-----	----

23. Do you intend to observe the activities of individuals or groups without their knowledge and/or informed consent from each participant (or from his or her parent or guardian)?	Yes	No
---	-----	----

Participant Confidentiality and Data Protection

24. Will the project involve collecting data and information from human participants who will be identifiable in the final report?	Yes	No
25. Will information not already in the public domain about specific individuals or institutions be identifiable through data published or otherwise made available?		No
26. Do you intend to record, photograph or film individuals or groups without their knowledge or informed consent?	Yes	No
27. Do you intend to use the confidential information, knowledge or trade secrets gathered for any purpose other than this research project?	Yes	No

Document Name & Type	Research Ethics and Bio-Safety Approval Form	Author/Department	Centre for Research & Consultancy
Approval Date	26/02/2018	Effective Date	27/02/2018
Review Date	24/02/2019	Next Review Date	23/02/2020

Gatekeeper Risk

28. Will this project involve collecting data outside the buildings of MEC?	Yes	No
29. Do you intend to collect data in shopping centres or other public places?		No

30. Do you intend to gather data within nurseries, schools, colleges, any organization or ministries?	Yes	No
---	-----	----

Other Ethical Issues

31 . Is there any other risk like ethical, moral, legal or issue not covered above that may pose a risk to you or any of the participants?		No
--	--	----

**** If you have answered Yes to any of these questions (18, 20, 25, 28, 29,30) it is mandatory to get an No Objection Certificate from the concerned organization or participants either to do the research in their premises or to use and publish the data pertaining to their organization or the participant.**

In the absence of the No Objection Certificate the project will be treated as a high risk project and will have to be approved by the institutional Research Ethics and Biosafety Committee.

**** If you have answered Yes to any other questions mentioned above(12,3,4,5,6,7,8,9,10, 11 , 12, 13, 14, 15, 16, 17, 19,21 22,23,24,26,27,31) it is mandatory to**

refer that project to the institutional Research Ethics and Biosafety Committee.



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Middle East

Document Name & Type	Research Ethics and Bio-Safety Approval Form	Author/Department	Centre for Research & Consultancy
Approval Date	26/02/2018	Effective Date	27/02/2018
Review Date	24/02/2019	Next Review Date	23/02/2020

Principal Investigator Certification

I believe that this project does not require research ethics and biosafety approval. I have completed the checklist and kept a copy for my own records. I realise I may be asked to provide a copy of this checklist at any time.	
I confirm that I have answered all relevant questions in this checklist honestly.	
I believe that this project does not require research ethics and biosafety approval. I have completed the checklist and kept a copy for my own records. I realise I may be asked to provide a copy of this checklist at any time.	
I confirm that I have answered all relevant questions in this checklist honestly.	

If you answered No to all of the above questions, then you have described a low risk project. Please complete the following declaration to certify your project.

Agreed restrictions to project to allow Principal Investigator Certification

Please identify any restrictions to the project, agreed with your Supervisor or any concerned stakeholder related to the project to allow you to sign the Principal Investigator Certification declaration.

<p>no risks can will cause by the project</p>
--

Principal Investigator's Declaration

Please ensure that you:

- ☒ Tick all the boxes below and sign this checklist.

- Principal investigator must get their Supervisor and Department Research co-ordinator to countersign this declaration.



Document Name & Type	Research Ethics and Bio-Safety Approval Form	Author/Department	Centre for Research & Consultancy
Approval Date	26/02/2018	Effective Date	27/02/2018
Review Date	24/02/2019	Next Review Date	23/02/2020

I confirm that I will carry out the project in the ways described in this checklist. I will immediately suspend research and request a new ethical and biosafety approval if the project subsequently changes the information I have given in this checklist.

Principal

for

Investigator

Signed Khawla
Investigator)

Mamari

AlMamari (Principal

Date 28 April 2019

Supervisor and Research Co-ordinator

I have read this checklist and confirm that it covers all the ethical and biosafety issues raised by this project. I also confirm that these issues have been discussed with the principal investigator and will continue to review in the course of supervision.

Countersigned Dr. Herald Noronha _____ (Supervisor)

Date 28 April 2019.....

Countersigned —r _____ (Department Research Co-ordinator)

Date 28 April 2019.....

Appendix C.3: No objection latter from Ooredoo



24th April 2019

To whom it may concern

With the reference to the application by Khawla Al-Mamari (PG17F1861) student of MBA (Phasel) of your college for the permission of preparing her dissertation in our company so we are permit her for preparing her dissertation on April 2019 in our company.

This letter is issued to the above student at her own request, without any responsibility or liability on our part.

A handwritten signature in blue ink, appearing to read "Samar Al-Sheikh".

Thanks & Regards

Samar Al-Sheikh
Department Head - People Development



Appendix C.4 Dissertation Diaries by student

Document Name & Type		MBA (IT) Dissertation Diary		Author/Department	Head, Centre for Postgraduate Studies
Approval Date		20/03/2017		Effective Date	20/03/2017
Review Date		17/01/2019		Next Review Date	16/01/2020

Diary – Spring / Summer / Fall

Name of Student:	Khaula Suleiman Al-Mamari		Week: 1
Name of Supervisor:	Dr. Herald Noronha		
Dissertation Topic:	A Study of Implementation of Knowledge Management For Contact Center to Improve the Team leader's performance & Ooredoo Oman.		

Date/ Day:	Time:	Venue:
------------	-------	--------

Tasks as per project plan	Actual tasks taken up / completed
Topic of the Project	

Comments / observations / remarks by the Student

Remarks / Comments by the Supervisor
The title of the project discussed need more focus on the selected topic

Signature of Student:	Signature of Supervisor:
Date:	Date:

Document Name & Type	ASDA (1) Dissertation Diary	Author/Department	Head, Centre for Postgraduate Studies
Approval Date	20/03/2017	Effective Date	20/03/2017
Review Date	17/01/2019	Next Review Date	16/01/2020

Diary – Spring / Summer / Fall

Name of Student:	Khawla Suleiman Al-Mamari	Week:	2
Name of Supervisor:	Dr. Herald Voronka		
Dissertation Topic:	A study of implementation of Knowledge management for Contact Center to improve the Team Leader's Performance & Corelco Oman		

Date/ Day:	Time:	Venue:
------------	-------	--------

Tasks as per project plan	Actual tasks taken up / completed
Background of the Study.	

Comments / observations / remarks by the Student

Remarks / Comments by the Supervisor

Background of the project discussed.
Title of the project is clear.
Need to work on the project objectives.

Signature of Student:

Date:

[Handwritten signature of student]

Signature of Supervisor:

Date:

[Handwritten signature of supervisor]

Document Name & Type	Dissertation Diary	Author/Department	Head, Centre for Postgraduate Studies
Approval Date	20/05/2017	Effective Date	20/05/2017
Review Date	17/05/2019	Next Review Date	16/05/2020

Diary - Spring / Summer / Fall

Name of Student:	Khawla Sulaman Al-Mamars	Week:	3
Name of Supervisor:	Dr. Herald Moronha		
Dissertation Topic: A Study of Implementation of Knowledge management for Contact Center to Improve the Team Leader's performance at Ooredoo Oman.			

Date/ Day:	Time:	Venue:
------------	-------	--------

Tasks as per project plan	Actual tasks taken up / completed
Objectives.	

Comments / observations / remarks by the Student

Remarks / Comments by the Supervisor

Objectives are clear, need of project outcome and significance of the study.

Signature of Student:

Date:

Signature of Supervisor:

Date:



Document Name & Type	MBA (II) Dissertation Diary	Author/Department	Head, Centre for Postgraduate Studies
Approval Date	20/03/2017	Effective Date	20/03/2017
Review Date	17/01/2019	Next Review Date	16/01/2020

Diary – Spring / Summer / Fall

Name of Student:	Khawla Suleiman Al Mamari	Week: 4
Name of Supervisor:	Dr. Harold Noronha	
Dissertation Topic:	A study of implementation of knowledge management for Contact Center to improve The Team Leader's performance at Ooredoo Oman	

Date/ Day:	Time:	Venue:
------------	-------	--------

Tasks as per project plan	Actual tasks taken up / completed
proposal work.	

Comments / observations / remarks by the Student

Remarks / Comments by the Supervisor

Chapter 1 needs to be completed.
Work on the work proposal
Continue with the literature review

Signature of Student:

Date:

Signature of Supervisor:

Date:

Document Name: R 1507	Author/Department	Head, Center for Postgraduate Studies
Approval Date	Effective Date	20/01/2017
Review Date	Next Review Date	18/01/2020

Diary - Spring / Summer / Fall

Name of Student:	Khawla Sulaiman Al-Memari	Week: 5
Name of Supervisor:	Dr. Herald Noronha	
Dissertation Topic:	A study of implementation of knowledge management for Contact Center to improve the Team leader's performance at Corcedao Oman.	

Date/ Day:	Time:	Venue:
------------	-------	--------

Tasks as per project plan	Actual tasks taken up / completed
Literature review	

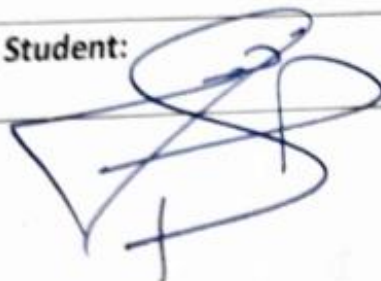
Comments / observations / remarks by the Student

Remarks / Comments by the Supervisor

Literature review should be aligned with the project objectives

Signature of Student:

Date:



Signature of Supervisor:

Date:



Document Name & Type	MBA [1] Dissertation Diary	Author/Department	Head, Centre for Postgraduate Studies
Approval Date	20/03/2017	Effective Date	20/03/2017
Review Date	17/01/2019	Next Review Date	16/01/2020

Diary - Spring / Summer / Fall

Name of Student:	Irhawla Sulaiman Al-Mamari	Week:	6
Name of Supervisor:	Dr. Herald Moronha		
Dissertation Topic:	A study of implementation of knowledge management for contact center to improve the team leader's performance of Coredoo Oman.		

Date/Day:	Time:	Venue:
-----------	-------	--------

Tasks as per project plan	Actual tasks taken up / completed
Literature review	

Comments / observations / remarks by the Student

Remarks / Comments by the Supervisor

Continue with the literature review
Secondary data needs to be collected
Copy literature review

Signature of Student:	Signature of Supervisor:
Date:	Date:



Document Name & Type	MBA (1) Dissertation Diary	Author/Department	Head, Centre for Postgraduate Studies
Approval Date	20/03/2017	Effective Date	20/03/2017
Review Date	17/01/2019	Next Review Date	16/01/2020

Diary – Spring / Summer / Fall

Name of Student:	Khawar Sulaiman Al-Mamari	Week: 7
Name of Supervisor:	Dr. Herald Noronha	
Dissertation Topic:	A Study of Implementation of Knowledge management for Contact Center to improve the team leader's performance of Ooredoo	

Date/ Day:	Time:	Venue:
------------	-------	--------

Tasks as per project plan	Actual tasks taken up / completed
Literature review.	

Comments / observations / remarks by the Student

Remarks / Comments by the Supervisor

Literature review looks fine
Continue with the research methodology
Need to work on research design.

Signature of Student:

Date:

Signature of Supervisor:

Date:

Document Name & Type	MSA (1) Dissertation Diary	Author/Department	Head, Centre for Postgraduate Studies
Approval Date	20/01/2017	Effective Date	20/01/2017
Review Date	17/01/2019	Next Review Date	16/01/2020

Diary - Spring / Summer / Fall

Name of Student:	Khalid Suleiman Al-Mannar	Week:	8
Name of Supervisor:	Dr. Herald Noronha		
Dissertation Topic:	A study of implementation of knowledge management for Contact center to improve the team leader's performance of Coredoo Oman.		

Date/ Day:	Time:	Venue:
------------	-------	--------

Tasks as per project plan	Actual tasks taken up / completed
population and Sampling Size	

Comments / observations / remarks by the Student

Remarks / Comments by the Supervisor

Identify the population, sample size and sampling techniques.
Need to find research instrument.

Signature of Student:

Date:

Signature of Supervisor:

Date:

Document Name & Type	MSA (11) Dissertation Diary	Author/Department	Head, Centre for Postgraduate Studies
Approval Date	20/03/2017	Effective Date	20/03/2017
Review Date	17/01/2019	Next Review Date	16/01/2020

Diary – Spring / Summer / Fall

Name of Student:	Khawla Suleiman Al-Mamari	Week:	10
Name of Supervisor:	Dr. Herald Noronha		
Dissertation Topic:	A study of implementation of knowledge management for contact center to improve the team leader's performance of Ooredoo Oman.		

Date/ Day:	Time:	Venue:
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Tasks as per project plan	Actual tasks taken up / completed
Questionnaire	

Comments / observations / remarks by the Student

Remarks / Comments by the Supervisor

Data Questionnaire should include demographic information and some question on likert scale

Signature of Student:
Date:

Signature of Supervisor:
Date:

Document Name & Type	MBA (IT) Dissertation Diary	Author/Department	Head, Centre for Postgraduate Studies
Approval Date	20/03/2017	Effective Date	20/03/2017
Review Date	17/01/2019	Next Review Date	16/01/2020



Diary – Spring / Summer / Fall

Name of Student:	Khaider Suleiman Al-Mamari	Week:	11
Name of Supervisor:	Dr. Herald Noronha		
Dissertation Topic:	A study of implementation of knowledge management for contact center to improve the team leader's performance of Ooredoo Oman.		

Date/ Day:	Time:	Venue:
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Tasks as per project plan	Actual tasks taken up / completed
Data Collection	

Comments / observations / remarks by the Student
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Remarks / Comments by the Supervisor
Data collection should be done on the sampling technique selected.

Signature of Student:	Signature of Supervisor:
Date:	Date:



Document Name & Type	MBA (IT) Dissertation Diary	Author/Department	Head, Centre for Postgraduate Studies
Approval Date	20/03/2017	Effective Date	20/03/2017
Review Date	17/01/2019	Next Review Date	16/01/2020

Diary – Spring / Summer / Fall

Name of Student:	Khawla Suleiman Al-Mamari	Week:	12
Name of Supervisor:	Dr. Herald Moronha		
Dissertation Topic:	A study of implementation of knowledge management for Contact center to improve the team leader's performance of Ooredoo Oman.		

Date/ Day:	Time:	Venue:
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Tasks as per project plan	Actual tasks taken up / completed
Data analysis	

Comments / observations / remarks by the Student

Remarks / Comments by the Supervisor

Data analysis needs to be completed based on the objectives.
Use appropriate analytical tools for analysis.

Signature of Student:	Signature of Supervisor:
Date:	Date:



Document Name & Type	MISA (IT) Dissertation Diary	Author/Department	Head, Centre for Postgraduate Studies
Approval Date	20/03/2017	Effective Date	20/03/2017
Review Date	17/01/2019	Next Review Date	16/01/2020

Diary – Spring / Summer / Fall

Name of Student:	Khawla Suleiman Al-Mamari	Week:	13
Name of Supervisor:	Dr. Herald Noronha		
Dissertation Topic:	A study of implementation of knowledge management for contact center to improve the team leaders performance at Coredoo Oman.		

Date/ Day:	Time:	Venue:
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Tasks as per project plan	Actual tasks taken up / completed
Data analysis	

Comments / observations / remarks by the Student

Remarks / Comments by the Supervisor
Data analysis is fine. Align the Secondary data analysis.

Signature of Student:	Signature of Supervisor:
Date:	Date:

Document Name & Type	MBA (IT) Dissertation Diary	Author/Department	Head, Centre for Postgraduate Studies
Approval Date	20/03/2017	Effective Date	20/03/2017
Review Date	17/01/2019	Next Review Date	16/01/2020

Diary – Spring / Summer / Fall

Name of Student:	Khawla Suleiman ALMamari	Week:	14
Name of Supervisor:	Dr. Herald Noronha		
Dissertation Topic:	A study on implementation of knowledge management for contact center to improve the team leader's performance at Ooredoo Oman.		

Date/ Day:	Time:	Venue:
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Tasks as per project plan	Actual tasks taken up / completed
Data analysis	

Comments / observations / remarks by the Student

Remarks / Comments by the Supervisor

Based on the data analysis, write the recommendations and conclusion

Signature of Student:	Signature of Supervisor:
Date:	Date:

Document Name & Type	MBA (IT) Dissertation Diary	Author/Department	Head, Centre for Postgraduate Studies
Approval Date	20/03/2017	Effective Date	20/03/2017
Review Date	17/01/2019	Next Review Date	16/01/2020

Diary – Spring / Summer / Fall

Name of Student:	Khawla Suleiman Al-Mamari	Week:	15
Name of Supervisor:	Dr. Herald Noronha		
Dissertation Topic:	A study on the implementation of knowledge management for Contact Center to improve the team leader's performance at corelco Oman.		

Date/ Day:	Time:	Venue:
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Tasks as per project plan	Actual tasks taken up / completed
Recommendations 5 Conclusion	

Comments / observations / remarks by the Student

Remarks / Comments by the Supervisor

Write the reflection on your research.
 Recommendations and conclusions
 look fine. Work on the final structure
 of the report. Include all chapters.

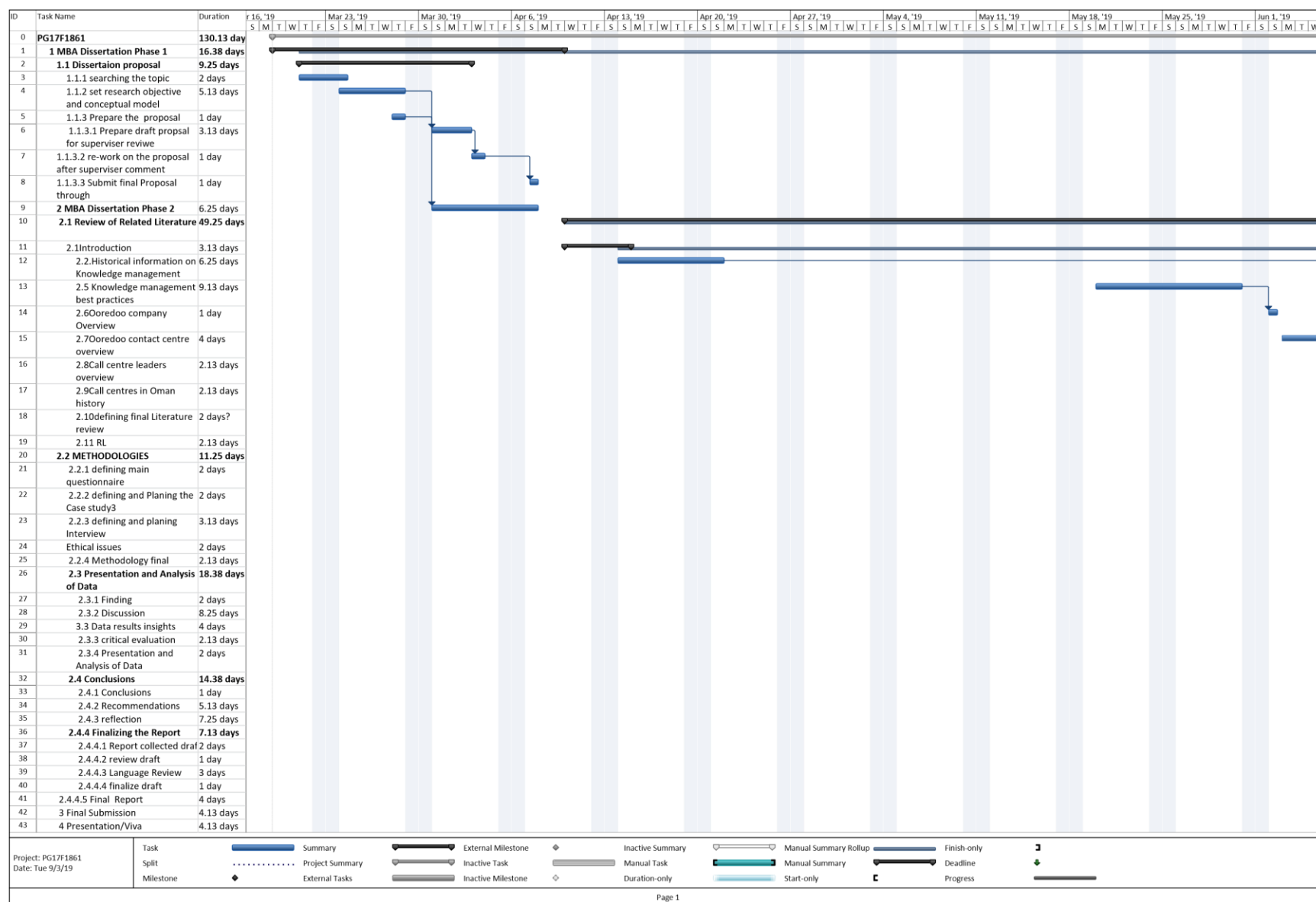
Signature of Student:

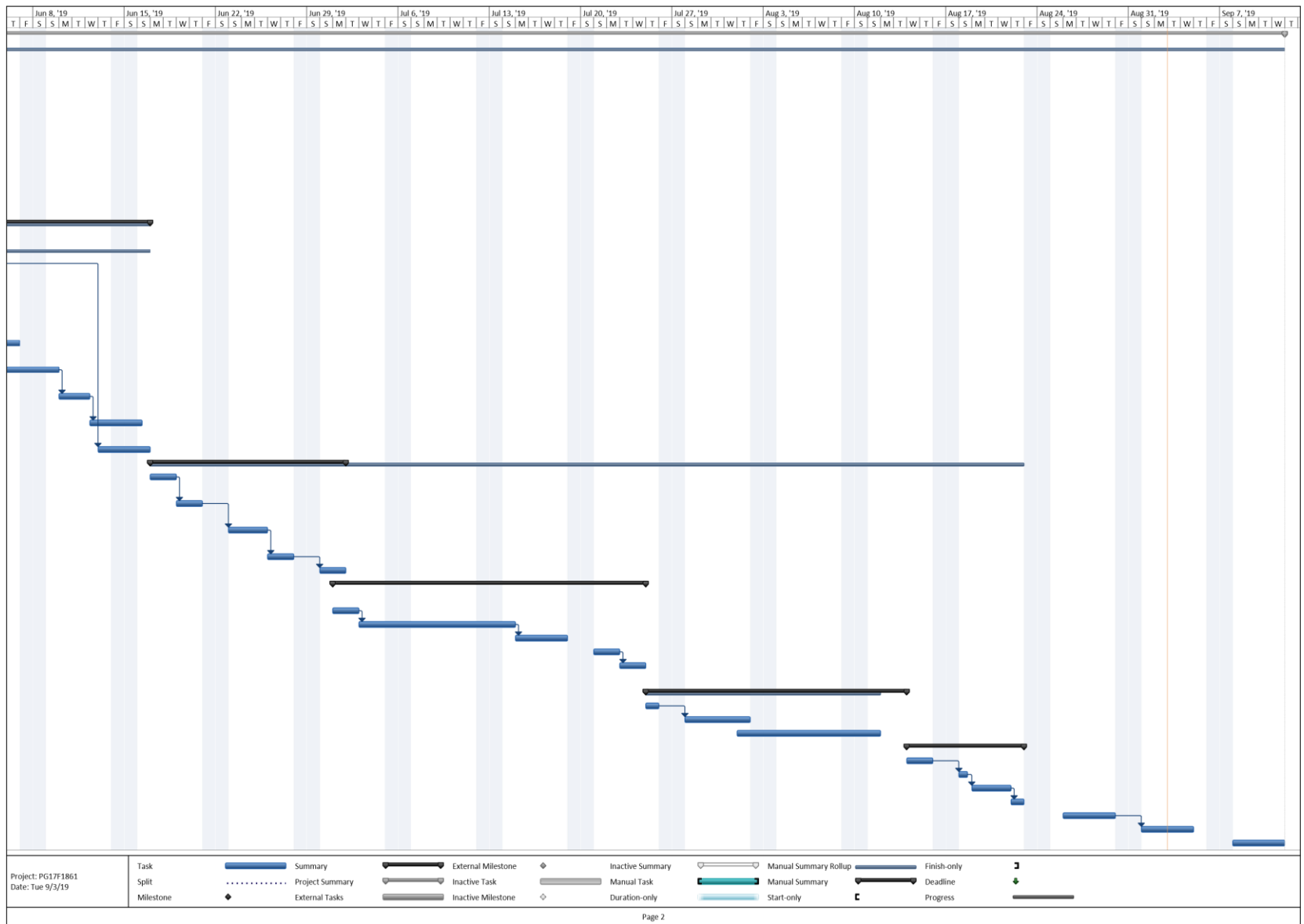
Date:

Signature of Supervisor:

Date:

Appendix C.4: Gantt Chart





Appendix C5: Importance of the research feedback from external Organization

