TOWARDS THE DEVELOPMENT OF A SOCIAL MEDIA-SUPPORTED ORGANISATIONAL LEARNING FRAMEWORK

by

Harry Moongela

17208302

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Study leader:

Prof M.J. Hattingh

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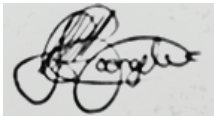
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ABSTRACT

Social media (platforms categorised as Web 2.0 platforms) have been reported and presumed to have a significant impact on organisations and can be used to improve organisational learning (OL) in businesses. Although OL has been discussed throughout literature in the Western world, only a few OL studies have focused on organisations in Africa, particularly in the South African context. Furthermore, there are a limited number of studies that have discussed the role and impact of social media on OL. Consequently, there seems to be a gap and a lack of guidelines for organisations that would like to implement the use of social media to facilitate OL.

This thesis, therefore, presented an overarching conceptual theoretical framework that can assist organisations to integrate social media and OL. The framework helped explore at what level and what type of OL occurred from the use of social media by employees in an organisation; this separates the study from previous work. This also helped fill the gap that exists in terms of the integration of OL and social media. The thesis used the OL theory alongside a qualitative interpretive research paradigm approach, in order to understand how the use of social media could facilitate OL.

The data were collected using semi-structured in-depth interviews from three different companies with seven industry experts. The data were triangulated by comparing the results from the three companies, and the research findings were used to develop a conceptual theoretical framework (based on literature and data collected) with key concepts that explain how the use of social media could facilitate OL. The conceptual theoretical framework was tested and reviewed by experts. This resulted in making a significant theoretical, methodological and practical contribution to existing theory, methods and practical use, by offering guidelines on how organisations could use social media to facilitate effective OL.

The study offered recommendations for future research, such as broadening the case studies by collecting data from organisations in other provinces, conducting a longitudinal study with a different population, ethnic groups from a different country and a larger sample to enhance the validity of findings. Further suggestions included interviewing a sample of female participants, as they may have different experiences and perceptions, as well as testing out the theoretical framework in other provinces and countries.

Keywords: *Web 2.0 Platforms, Social Media, Organisational Learning*

DECLARATION

I declare that this dissertation is my own work and that I have referenced all the sources that I have used and that no part was previously submitted at any tertiary institution.

Harry Moongela

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4I	Intuiting, Interpreting, Integrating and Institutionalising
AI	Artificial Intelligence
BYOD	Bring Your Own Device
BYOT	Bring Your Own Technology
CEO	Chief Executive Officer
CoP	communities of practice
ERP	Enterprise Resource Planning
ESNS	ESNS Enterprise Social Networking Systems
GM	General Manager
IM	Instant Messaging
IT	Information Technology
IS	Information Systems
KMS	Knowledge Management System
MD	Managing Director
MRO	Maintenance, Repair and Operation
OL	Organisational Learning
OLC	Organisational Life Cycle
PPE	Personal Protective Equipment

SECI	Socialisation, Externalisation, Combination and Internalisation
SME	Small- and Medium-Sized Enterprise

TERMS AND DEFINITIONS

Organisational Learning	OL can be described as a way to improve and shape the organisational knowledge base (Shrivastava, 1983; Lyman et al., 2019; Menolli et al., 2020). OL can also be defined as how activities are developed in an organisation through improved knowledge and understanding (Fiol & Lyles, 1985; Ying et al., 2022).
Social media	Social media can be explained as media that allows networking and social interaction (Davis III et al., 2012; Men, O'Neil & Ewing, 2020). Social media can also be described as a group of Web 2.0 internet-based applications which enable users to create and exchange content (Kaplan & Haenlein, 2010; Peeters, 2018; Men et al., 2020).
Web 2.0 Platforms	Web 2.0 are the second-generation web platforms that permit users to interrelate and network with one another. Web 2.0 tools provide a platform that allows users to freely communicate and collaborate, which could then foster learning (Kane et al., 2010; Zhao and Kemp, 2013).

CHAPTER 1.GENERAL OVERVIEW OF THE STUDY

1.1 INTRODUCTION

Organisational learning (hereinafter OL) is thought to be why certain organisations have a competitive advantage over others (Tsang, 1997; Chatti *et al.*, 2007; Petiz, Ramosand & Roseiro, 2013; Singjai, Winata & Kummer, 2018; Martínez-Costa, Jiménez-Jiménez & Dine Rabeh, 2019; Odor, 2019). Therefore, OL is a necessity for the survival of organisations as it allows them to improve their services (Kim, 1998; Petiz *et al.*, 2013; Lyman, Hammond & Cox, 2019), and organisations are not expected to succeed without it (Nazem & Mozaiini, 2014; Singjai *et al.*, 2018; Martínez-Costa *et al.*, 2019; Odor, 2019).

OL has been gaining traction with several researchers (Kim, 1998; Tsang, 1997; Anica-Popa, 2011; Zhao & Kemp, 2013; Odor, 2019; Lyman *et al.,* 2019). This interest has prompted researchers to explore how organisations both do and should learn (Tsang, 1997; Martínez-Costa *et al.*, 2019; Odor, 2019). Due to technological advancement and the way in which learning in organisations has changed, OL is one of the topics that this study focuses on.

Organisations have invested in social media to encourage collaboration between employees (Schneckenberg, 2009; Petiz *et al.*, 2013; Breunig, 2016; Menolli *et al.*, 2020), as there is an assumption that social media can enhance the performance of employees and the sharing of knowledge (Schneckenberg, 2009; Caruso, 2018; Filstad, Simeonova & Visser, 2018). The adoption of social media in organisations has encouraged researchers to explore how social media influences OL processes (Chatti *et al.*, 2007; Schneckenberg, 2009; Treem & Leornardi, 2012; Menolli *et al.*, 2020). These authors found that social media influences certain organisational practices, such as learning (Treem & Leornardi, 2012; Caruso, 2018; Menolli *et al.*, 2020). It is assumed that the use of information technology (IT) in organisations can be used to improve the collaboration of organisational knowledge creation and sharing (Alavi & Leidner, 2001; Chatti *et al.*, 2007; Lopez & Esteves, 2013; Breunig, 2016; Chuks, 2022). Therefore, the use of social media in organisations will also be researched in this study.

1.2 BACKGROUND INFORMATION

The term 'OL' refers to certain types of learning activities that occur in an organisation (Tsang, 1997; Lyman *et al.,* 2019; Chuks, 2022). Most of these OL activities are proposed to obtain knowledge or information and skills (Huber, 1991; Olafsen & Cetindamar, 2005; Lyman *et al.*, 2019; Menolli *et al.*, 2020). Kim (1998) and Lyman *et al.* (2019) reveal that OL refers to improving the learning capacity of an organisation, in order to take effective cognitive and knowledgeable actions.

Explicitly, OL can be described as a way to improve and shape the organisational knowledge base (Shrivastava, 1983; Lyman *et al.,* 2019; Menolli *et al.*, 2020). OL can also be defined as how activities are developed in an organisation through improved knowledge and understanding (Fiol & Lyles, 1985; Ying *et al.*, 2022). It is worth noting that OL is often linked with enhancing performance in an organisation (Huber, 1991; Tsang, 1997; Nisar, Prabhakar & Strakova, 2019). However, OL only leads to improved performance if the correct knowledge is acquired (Tsang, 1997; Nisar *et al.*, 2019). Nazem and Mozaiini (2014) and Abd Awang *et al.* (2019) add that activities practised in an organisation as a result of OL often lead to and foster a positive working environment.

Over the past few years, organisations have changed and they have created a competitive and challenging environment due to changes in employees' attitudes, globalisation and the development of new technologies (Olafsen & Cetindamar, 2005; Ege, Esen & Aşık Dizdar, 2017; Abd Awang *et al.*, 2019; Ying *et al.*, 2022). As a result, organisations have developed their organisational procedures, structures and management styles to stay competitive and survive in their given industries (Olafsen & Cetindamar, 2005; Ege *et al.*, 2017; Ying *et al.*, 2022). In staying competitive, organisations must change how employees learn, enhance the quality of learning in organisations, introduce cost-effective measures and allow organisations to compete at a global level (Chatti *et al.*, 2007; Liu & Liu, 2018; Ying *et al.*, 2022). Consequently, only certain organisations are able to generate efficient and effective solutions that help improve their learning and performance, which allows them to have a reputation for being innovative (Ege *et al.*, 2017; Abd Awang *et al.*, 2019).

The current business environment is becoming increasingly competitive, with regular changes posing serious challenges for organisations (Tsang, 1997; Baxter, Connolly &

Stansfield, 2009; 2011; Zhao & Kemp, 2013; Liu & Liu, 2018; Ying *et al.*, 2022). The most rapid of these changes have been brought about by the introduction of social media in business (Balaji & Murthy, 2019; Siti-Nabiha, Nordin & Poh, 2021; Bodhi *et al.*, 2022). Similarly to OL, the introduction of social media in organisations has the potential to enhance performance and gives the organisations a competitive edge (Schneckenberg, 2009; Zhao & Kemp, 2013; Balaji & Murthy, 2019; Bodhi *et al.*, 2022). Organisations can use social media to collaborate and communicate among employees, share ideas and knowledge, share documents and files within the organisation, arrange meetings when working on projects, manage and analyse data, and develop patterns and insights (social media analytics) in order to make fast, effective and relevant business decisions (Siti-Nabiha *et al.*, 2021; Bodhi *et al.*, 2022). This competitive edge has resulted in a re-evaluation of the ways that organisations share information and communicate internally (Baxter *et al.,* 2011; Baxter & Connolly, 2014; Balaji & Murthy, 2019).

The concept of social media has grown rapidly over the years, which has resulted in several definitions from scholars. Overall, social media can be explained as media that allows networking and social interaction (Davis III *et al.*, 2012; Men, O'Neil & Ewing, 2020). More specifically, social media can be described as a group of Web 2.0 internet-based applications which enable users to create and exchange content (Kaplan & Haenlein, 2010; Peeters, 2018; Men *et al.*, 2020). Social media can also be defined as interactive communication channels that allow users to connect and share information of common interests (Chatti *et al.*, 2007; Ezeah, Asogwa & Obiorah, 2013; Peeters, 2018; Balaji & Murthy, 2019; Men *et al.*, 2020).

Research on the use of social media in organisations has not received a lot of attention and is considered to be in its early stages, however, it is gradually increasing in popularity (Treem & Leornardi, 2012; Baxter & Connolly, 2014; Men *et al.*, 2020). The use of social media allows employees in an organisation to collect, store and share knowledge, which then promotes OL (Alavi & Leidner, 2001; Treem & Leornardi, 2012; Schlagwein & Bjørn-Andersen, 2014; Peeters, 2018; Balaji & Murthy, 2019). This knowledge is shared through internal communication, employee collaboration and employee innovation on social media (Chatti *et al.*, 2007; Schneckenberg, 2009; Treem & Leornardi, 2012; Peeters, 2018; Men *et al.*, 2020; Menolli *et al.*, 2020).

In this case, social media can also be regarded as a knowledge management system (KMS) when used by organisations; this is a system which is used to manage the knowledge of an organisation (Alavi & Leidner, 2001; Schneckenberg, 2009; Balaji & Murthy, 2019). Employees who use blogs and wikis reported that social media allows them to easily communicate and discuss work-related matters and encourages informal collaboration and networking (Alavi & Leidner, 2001; Chatti *et al.*, 2007; Treem & Leornardi, 2012; Balaji & Murthy, 2019; Men *et al.*, 2020; Menolli *et al.*, 2020). Social media also allows employees to easily access important information in an organisation (Treem & Leornardi, 2012; Balaji & Murthy, 2019), which enhances and supports the management of knowledge in the organisation (Alavi & Leidner, 2001; Schneckenberg, 2009; Men *et al.*, 2020). Schneckenberg (2009) and Men *et al.* (2020) further reveal that employees must be empowered for social media to effectively support learning.

Social media had an advantage over other organisational knowledge management technologies because it does not need a great deal of upkeep by organisational staff and requires few resources (Olafsen & Cetindamar, 2005; Treem & Leornardi, 2012). Web 2.0 technologies are also easy to use and allow employees to create their own content, which encourages a bottom-up exchange of important knowledge (Olafsen & Cetindamar, 2005; Schneckenberg, 2009; Balaji & Murthy, 2019; Men *et al.*, 2020). Thus, social media plays an important role as it improves knowledge management activities and skills (Alavi & Leidner, 2001; Olafsen & Cetindamar, 2005; Balaji & Murthy, 2019) and allows employees to carry out new types of activities that were difficult before the use of social media in an organisation (Treem & Leornardi, 2012; Louati & Hadoussa, 2021; Ziółkowska, 2021).

1.3 PROBLEM STATEMENT

Although interest in OL has been growing, most OL research is based on Western organisations in countries such as Australia, the United Kingdom and America (Tsang, 1997; Greenwood, 1998; Murray & Chapman, 2003; Boateng, Malik & Mbarika, 2009; Dinh *et al.*, 2011; Dreher, 2014; Peeters, 2018; Men *et al.*, 2020). In addition, very few studies have focused on organisations in Africa, particularly in the South African context (Zuber-Skerritt, 2002; Morris, Bessant & Barnes, 2006; Martin, 2017; Tshishonga, 2021). Tsang (1997) and Odor (2019) further argue that it is crucial to conduct OL research with regard to other cultures.

Although OL has been discussed throughout the literature, very few scholars have discussed the role of social media in organisations concerning knowledge management and sharing (Alavi & Leidner, 2001; Treem & Leornardi, 2012; Khan & Khan, 2019; Menolli *et al.*, 2020). This is surprising, considering the fast-paced acceptance of social media within organisations (Schneckenberg, 2009; Treem & Leornardi, 2012; Men *et al.*, 2020; Menolli *et al.*, 2020).

Literature reveals that there are few accumulative works and research gaps regarding OL (Ricciardi, Cantino & Rossignoli, 2021). This means that researchers who have studied OL have failed to add to the results of other scholars, thus no new research has been created (Huber, 1991; Ricciardi *et al.*, 2021; Canbaloğlu, Treur & Roelofsma, 2022). Furthermore, there is a lack of integration between research groups regarding different facets of OL (Huber, 1991; Sekliuckiene, Vaitkiene & Vainauskiene, 2018; Ricciardi *et al.*, 2021). OL research should be exposed to findings from other research fields, as this has the potential to extend the boundaries of OL (Huber, 1991; Alerasoul *et al.*, 2021). A potential research field that could be integrated with OL would be social media as the use of social media in organisations allows individuals to share knowledge, which improves OL (Baxter & Connolly, 2013; Agerdal-Hjermind, 2014; Peeters, 2018; Balaji & Murthy, 2019; Men *et al.*, 2020). There is an increase in organisations using Web 2.0 technologies to facilitate OL, however, there seems to be a lack of guidelines concerning social media use (Treem & Leornardi, 2012). Consequently, a framework must be developed.

The study, therefore, aims to create an overarching framework that integrates both OL with social media frameworks. This social media-supported organisational framework would help to explore at what level and what type of OL occurs through the use of social media by employees in an organisation, which separates this study from previous work. The study seeks to fill the gap that exists in terms of the integration of OL and social media. The new framework (developed based on literature) was tested in various organisations, making a significant contribution to existing theories.

1.4 RESEARCH QUESTIONS

The main research question, namely *How do social media tools facilitate effective organisational learning?* is divided into four sub-questions:

a) What is the scope of learning in an organisation?

b) What social media tools are used by organisations for OL?

c) How do organisations use social media tools for OL?

d) How do organisations manage the social media-supported OL platform content?

1.4.1 Research objectives

This study aims to achieve four research objectives as stated below. These will answer the research questions, to find out how social media tools facilitate effective organisational learning:

- **Discover the scope of learning in an organisation** by investigating the types and levels of OL.

- **Discover which social media tools are used by organisations for OL** by identifying the names and types of social media tools.

- **Discover how organisations use social media tools for OL** by investigating how employees learn within the organisation through social media.

- **Discover how organisations manage social media-supported OL platform content,** allowing the researcher to provide recommendations and guidelines on how future organisations can manage their content on social media for OL.

All the objectives must be achieved in order to inform and answer the main research question, namely how social media tools can facilitate effective OL. Once all the objectives have been completed, the findings will be used to draw up a refined framework that incorporates social media and OL.

1.5 ASSUMPTIONS

The researcher presumes that to answer the research questions and achieve the research objectives, the proposed framework needs to be tested holistically in organisations that either do/do not use social media for OL. It is assumed that organisations currently do not use social media effectively to enhance OL. Therefore, the study is meant to rectify this and provide solutions to improve OL through the use of social media.

The researcher also assumes that the study is likely to give a valuable and rich perspective considering that data is collected from a unique, South African context. It is important to

focus on the South African context since South Africa is a unique case study compared to the rest of Africa and the Western world. Notable factors that make South Africa unique include the population demographics which paints the picture of the size of the industrial market in which organisations operate in, having eleven different official languages which allows multiple ways of communication and highlights the diversity of the ethnic groups, having a significant gap between the rich and the poor people which has an effect on the access of technology/social media and being a developing country has its own challenges compared to developed countries with more IT resources and access to technology/social media. The study therefore is expected to yield different results when compared to previous studies that have been conducted from a Western perspective.

1.6   LIMITATIONS

The study is limited in terms of time, the researcher must ensure that the study is carried out within the allocated time for a PhD study. As English is the medium of instruction in interviews, the exclusion of other South African official languages may present limited findings. In addition, the study uses multiple case studies, therefore cross-case analysis is possible but the scope of generalising and validating the results may be limited.

1.7   BRIEF CHAPTER OVERVIEW

The researcher provides the outline of the chapters as they appear in the study:

Chapter One, General overview of the study, covers a general introduction, providing the background to the study and outlining the problem statement and rationale. Research questions, aims and objectives are presented. The relevant assumptions and limitations to the study are also defined.

Chapter Two, Literature review, presents the literature review that is relevant to the topic of interest. Definitions for both OL and social media are given.

Chapter Three, Methodology, presents and discusses the research methodology. The researcher explains and motivates the research design, as well as the sampling, data collection and data analysis methods and ethics to be considered.

Chapter Four, **Systematic literature review,** presents the systematic literature review and explains the concepts of OL and social media. It further presents the frameworks for both OL and social media.

Chapter Five, **Theoretical underpinning and proposed framework,** presents the theoretical lens and explains the theoretical underpinning of the research (OL theory). The researcher presents and discusses the components of the proposed theoretical framework for both OL and social media.

Chapter Six, Data analysis and discussion, presents the data collected from the interviews and provides a detailed data analysis. Data emerging from the interviews are presented, revealing the important themes that emerged during data analysis. Each theme is further explained, alongside how they each relate to literature. The results are summarised and insights are provided.

Chapter Seven, Theoretical framework for social media-supported OL, presents the theoretical framework and explains how the initially proposed framework was created using concepts from literature. The construction of the framework is described, as well as how the new concepts from the data collected were incorporated into the framework. Each component and where they fit into the framework is illustrated. The final, expert-reviewed framework is presented with a description of its components and how they interchange and relate with one another.

Chapter Eight, Conclusion and recommendations, presents the conclusion and recommendations for the research study. How the research study answered each of the research questions is described. In addition, there is a discussion of how the study has contributed to the body of knowledge. Finally, the chapter provides recommendations for further research, followed by concluding remarks.

CHAPTER 2. BACKGROUND

2.1 INTRODUCTION

This research is focused on the use of social media in organisations to enhance OL. To contextualise the systematic literature review deliberated in Chapter Four, a contextual discussion of the two main concepts, namely OL and social media, must be provided. In this chapter, the researcher provides a brief literature review of the study's main concepts, with detailed definitions of these concepts in an organisational setting, by explaining how previous literature has defined OL and social media.

2.2 ORGANISATIONAL LEARNING DEFINITIONS

Literature provides several definitions of OL. For example, Baxter *et al.* (2009) reveal that OL involves employees networking and learning from each other to create and gain new knowledge and skills to enhance their working experience. The processing of information and learning from experience in an organisation allows individuals and organisations to change organisational behaviours, which then results in OL (Huber, 1991). OL places more emphasis on how organisations learn and the accomplishments and results that come from learning (Ege *et al.*, 2017). OL also focuses on the processes involved in learning within an organisation, such as the integration of what has already been learned by the organisation with new learning (Crossan, Lane & White, 1999; Ege *et al.*, 2017).

OL has a social aspect to it, which involves interaction among employees; it depends on teamwork to flourish (Baxter *et al.*, 2009; 2011). The learning conducted by employees allows organisations to evolve in terms of adjusting and transforming their internal structures (Baxter *et al.*, 2011). Learning systems must be implemented in an organisation to carry out effective actions and decisions, which then achieve OL (Ji & Salvendy, 2001). Anica-Popa (2011) reveals that the process of OL should be carried out within an organisation, to stay competitive and ever-changing. OL aims to keep track of the knowledge that is obtained through experiences (short-term plan) and make this stored knowledge accessible to relevant employees in the organisation (long-term plan) (Anica-Popa, 2011).

A study conducted by Wang and Ahmed (2003) identified the five focus areas that exist in the OL field. These include:

- **Individual learning:** Staff training and development that happens in an organisation;

- **Process or system:** Improving the ability to problem-solve and process information;

- **Culture and metaphor:** Creating a learning environment that involves employee participation, empowering employees and employee teamwork;

- **Knowledge management:** The communication and building of a knowledge base; and

- **Continuous improvement:** Helping the organisation build upon innovation and encouraging employees to constantly produce new ideas in the organisation.

Literature suggests that OL, which involves the formation and sharing of new knowledge, helps improve organisational innovation (Jiménez-Jiménez & Sanz-Valle, 2011). Organisational innovation refers to employees creating new information or obtaining information that already exists in an organisation and sharing it with one another (Jiménez-Jiménez & Sanz-Valle, 2011; Petiz *et al.*, 2013). Organisational innovations (such as social media) often have a positive impact on organisations, as they improve organisational services and performance (Jiménez-Jiménez & Sanz-Valle, 2011; Petiz *et al.*, 2013).

2.2.1 Relationship between knowledge management and Organisational Learning

Various organisations use tacit and explicit knowledge to enhance OL and employees' experiences (Smith, 2001). Tacit knowledge refers to the instinct, perceptions, beliefs and common sense possessed by employees that they use at a workplace (Smith, 2001; Razmerita, Kirchner & Nabeth, 2014; Qi & Chau, 2018). Tacit knowledge is usually learned through personal experiences, based on practicality and the 'know-how' knowledge of employees; it is not found in books, manuals or databases (Smith, 2001; Qi & Chau, 2018). Tacit knowledge is shared among employees through spontaneous conversations, face-to-face interactions, internships, and mentoring. This then consequently fosters an environment where employees can create and share ideas, which allows OL to take place (Smith, 2001; Razmerita *et al.*, 2014).

Explicit knowledge refers to the 'know what' knowledge that is learned through formal academic education or training, which is contained in documents, electronic media, and formal language (Smith, 2001; Razmerita *et al.*, 2014; Qi & Chau, 2018). Explicit knowledge is usually based on previously recognised learning processes, stored in databases and retrieved by high quality retrieval systems (Smith, 2001; Qi & Chau, 2018). Employees share explicit knowledge using mediums such as pictures, notes, diagrams and printed documents. Additionally, explicit knowledge can always be reused to solve organisational problems once stored (Smith, 2001; Razmerita *et al.*, 2014). Employees are likely to share explicit knowledge since it is easier to transmit, and record on documents and code, which consequently results in enhancing OL (Smith, 2001; Razmerita *et al.*, 2014). Therefore, the exchange of tacit and explicit knowledge through organisational knowledge management processes, directly and indirectly, enhances and relates to OL (Qi & Chau, 2018).

Knowledge management usually helps to aid and ensure that an organisation can continue learning (Qi & Chau, 2018). Knowledge management activities allow organisations to realise and encourage OL; this subsequently gives organisations a competitive edge over others (Qi & Chau, 2018). Knowledge management is known to be made up of four processes, namely i) knowledge creation and acquisition, ii) knowledge storage and retrieval, iii) knowledge transfer and sharing, and iv) knowledge application (Alavi & Leidner, 2001). Usually, knowledge management is seen as a top-down and formal organisational process that fosters an environment that helps employees contribute and access knowledge from the knowledge databases (Qi & Chau, 2018). Knowledge management involves the management of an organisation disseminating information to employees, based on what they think is important and what they think employees should know (Qi & Chau, 2018).

Knowledge management allows for the creation and sharing of knowledge, and that knowledge subsequently fosters innovation and creativity and improves OL (Alavi & Leidner, 2001; Qi & Chau, 2018). Knowledge management also acts as an intermediary or mediator between OL and the use of social media in organisations, as shown in Figure 2-1 below (Alavi & Leidner, 2001; Qi & Chau, 2018).

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Figure 2-1: Relationship between OL, knowledge management and social media
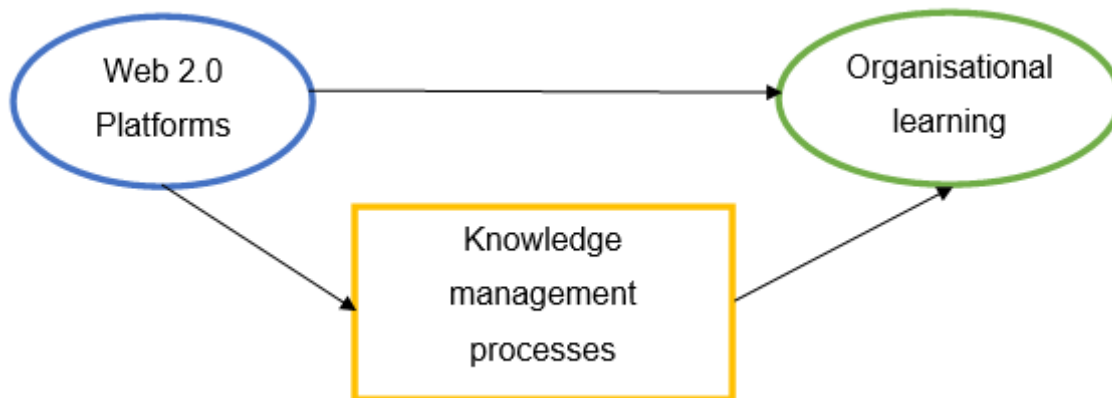
<u>Source</u>: Adapted from Qi and Chau (2018)

In the grand scheme of things, this is where knowledge management relates to OL (and the use of organisational social media) and also helps to directly promote and facilitate OL. However, since knowledge management is a field on its own, the current study will only focus on OL and the use of social media in an attempt to limit the scope. This will be discussed and covered in depth, in the chapters that follow.

2.2.2   Measuring Organisational Learning

As with any other organisational aspect, OL requires some type of measurement, and this includes both quantitative and qualitative measurement. Quantitative measurements usually focus on the analysis of numbers and the outputs/performance, which makes OL difficult to measure and compare (Garwin, 1993; Chiva, Alegre & Lapiedra, 2007). Garwin (1993) reveals how, traditionally, OL has been measured by looking at the organisations' performance or productivity. An increase in the performance or productivity of the company means that there is an increase in OL, while a decrease in performance or productivity means that OL decreases (Garwin, 1993). Garwin (1993) further states that learning measured according to performance is likely to produce skewed results since it relies on a single measure and ignores all other important aspects that contribute to OL (such as technology or competitors).

However, qualitative measurements focus on the capabilities, sources and procedures of OL (Garwin, 1993; Chiva *et al.,* 2007). Qualitative measurements are more viable as they give an in-depth and true reflection of the learning that takes place in organisations. It is

worth noting that OL consists of four major processes that can be used as a benchmark for measuring learning in organisations, namely data acquisition, data distribution, data interpretation and organisational memory (Qi & Chau, 2018). Garwin's (1993) study disclosed the three stages through which OL is measured, namely the:

- **Cognitive stage:** When employees start thinking differently as a result of expanding their horizons and being introduced to new knowledge and ideas;
- **Behavioural stage:** When the organisational members start to implement and adopt new perceptions and change their working behaviour; and
- **Performance improvement stage:** When a change in employees' behaviours, leads to an improvement in performance or production.

As shown in Figure 2-2 below, Chiva *et al.* (2007) have five dimensions (as opposed to stages) that can be used to measure the capability of learning in organisations, namely:

- **Experimentation:** The extent to which new propositions and ideas are considered and implemented;
- **Risk-taking**: How the organisation deals with mistakes, doubts and uncertainty;
- **Interaction with the external environment:** The relationship of the organisation with the external environment or stakeholders;
- **Dialogue:** The process of probing and engaging with everyday procedures, certainties and expectations of the organisation; and
- **Participative decision making:** The extent to which employees can have an impact on the process of decision making.

Figure 2-2: Dimensions for measuring the learning capability of an organisation
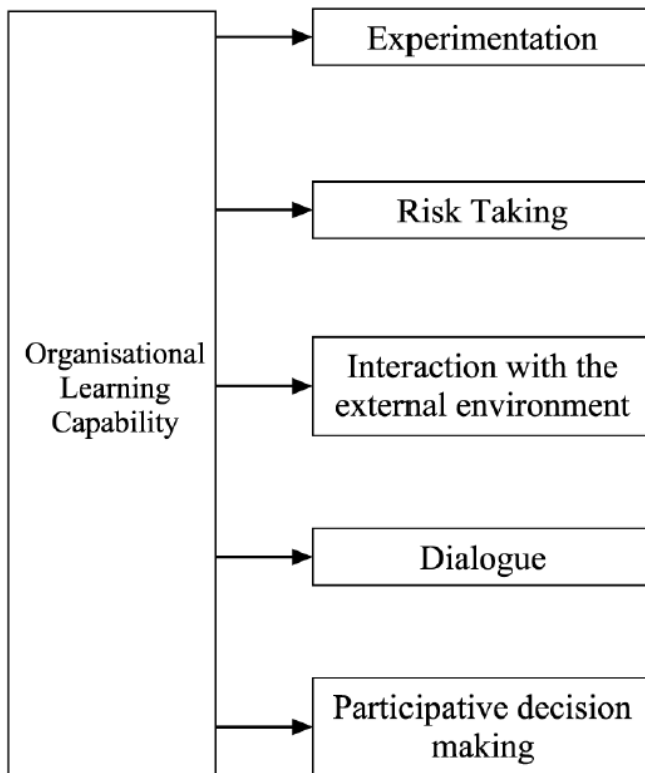
Contrary to the aforementioned, Hasson *et al.* (2016) assert that there are actually seven dimensions that could be used to measure learning in an organisation, namely:

- **Continuous learning**: Developing learning opportunities for all its employees;
- **Dialogue and enquiry**: Fostering an environment that encourages employees to carry out experiments, ask more questions and provide feedback to other employees;
- **Team learning**: Ensuring the collaboration of teams, sharing of knowledge within teams and setting up team objectives and goals;
- **Embedded systems**: Deploying an information system (IS) that allows employees to record and disseminate the information and learning that takes place in an organisation;
- **System connections**: The relationship that is built and exists between the internal environment and the external environment of an organisation;

- **Empowerment:** Improving an organisation's existing status by creating and sharing a new and joint vision, using feedback contributed by its employees; and

- **Providing leadership for learning**: Stirring the organisation into a new path and discovering how to use learning in an organisation to create change.

2.2.3   Factors influencing Organisational Learning

The context of every organisation affects its OL, depending on how big or small the organisation is and the type of industry the organisation operates in. Organisations that encourage innovation and creativity have a positive effect on facilitating learning in an organisation (Chou, 2003); however, Qi and Chau (2018) reveal that large organisations (200 employees or more) need more resources to encourage innovation. In addition, more established organisations are expected to have more knowledge and experience when it comes to creating an environment that fosters learning in an organisation (Qi & Chau, 2018). Similarly, organisations that fall under the designing, consulting and manufacturing industries are more likely to encourage OL and knowledge management compared to organisations in other industries (Qi & Chau, 2018).

Martínez-León and Martínez-García (2011) further added that the size of the organisation (small, medium or large) has an effect on the learning processes and their outcomes in an organisation. Large organisations (200 employees or more) tend to have better learning processes and structures in place as they are more formalised when compared to medium and small organisations (where learning is less formalised) (Jones & Macpherson, 2006; Martínez-León & Martínez-García, 2011). Martínez-León and Martínez-García (2011) also admit that certain formal measurements of OL could only be applied to certain organisations, depending on their size.

Small and medium-sized organisations always tend to struggle when it comes to using formal ways of learning which involve the traditional classroom or standard eLearning setting (Müller & Faltin, 2011). In small firms, managers usually decide how information/knowledge is accessed or shared and how OL is carried out since they hold most of the power and are in charge of making key decisions (Jones & Macpherson, 2006). Most small and medium-sized firms depend on external sources for information and knowledge, such as suppliers and customers, for OL to occur (Jones & Macpherson, 2006). OL usually takes place in small firms as a reaction to a problem that has occurred

in an organisation, rather than as a carefully planned approach to acquiring new knowledge (Jones & Macpherson, 2006). Small firms are also reported to rely on informal learning, whereby they prefer to learn by taking one step at a time (Anderson & Boocock, 2002).

It is worth noting that there are some barriers encountered by organisations that affect OL. One of them is leadership training, which involves equipping leaders in an organisation with the necessary skills to improve the organisation (Hasson *et al.*, 2016). Improper leadership training is likely to hinder the improvement of learning in an organisation (Hasson *et al.*, 2016). Müller and Faltin (2011) also reveal that OL is mired by the slow progression of employee training and creation of formal learning materials in organisations.

Another barrier to OL is leadership that insists on holding onto power – either through decisions made regarding training or a reluctance to decentralise learning contributions (Argyris, 1994; Gold, Malhotra & Segars, 2001; Schneckenberg, 2009). Other researchers also state that being an owner-manager who has sole authority over their organisation and thus decides how knowledge is accessed and shared, can be a barrier to OL, since employees do not play an active role in learning (Argyris, 1994; Anderson & Boocock, 2002; Jones & Macpherson, 2006).

Argyris (1994) adds that managers who do not encourage the empowerment of their employees cause a passive environment, where employees fail to solve organisational problems thus inhibiting OL in a long run. Some managers also try to limit employees from questioning each other's actions and decisions for the sake of building a false 'positive and polite' environment, which impedes OL, more specifically double-loop learning (Argyris, 1977; 1994; 1995).

The external or internal commitment of all employees involves well-defined duties, performance goals, work attitude and organisational importance; thus, a lack of commitment can function as a barrier to OL (Schneckenberg, 2009). Employees who do not pay attention to the organisation's problems or fail to examine their performance, instead relying on management to make all important decisions, can also pose a barrier to OL (Argyris, 1994).

Other reasons that inhibit OL are the defensive routines practised by the organisation and the defensive reasoning practised by the employees when a problem occurs. This involves employees not taking responsibility and blaming their colleagues, thus refusing to learn (Argyris, 1994; 1995). Furthermore, employees who are scared of receiving criticism, personal feedback and losing credibility and power also hinder OL, since they are not willing to learn at the expense of their reputation (Matschke, Moskaliuk & Cress, 2012; Filstad *et al.,* 2018). Employees who hold on to important information or knowledge and are reluctant to share knowledge with other employees further impede learning in an organisation (Argyris, 1977; Alavi & Leidner, 2001; Filstad *et al.,* 2018). Employees may lack the confidence to share knowledge with other employees, making it difficult for OL to be carried out in an efficient manner (Baxter & Connolly, 2014).

Learning is deterred if an organisation does not develop clearly stated procedures and guidelines on how information or knowledge can be captured and shared (Kane, Robinson-Combre & Berge; 2010). If an organisation is inflexible or the organisation does not encourage communication, information creation and information dissemination, there is no conducive learning environment, thus OL is inhibited (Gold *et al.,* 2001; Baxter *et al.,* 2009).

Anderson and Boocock (2002) add that organisational culture and the systems used for communication can also contribute to hampering OL. Using KMS to capture knowledge might result in the same knowledge being applied to different circumstances, even in circumstances that might be unsuitable (Alavi & Leidner, 2001). Organisations that create boundaries between individuals and groups of employees, that do not encourage the sharing of ideas, can also inhibit learning in an organisation (Garwin, 1993). Finally, the complexity of an organisation's problems is also a barrier to OL (Chou, 2003).

2.3   SOCIAL MEDIA DEFINITIONS

Literature provides several definitions of social media. Social media can be described as platforms that allow users to create and share content, unlike Web 1.0 platforms which involve providing access to information and content for users (Agerdal-Hjermind, 2014). Social media can also be described as technologies that allow users to network and accumulate knowledge, drawing from personal experiences and practice (Boateng, Mbarika & Thomas, 2010). Zhao and Kemp (2013) simply describe Web 2.0 as the

second-generation web platforms that permit users to interrelate and network with one another. Social media/Web 2.0 tools provide a platform that allows users to freely communicate and collaborate, which could then foster learning (Kane *et al.*, 2010).

Different types of social media platforms exist, ranging from social news sites such as Reddit; blogs and forums such as Blogger, LiveJournal and WordPress; wiki-based encyclopaedias such as Wikipedia; social bookmarking sites such as Delicious; social media sharing sites such as YouTube; micro-blogging sites such as Twitter and social networking sites such as Myspace and Facebook (Chatti *et al.*, 2007; Alwagait, Shahzad & Alim, 2014; Voorveld *et al.*, 2018; Budree, Fietkiewicz & Lins, 2019). Organisations tend to use social networking sites, blogs and wikis (Baxter & Connolly, 2014; Voorveld, 2019).

The difference between different types of social media is that social networking sites such as Myspace, LinkedIn, WhatsApp and Facebook allow users to have different personas online, be it at or outside of work, whilst networking with other users that have similar interests; this has the potential to add value and status to their lives (Voorveld *et al.*, 2018; Budree *et al.*, 2019; Voorveld, 2019). Furthermore, LinkedIn allows professionals to communicate with each other, offers employment opportunities and allows business-to-business interactions (Voorveld *et al.*, 2018; Budree *et al.*, 2019). Blogs and forums such as Blogger, LiveJournal and WordPress permit users to easily communicate, collaborate, network and provide feedback regarding relevant topics discussed by employees (Balaji & Murthy, 2019; Men *et al.*, 2020; Menolli *et al.*, 2020). Social news sites such as Reddit allow users to share information, get feedback and collaborate (Voorveld, 2019). Wiki-based encyclopaedias, which are commonly referred to as wikis, are used as knowledge management tools in a workplace and allow users to publish information themselves, share ideas, collaborate and interact, and find information and resources within the workplace (Budree *et al.*, 2019). Micro-blogging sites such as Twitter allow users to communicate and promote numerous activist movements to create awareness and gather support, predominantly using hashtags (Voorveld *et al.*, 2018; Budree *et al.*, 2019; Pearce *et al.*, 2019). These activism campaigns allow social media users to have in-depth conversations, create awareness and shed light on topics such as diversity and how minority groups are treated in the workplace or media (Budree *et al.*, 2019; Pearce *et al.*, 2019). Social media sharing sites such as YouTube allow companies to advertise and market themselves online through brand communication, share videos and spread

messages to their customers whilst allowing customers to access their information quickly (Budree *et al.*, 2019; Voorveld, 2019).

2.4 CONCLUSION

Chapter Two presented the literature review of the two main themes in this study, namely OL and social media. The chapter provided in-depth definitions of OL and social media which were adopted from previous literature, this provided several definitions from a wide variety of sources and experts in the OL and social media fields. In the OL section, the author identified the following major concepts: (1) Five focus areas that exist in the OL field – this include improving training, problem solving, learning environment, communication and innovation in the organisations. (2) Relationship between knowledge management and OL – this explains what tacit and explicit knowledge is, how knowledge management incorporates social media and how it enhances OL and employees' experiences. (3) Measuring OL – this reveals the quantitative and qualitative measurements of OL and also explains the processes, dimensions and stages involved in measuring OL. (4) Factors influencing OL – this explains how the size of organisations, type of industry and the barriers in organisations affect OL.

In the social media section, several definitions of social media were provided from different literature sources. A brief explanation of different types of social media, examples of each type of social media and how they differ from each other was presented. The researcher also gave the background of the OL concepts that exist. Based on the major concepts regarding OL and social media, the researcher can therefore state that OL and social media are made up of a lot of important themes and focus areas that all need to be taken into consideration when incorporating OL and social media in organisations. The major concepts regarding OL and social media also gives a general idea of the scope of learning in an organisation and which social media tools are used by organisations for OL. The systematic literature review conducted by the researcher will be discussed in the next chapter.

CHAPTER 3.SYSTEMATIC REVIEW OF LITERATURE: TOWARDS THE DEVELOPMENT OF A SOCIAL MEDIA-SUPPORTED OL FRAMEWORK

3.1 INTRODUCTION

In this chapter, the researcher presents the systematic literature review protocol and strategy that was used. The relevant literature is systematically presented under the appropriate headings or topics. The researcher then presents the main concepts of this study (OL and social media). Under the OL section, the researcher discusses the types, processes, dimensions and knowledge regarding OL. The researcher then discusses the scope of learning in an organisation, OL levels and later introduces some of the existing frameworks of OL adopted from literature.

Under the social media section, the researcher describes the social media used in organisations and explains how social media are used in these organisations. The researcher then highlights the existing frameworks of social media adopted from literature and introduces the applicable theoretical lenses that may be suitable for this study. The chapter includes a justification of the theory chosen and proposes a theoretical framework adopted from the literature that would be incorporated with the collected data.

3.1.1 Review protocol and strategy

The researcher conducted a systematic literature review as a review protocol and strategy, using guidelines proposed by Okoli and Schabram (2010). The authors outline how to carry out a systematic literature review for the IS discipline in particular. Articles written in English were searched from academic databases such as EBSCO, Emerald Insight, Science Direct, ProQuest, Scopus and Web of Science. These academic databases have been chosen to ensure that relevant articles in the informatics field would be included. The keywords that were used to help guide the search were based on the main concepts of the study, namely OL frameworks or models and social media frameworks or models. The keywords helped reduce the scope of the search. The researcher reviewed the titles of the articles and their abstracts, guided by the keywords, to decide which articles to include or exclude.

In this research, the dates of when the articles were published were not used as a search criterion. Ideally, studies that were chosen had one or all of the following characteristics:

- Proposed frameworks that incorporate OL and social media;
- Framework that can be used to carry out empirical research to yield findings; and
- Could be used to carry out interpretive research using surveys and interviews.

The figure below highlights how the systematic literature review process was conducted:

Figure 3-1: Systematic literature review process
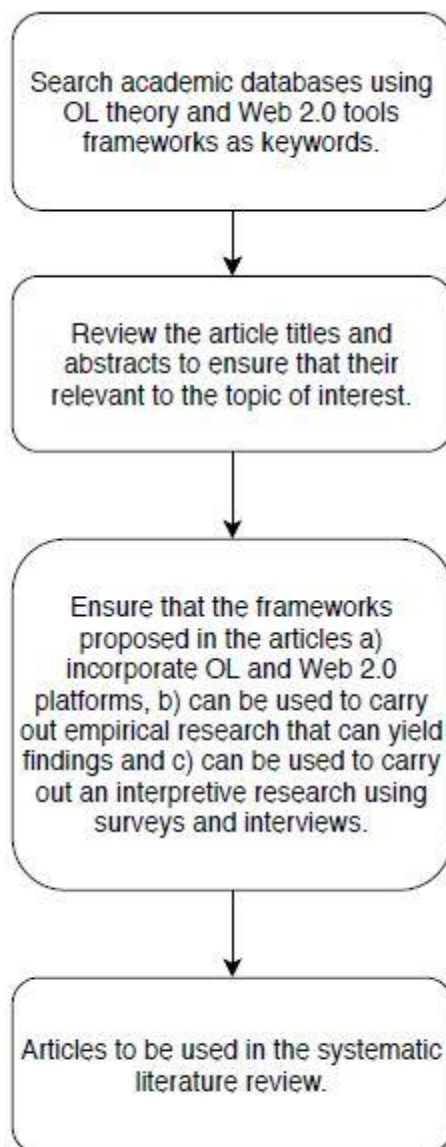
Figure 3-2 below depicts the criteria that were used to include and exclude the studies from the literature review:

Figure 3-2: Criteria to include and exclude studies

Inclusion Criteria {

*Peer reviewed studies in English; Studies from academic databases (EBSCO, Emerald Insight, Science Direct, ProQuest, Scopus and Web of Science)

*a) Studies that focus on Organisational learning frameworks or models; b) Web 2.0 platforms (Social media) frameworks or models

* Studies with the following characteristics: a) proposed frameworks that incorporate organisation learning and web 2.0 platforms, b) framework can be used to carry out an empirical research that can yield findings; c) can be used to carry out an interpretive research using surveys and interviews.

Exclusion Criteria {

*Studies not in English

*Studies not related to the keywords and research questions

* Studies that do not propose any frameworks that incorporate organisation learning and web 2.0 platforms, framework that cannot be used to carry out an empirical research that can yield findings; and framework that cannot be used to carry out an interpretive research using surveys and interviews.

*Short papers and repeated studies

The systematic literature review method was used to explore and highlight the main concepts of OL that exist in the available literature. The key concepts and themes that the literature review focused on were:

- Types of OL;

- Types of OL levels;

- Proposed organisational frameworks;

- Different social media used in organisations; and

- Proposed social media OL frameworks.

In Table 3-1 below, the researcher provides an overview of the articles that were collected from literature through a thorough systematic literature review process. The researcher highlights the main concepts and themes that were discussed and identified in the papers and each paper is sorted according to the appropriate/relevant category it falls under. These sources/papers were chosen because they have thoroughly and extensively mentioned and explained the three main components, which were revealed in studies that have focused on OL and social media.

A total of 76 articles were initially collected. The researcher then used the inclusion and exclusion criteria to filter through the articles collected. A total of 28 articles were excluded as they did not meet the inclusion requirements. After using the inclusion criteria and the review process (using key concepts and themes - social media frameworks and OL frameworks), 48 articles were used to inform the literature.

Table 3-1: Literature topics and authors

OL	
Types of OL	- Argyris and Schon (1978; 1996) - Argyris (1983; 1994) - Fiol and Lyles (1985) - Baxter *et al.* (2009) - Pahl-Wostl (2009) - Zhao and Kemp (2013)
OL levels	- Boateng *et al.* (2010) - Baxter *et al.* (2009; 2011) - Anica-Popa (2011) - Petiz *et al.* (2013) - Child (1994)
OL frameworks	- Anderson (1994) - Argyris and Schon (1996) - Pahl-Wostl (2009) - Boateng *et al.* (2009) - Boateng *et al.* (2010)

	• Crossan *et al.* (1999)
	• Tam and Gray (2016)
	• Nathai-Balkissoon and Fai Pun (2011)

SOCIAL MEDIA	
Blogs	• Kane *et al.* (2010)
	• Boateng *et al.* (2010)
	• Baxter *et al.* (2009; 2010; 2011)
	• Zhao and Kemp (2013)
	• Baxter and Connolly (2013; 2014)
	• Agerdal-Hjermind (2014)
Wikis	• Baxter *et al.* (2009)
	• Kane *et al.* (2010)
	• Vuori (2012)
	• Baxter and Connolly (2014)
	• Breunig (2016)
Social media *(Micro-blogging sites, social networking sites, instant messaging [IM])*	• Dreher (2014)
	• Lopez and Esteves (2013)
	• Zhao and Kemp (2013)
	• Breunig (2016)
Other internal IS or IT systems	• Chen *et al.* (2003)
	• Baxter *et al.* (2009)
	• Boateng *et al.* (2010)
	• Dinh *et al.* (2011)
	• Vuori (2012)
	• Petiz *et al.* (2013)
	• Schlagwein and Bjørn-Andersen (2014)

SOCIAL MEDIA OL FRAMEWORKS
• **Boateng *et al.* (2009)**
• **Baxter *et al.* (2009)**
• **Baxter *et al.* (2011)**
• **Dinh *et al.* (2011)**
• **Zhao and Kemp (2013)**
• **Schlagwein and Bjørn-Andersen (2014)**
• **Qi and Chau (2016)**

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3.2   ORGANISATIONAL LEARNING

In this section, the researcher discusses the important sub-topics that fall under the main topic of OL. These sub-topics were extracted from the systematic literature review and include types of OL, OL processes, OL dimensions and OL knowledge. The researcher also discusses OL levels and OL frameworks.

3.2.1   Organisational Learning types, processes, dimensions and knowledge

In this section, OL types, processes, dimensions and knowledge are discussed in detail. With regards to the first item, literature has revealed that there are three different types of OL, namely single-, double- and triple-loop learning.

As the first type of OL, **single-loop learning** involves detecting what is similar or related while correcting for errors or anomalies (Argyris & Schon, 1978; 1996; Argyris, 1983; 1994). It involves a change in the set of rules at a specific level within an organisational structure (Argyris, 1983; Fiol & Lyles, 1985). Single-loop learning usually leads to changes in behaviour and outcomes in an organisation without changing its rules or principles (Argyris, 1983). The impact only affects immediate activities and a certain part of the organisation and it is usually for a short period (Argyris, 1983; Fiol & Lyles, 1985).

The second type of OL, **double-loop learning,** involves changing the general principles and rules of an organisation rather than changing particular behaviours or actions (Argyris, 1983; Fiol & Lyles, 1985). Double-loop learning usually leaves long-lasting effects on the whole organisation (Argyris, 1983; Fiol & Lyles, 1985). The success of double-loop learning results in the organisation changing its core values and culture, to adapt to OL, which usually leads to improvement in workers' performance (Baxter *et al*., 2009).

The last type of OL, **triple-loop learning,** involves making changes to the governing rules, values and norms of the organisation (Pahl-Wostl, 2009). Triple-loop learning makes considerations of the fundamental beliefs, values, and world views of the organisation, especially if the world view assumptions do not apply any longer (Pahl-Wostl, 2009).

Learning in a workplace can also be divided into formal and informal learning (Zhao & Kemp, 2013). Formal learning involves employees gaining new knowledge through training programmes which then enhance OL (Zhao & Kemp, 2013). Informal learning

involves employees learning through informally interacting with one another and learning from experience through sharing (Zhao & Kemp, 2013). Learning in a workplace usually aims to achieve a certain goal in an organisation and strives to improve OL (Zhao & Kemp, 2013).

Huber (1991) explains that there are four types of OL processes, namely i) information acquisition, which involves the organisation obtaining knowledge or information; ii) information distribution, which involves the organisation disseminating knowledge or information; iii) information interpretation, which involves the organisation giving meaning to knowledge or information and iv) organisational memory, which involves the storing of knowledge or information (Huber, 1991; Chen *et al.*, 2003). However, Petiz *et al.* (2013) feel that there are five main OL dimensions or common practices:

- **Idea generation** - involves encouraging employees to find new ways of doing things, discover the needs of clients, and uncover the problems that need to be solved within an organisation. Idea generation also involves the sharing of new ideas which allows employees to improve the way they present these new ideas;

- **Market and technology surveillance** - involves observing the market and trying to find the best practices of other organisations. This allows organisations to evaluate where they stand and work on where to improve, which then benefits the organisation in the future;

- **Problem-solving** - involves employees solving problems by working together as a team, taking part in decision making and analysing past organisational practices. It is advisable to keep a record of problems and solutions encountered to avoid future problems and to help improve employees' critical thinking skills;

- **Dialogue and knowledge transfer** - involves encouraging the sharing of knowledge through teamwork, communication and discussions between individuals and groups of employees; and

- **Training and skills development** - involves improving employees' work performance and skills by conducting formal training programs.

3.2.2   The scope of learning in an organisation: Organisational Learning levels

According to literature, OL happens on three levels, namely individual, collective (group) and organisational levels, and they all seem to relate to one another (Baxter *et al.*, 2009;

Petiz *et al.*, 2013). OL relies upon the individuals that work within the organisation and the survival of the organisation depends on them (Baxter *et al.*, 2009). In this instance, the individual is seen as someone who learns on behalf of the organisation; thus, learning at an individual level is seen as the simplest form of OL (Anica-Popa, 2011; Baxter *et al.*, 2011). The individual level is further divided into two dimensions. The first dimension is called continuous learning, which involves the ability of the organisation to create learning opportunities for all the employees (Hasson *et al.*, 2016). The second dimension is called dialogue and inquiry; this involves the organisation creating an environment that allows employees to scrutinise, enquire and provide feedback (Hasson *et al.*, 2016).

OL also relies on and is supplemented by collective (group) level learning that occurs in organisations (Baxter *et al.*, 2009). At the group level, the experiences of individual employees are combined, for the whole group to learn from (Anica-Popa, 2011). The organisation ensures that learning is directed to a group of individuals that need to be taught (Baxter *et al.*, 2009). This type of learning is described as an interpretive view, which highlights that OL occurs through relationships formed in groups and in a collective manner (Baxter *et al.*, 2011). Team learning is group level learning, which involves teams in the organisation setting up goals, exchanging information and collaborating, alongside the effort that organisations put in to support these teams (Hasson *et al.*, 2016).

The organisation and its beliefs also play an important role in OL, thus the organisational level is the core of OL (Baxter *et al.*, 2009; Anica-Popa, 2011). Therefore, individuals, groups and the organisation itself depend on each other to facilitate OL. In this instance, the organisation finds a way to learn by aligning themselves to the knowledge possessed by the individuals through adapting and modifying themselves (Baxter *et al.*, 2011). The development of OL also depends on the interaction between organisational entities and the organisation itself (Boateng *et al.*, 2010).

Crossan *et al.* (1999) describe the four psychological and social processes that occur throughout the three levels of learning in an organisation (discussed above). These are i) intuiting, ii) interpreting, iii) integrating and iv) institutionalising, also known as the "4I" (Schlagwein & Bjørn-Andersen, 2014).

The first 'I', **intuiting,** is a process carried out by individuals in an organisation, which refers to the subconscious act of perceiving patterns, possibilities and connections, and

recognising their similarities and differences (Crossan *et al.*, 1999; Schlagwein & Bjørn-Andersen, 2014). Intuiting can also be described as the foundation of new learning (Crossan *et al.*, 1999).

The second 'I', **interpreting,** is the conscious act of creating and simplifying instinctive insights or ideas and then having to explain that particular insight or idea to yourself and others through actions and words (Crossan *et al.*, 1999; Schlagwein & Bjørn-Andersen, 2014). The idea or insight is usually internalised and then expressed vocally for other people to understand (Crossan *et al.*, 1999). Interpretation of different individuals is usually assembled and used to create a shared understanding and common language within a group to ensure that the group is on the same page (Crossan *et al.*, 1999).

The third 'I', **integrating** regards creating a common understanding amongst individuals in a group and taking actions through a joint or mutual agreement (Crossan *et al.*, 1999; Schlagwein & Bjørn-Andersen, 2014). For a mutual understanding to occur, individuals in an organisation need to have conversations and then carry out coordinated actions (Crossan *et al.*, 1999). The practice of integrating is, firstly, conducted informally and it is only made formal later; when an action is important and occurs frequently, it is institutionalised (Crossan *et al.*, 1999). The common understanding and language developed through integration allow individuals in an organisation to develop new learning and preserve it (Crossan *et al.*, 1999).

The final 'I', **institutionalising**, is the practice of making sure that all the learning that has occurred amongst individuals and groups in an organisation is implemented routinely (Crossan *et al.*, 1999; Schlagwein & Bjørn-Andersen, 2014). The idea behind institutionalising is that even when individuals/employees leave a particular organisation, some of the learning acquired remains embedded in the fundamental principles or systems of the organisation (Crossan *et al.*, 1999). The organisation is responsible to define tasks, specify actions and ensure that organisational strategies, structures, systems, procedures and practices are put in place so that certain actions take place routinely (Crossan *et al.*, 1999). Once certain actions yield favourable outcomes, they then become routines for the organisation to continue performing (Crossan *et al.*, 1999). By doing so, the organisation creates a formal pattern that guides the learning of current and future employees, which helps define the culture of the organisation (Crossan *et al.*, 1999). The pattern adopted is also expected to adapt to changes within the organisation, as the

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organisation learns new ways of conducting organisational activities (Crossan *et al.*, 1999).

Crossan *et al.* (1999); Boateng *et al.* (2010) and Ege *et al.* (2017) describe OL as a dynamic process since learning happens across different levels and over time. In this case, OL occurs by merging new learning (which is described as feedforward) and what has already been learned (which is described as feedback) (Crossan *et al.*, 1999; Jones & Macpherson, 2006; Schlagwein & Bjørn-Andersen, 2014; Mainert *et al.*, 2018). The feedforward process refers to when new concepts and activities flow from the individual level right through to the organisational level; while feedback refers to when what has already been acquired or learned, flows from the organisational level right through to the individual level, to influence employees' thinking and actions (Crossan *et al.*, 1999; Jones & Macpherson, 2006; Schlagwein & Bjørn-Andersen, 2014; Mainert *et al.*, 2018).

The four psychological and social processes mentioned before occur at different levels of OL; intuiting and interpreting take place at the individual level, interpreting and integrating take place at the group level, and integrating and institutionalising take place at the organisational level (Crossan *et al.*, 1999). OL is also said to happen only when knowledge is made available to employees within an organisation (Boateng *et al.*, 2009). Anica-Popa (2011) states that OL involves understanding, learning and communicating between the organisation itself and its employees. Knowledge is usually accessed by retrieving data that is stored in an organisation (Boateng *et al.*, 2009). Child's (1994) study also reveals three different types of OL levels, namely:

- **Technical level**: Refers to acquiring and employing new practices in an organisation, which involve improving the quality of internal practices;
- **Systematic level**: Refers to introducing the operation of new systems and procedures that include improving employees' communication abilities and clearly defining employees' duties; and
- **Strategic level**: Refers to a senior leader in an organisation clearly defining the organisation's standards and important factors that will lead to success.

Usually, the technical level does not result in organisational changes, while the systematic level results in changes that affect the norms of an organisation and employees are likely to resist these changes. Furthermore, major changes are likely to result from the strategic

level (Child, 1994). Furthermore, organisational level learning is made up of four dimensions:

- **Embedded systems:** The organisation makes an effort to set up systems to share and adopt learning;
- **System connections:** The connection between the internal and external environments of the organisation;
- **Empowerment:** The organisation creates and shares a mutual goal and uses employees' feedback to change from the status quo to the new goal; and
- **Providing leadership**: Management in an organisation reflects on how to make use of learning to create change, to steer the organisation on a new path.

3.2.3   Organisational Learning frameworks

After reviewing the articles that focused on OL frameworks, a total of five OL frameworks were found in the literature. The OL frameworks that were revealed from the literature focus on the knowledge conversion processes, OL conversion models, OL processes, OL levels, 5I OL framework, life cycle stages and the factors that influence OL. Each relevant OL framework that was found in the literature is presented as a sub-section below.

- *OL processes*

Boateng *et al.* (2010) propose an OL framework that describes four knowledge conversion processes that take place in an organisation, as well as the learning processes associated with them. These are called the socialisation, externalisation, combination and internalisation (SECI model).

Figure 3-3: OL processes

Conversion modes

Socialization – converting tacit to tacit knowledge

Externalization – converting tacit to explicit knowledge

Combination – converting explicit to explicit knowledge

Internalization – converting explicit to tacit knowledge

Knowledge conversion processes

1. Capturing individual knowledge
2. Sharing individual knowledge
3. Interaction of shared experiences
4. Feedback without criticism

1. Communication (dialogue)
2. Capturing collective knowledge and explicit knowledge creation
3. Diffusion of knowledge at the collective level
4. Instantaneous feedbacks and exchange

1. Organizing and categorizing of knowledge
2. Integration of sources of knowledge
3. Platform for collective/collaborative knowledge creation
4. Searchable/accessible and distribution

1. Access to explicit knowledge
2. Re-experience others explicit knowledge
3. Asynchronous learning (any place any time)
4. Experiential (actualizing concepts and methods)

<u>Source</u>: Adapted from Boateng *et al.* (2010)

- ***OL framework using learning tools***

Boateng *et al.* (2009) also propose an OL framework that incorporates the four conversion models (called the [SECI] model) described in Boateng *et al.*'s (2010) paper. The framework shows how organisations can use methods and tools to make knowledge available to employees and subsequently improve OL (Boateng *et al.*, 2009).

Figure 3-4: OL framework using learning tools
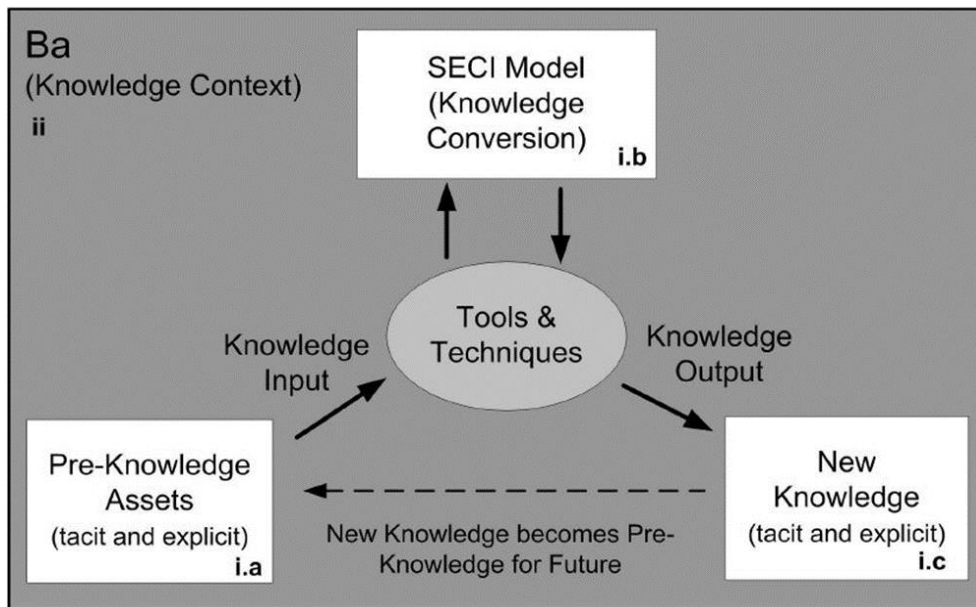
Source: Adapted from Boateng *et al.* (2009)

- ***The OL framework as a dynamic process***

Crossan *et al.* (1999) propose an OL framework that highlights OL as a dynamic process. It underlines the OL processes (4I) and levels (individual, group and organisational) involved.

Figure 3-5: The OL framework as a dynamic process
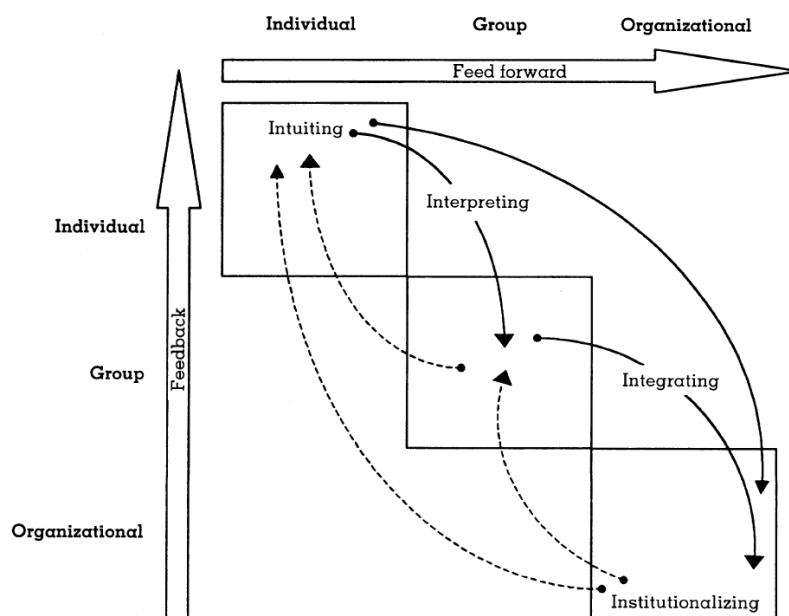
Source: Adapted from Crossan *et al.* (1999)

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- ***The 5I OL framework and life cycle stages***

Tam and Gray (2016) conducted an empirical research form, in which they created a framework specially made for small- and medium-sized enterprises (SMEs). In this framework, Tam and Gray (2016) have decided to combine the 5I OL framework for SMEs created by Jones and Macpherson (2006) and the organisational life cycle (OLC) framework created by Smith, Mitchell and Summer (1985). Tam and Gray (2016) highlighted the three SMEs' life cycle stages and the OL level that occurred at each:

- **Inception stage** - refers to the beginning stage of the OLC, when organisations start and they are in their infant and casual phases and interaction among staff members is informal (inter-organisational and individual level learning);

- **High-growth stage** - refers to the phase where an organisation starts to be successful and has overcome the hurdles and challenges that new firms go through. At this stage, the interaction among staff members is made formal (inter-organisational, group and organisational level learning); and

- **Maturity stage** - refers to the phase where an organisation has formal structures (inter-organisational and organisational level learning).

Figure 3-6: The 5I OL framework and life cycle stages
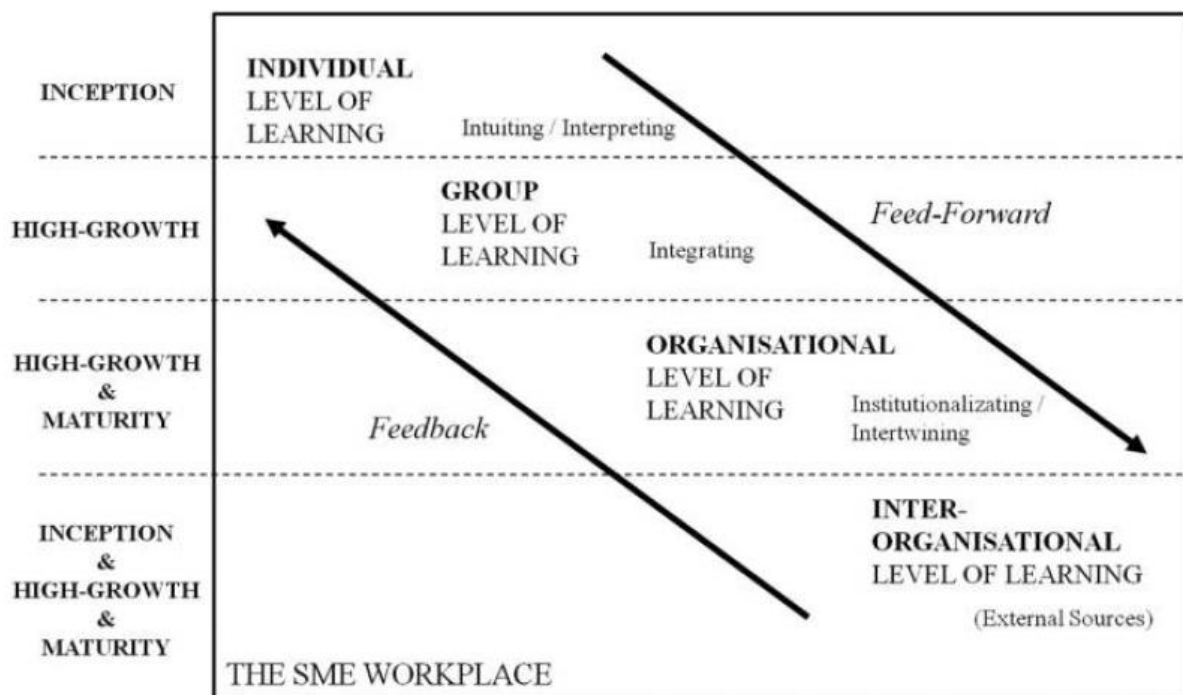
Source: Adapted from Tam and Gray (2016)

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- ***The four factors influencing OL***

Nathai-Balkissoon and Fai Pun (2011) proposed a framework that consisted of four main factors that influence OL (presented in Figure 3-7), namely:

- **Cognitive ability of individuals,** which involves the ability to understand, store and recollect information;
- **Learning tools and practices,** which involves experimental learning, learning from experience and using knowledge management tools and instruments;
- **Learning processes,** which involves individual, group and organisational level learning, and single-, double- and triple-loop learning; and
- **Organisation structure and culture,** which involves the learning environment and the structure, principles and beliefs of the organisation.

Figure 3-7: The four factors influencing OL
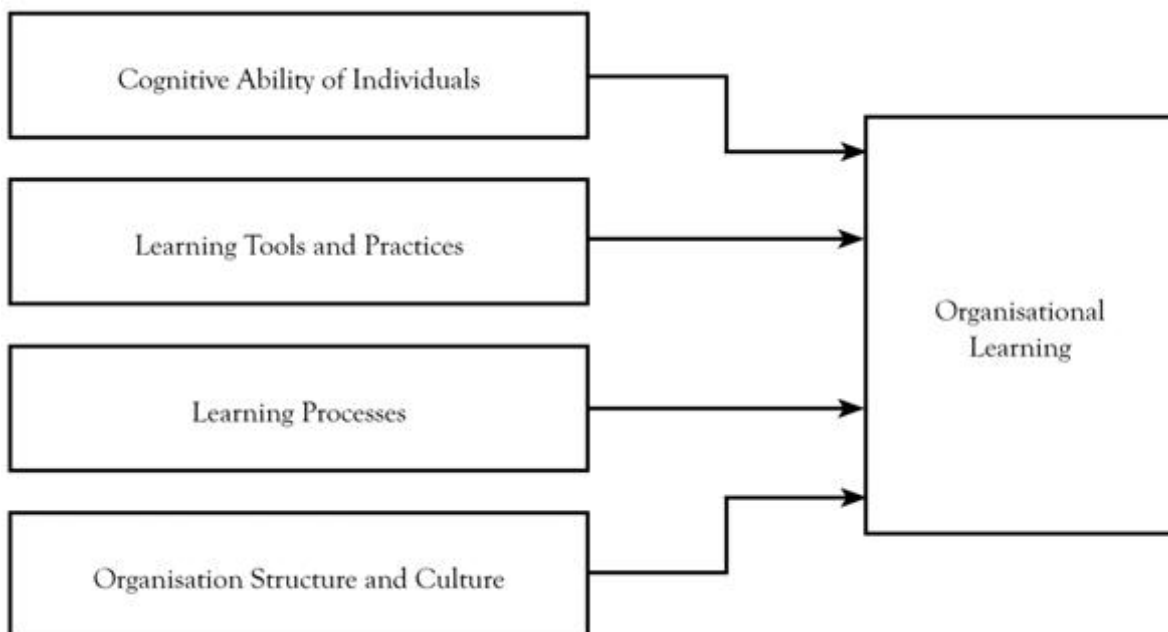
Source: Adapted from Nathai-Balkissoon and Fai Pun (2011)

3.2.4 Summary of review

Literature has presented various concepts that exist within the OL field. As reported, there are five focus areas within OL (individual learning, process or system, culture or metaphor, knowledge management and continuous improvement). OL comprises three main types of learning (single-, double- and triple-loop learning); furthermore, learning in a workplace

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can also be defined into two forms of learning, namely formal and informal learning. OL consists of four main processes (information acquisition, information distribution, information interpretation and organisational memory) and five main learning dimensions (idea generation, market and technology surveillance, problem-solving, dialogue and knowledge transfer and training and skills development).

OL is also reported to happen at three different levels, namely individual, collective (group) and organisational levels. Initially, the levels were described as the technical, systematic and strategic levels. As mentioned, four psychological and social processes occur within OL (4I). All these processes take place when dynamic processes such as feedforward and feedback take place in an organisation. Within organisational level learning, there are four dimensions, namely embedded systems, system connections, empowerment and providing leadership. Throughout literature, scholars have also proposed numerous OL frameworks or models describing different types, processes, dimensions and levels of OL. With all this considered, OL has various aspects and concepts of interest that are all important and must be considered when OL is used as a focal point.

3.2.5   Insights derived from review

Literature seems to have various definitions of OL but a common theme is that it is a process that allows employees to gain new knowledge and carry out actions that change the way things are done in an organisation. OL usually ranges from information management, training staff members, building learning and creating ethos and structure within the organisation. Single-, double- and triple-loop learning all lead to making changes within the organisation, ranging from minor to long-lasting or drastic changes that affect organisational structure for a period. Organisational processes mainly involve dealing with the management of organisational information and management, ranging from gaining to sharing and storing relevant knowledge and information.

OL dimensions are also important; they include employees developing new ideas, monitoring the market for new trends, developing a solution to problems and sharing the knowledge throughout the organisation via training and equipping employees with the necessary skills. In addition, OL also involves psychological and social processes that take place at different levels of the organisation, and this is described as the scope of learning.

The scope of learning in an organisation ranges from individual to group and then to the organisational level which encompasses the whole organisation (see Figures 3-5 and 3-6). The organisational levels also have dimensions associated with them that deal with setting up systems to create a learning environment and providing a clear direction for the organisation to successfully achieve OL.

In addition, the frameworks or models all seem to have an overarching theme that emphasises carrying out successful learning in organisations, but none of the frameworks seems to incorporate the type of OL and the level at which the learning occurs. This is one of the gaps that this study aims to address in the following chapters.

3.3 SOCIAL MEDIA (WEB 2.0 PLATFORMS)

In this section, the researcher discusses the important sub-topics that fall under the main topic of *Social media (Web 2.0 platforms)*. The sub-topics (social media [Web 2.0] platforms in organisations and in OL frameworks) were extracted from the systematic literature review. Under Social media (Web 2.0 platforms) in organisations, the researcher discusses all the types of social media and what they are used for in organisations. The researcher then discusses the different types of Social Media (Web 2.0 platforms) frameworks that have incorporated OL.

3.3.1 Social media (Web 2.0 platforms) in organisations

The use of social media in organisations has been gaining popularity, particularly in the corporate field (Zhao & Kemp, 2013). Chen *et al.* (2003) further suggest that the use of IT (social media) in organisations has the potential to support OL. Specifically, the social aspect of social media can facilitate the social aspect of OL in companies (Baxter *et al.*, 2010). The use of social media in organisations has changed the way individuals create and interact with information (Dinh *et al.*, 2011). Information in organisations that was only available and shared through teaching and expert knowledge can now easily be accessed, altered and shared through online social media (Dinh *et al.*, 2011).

- *The use of blogs*

Baxter and Connolly (2013) reveal that employees make use of social media (such as blogs) to share information and work on projects within an organisation. Employees working on a project use blogs to discuss their preliminary thoughts, objectives and roles

that need to be conducted in a project (Baxter *et al.*, 2010). This also allows project managers to keep the team updated regarding progress and allows employees in different departments to work on the same project remotely (Baxter *et al.,* 2010; Vuori, 2012). Blogs also allow employees to openly comment on and discuss topics that they are interested in, which encourages transparency (Baxter *et al.,* 2010; 2011). The use of blogs within an organisation allows employees to create, share and implement new knowledge which achieves OL (Baxter & Connolly, 2013; Agerdal-Hjermind, 2014). Blogs can also be used to provide orientation to new employees to give them an overview of how the organisation works and how they can contribute to the success of the organisation (Kane *et al.*, 2010).

Blogs create a sense of community in an organisation as they allow employees to engage in communal activities and share information (Baxter *et al.,* 2010). The use of blogs also provides employees with a centralised platform where they can access written conversations shared between employees, which they can use to store and retrieve information (Boateng *et al.*, 2010; Baxter & Connolly, 2013; Agerdal-Hjermind, 2014). The retrieval of information from any IS used in an organisation allows employees to contribute new knowledge and improve OL (Baxter *et al.*, 2009; 2011). Retrieved information from blogs can also be used by staff members in future projects to promote OL (Baxter *et al.*, 2010).

The use of an internal IS in an organisation allows employees to revisit previous projects and learn from them so as not to repeat previous mistakes (Baxter *et al.*, 2009). Blogging also allows employees to interact and collaborate by providing feedback to each other (Baxter & Connolly, 2013; Agerdal-Hjermind, 2014). Feedback received from blogging permits employees to reflect on matters experienced in the working environment, which allows organisational development and learning (Baxter *et al.*, 2011). Staff members are also known for using blogs for internal and external projects, to uphold the good image of the company (Baxter *et al.*, 2010). In addition, blogs are used by executives or management to address the company's initiatives with employees (Baxter *et al.*, 2010).

The use of blogs in organisations has certain benefits over traditional means of communication. Organisational blogs make it easier for external stakeholders to access information, expose employees' capabilities and give organisations an interactive platform which improves their image (Agerdal-Hjermind, 2014). Organisational blogs have also been found to encourage interaction and sharing of information and knowledge among

employees (Baxter *et al.*, 2009; 2011; Agerdal-Hjermind, 2014). Although organisational blogs do not necessarily promote networking between employees, they can be used to initiate networking (Agerdal-Hjermind, 2014). Agerdal-Hjermind (2014) reveals that organisational blogs may limit employees in terms of freedom of expression, as employees are likely to follow organisational culture when it comes to blogging. Employees can use blogs to find relevant information regarding their work when they cannot find it from other communication platforms (Baxter & Connolly, 2014).

- *The use of Web 2.0 information systems*

The use of IS (for example social media) in organisations creates and manages information to enhance working performance, which inevitably improves OL (Baxter *et al.*, 2009). Employees learn from this information, share it and try to implement what they have learned (Baxter *et al.*, 2009). The interaction of individuals through IS in an organisation helps to support and facilitate OL (Baxter *et al.*, 2009; Boateng *et al.*, 2010). The use of IS such as blogs also allows employees to reflect on the knowledge obtained from the platform, which helps in achieving OL (Baxter *et al.*, 2009).

Social media creates an interactive environment that allows employees to create and share knowledge (Boateng *et al.*, 2010). Knowledge is shared between employees who possess the knowledge with employees who need to pursue the knowledge (Boateng *et al.*, 2010). Boateng *et al.* (2010) further add that the use of social media in organisations allows new knowledge to be accessed, generated and stored.

Chen *et al.* (2003) describe commercial IT systems used in organisations as groupware which allows users to share knowledge and collaborate. An example of such a system is Lotus Notes (used by IBM) which allows information to be stored in a database and provides a shared understanding of business procedures (Chen *et al.*, 2003). Commercial IT systems also support organisational performance and OL (Chen *et al.*, 2003; Schlagwein & Bjørn-Andersen, 2014).

The use of social media is also important in managing the reputation of the organisation (Dreher, 2014). Employees are responsible for representing the brand of an organisation accordingly, which usually enhances the perception of an organisation to important stakeholders (Dreher, 2014). The use of social media in organisations allows employees to be updated with news regarding their industry and line of work, which further improves

their knowledge and promotes organisational innovation (Dreher, 2014). However, the use of social media can also be non-beneficial to organisations as employees can reveal their dissatisfactions, which may force organisations to make rapid and ill-considered decisions with less accurate information available to them (Dreher, 2014).

- ***The use of Web 2.0 for learning***

Social media allow employees to learn informally in an organisation through the collaboration of employees when using Web 2.0 technology (Lopez & Esteves, 2013; Zhao & Kemp, 2013; Breunig, 2016). Employees can establish relationships on these social media which leads to learning, as information shared on social media allows employees to remain updated with modern trends in their profession and industry and the platform can also be used as a knowledge retention or management tool (Zhao & Kemp, 2013; Breunig, 2016). It also allows employees to be updated with new changes and improvements in other stakeholders' fields of work (Zhao & Kemp, 2013).

Social network sites such as Facebook are used to develop and maintain informal interactions among employees, while LinkedIn is generally used to develop and maintain formal interactions among employees (Zhao & Kemp, 2013). Knowledge shared on these social networking sites leads to change which then helps improve business performance (Zhao & Kemp, 2013). Social media, such as blogs and wikis, allow employees to engage in conversations and work in a team to share ideas and knowledge (Zhao & Kemp, 2013; Baxter & Connolly, 2014). Wikis also allow employees from the same company but working in different geographical locations, to collaborate on the same projects and showcase their expertise on a particular subject, which then results in OL (Kane *et al.*, 2010; Breunig, 2016). This is a critical advantage as it means the employees can learn and work together even though they are physically distant (Kane *et al.*, 2010). Wikis provide a sense of transparency in an organisation as information is available to everyone and employees can access updated information (Breunig, 2016).

- ***The use of Web 2.0 for collaboration***

Boateng *et al.* (2009) explain that social media create a platform or an environment that allows employees to collaborate, network and interact. Social media also allow knowledge to be created, accessed and shared, which then allows learning in an organisation (Boateng *et al.*, 2009; Lopez & Esteves, 2013). Employees that possess knowledge and

employees that are looking for knowledge are brought together by social media to share knowledge and have online dialogues (Boateng *et al.*, 2009). At the end of the day, social media enable organisations to reach their desired goal of improving OL (Boateng *et al.*, 2009).

Schneckenberg (2009) states that the advantage of using social media is that employees within an organisation are encouraged to work collectively on projects and are encouraged to create and improve their knowledge of the process. Boateng *et al.* (2009) further explain that for social media to support OL, the tool should allow employees to interact and communicate in groups/teams; create knowledge; collaborate on projects; share knowledge in groups/teams; distribute knowledge; incorporate knowledge from different sources and practice asynchronous learning.

Petiz *et al.* (2013) reveal that social media pave the way for employees to participate, collaborate and network while performing organisational (professional) activities alongside personal interests. Social media also encourage employees to generate new ideas and take ownership of their learning in an organisation (Petiz *et al.*, 2013). The new ideas created by employees and presented on social media greatly improve the organisation and allow innovation. In their study, Petiz *et al.*, (2013) interviewed employees which revealed that the sharing of ideas within an organisation has a positive impact on team collaboration. Social media such as blogs can create an environment where employees can keep up to date and can exchange information about trending topics (Petiz *et al.*, 2013). Additionally, social media such as wikis and project management tools allow employees to access information, collaborate on team projects and share their experiences (Petiz *et al.*, 2013; Baxter & Connolly, 2014; Breunig, 2016). The use of wikis in an organisation can create a healthy and positive environment among employees, which then improves efficiency and learning throughout the organisation (Baxter & Connolly, 2014; Breunig, 2016). Employees also suggest that using social media allows them to find solutions to previously encountered problems quickly and they get to share these solutions with other employees (Petiz *et al.*, 2013).

- ***The use of Web 2.0 for communication***

Web 2.0 tools are reported to enhance communication both within and outside of the organisation (Petiz *et al.*, 2013). Communication on social media allows employees to

take part in decision making and improves organisational culture (Petiz *et al.*, 2013). In a case where customers and organisational associates are allowed to partake on social media, knowledge from outside and inside the organisation can be shared and the organisation maintains a good image with the public (Petiz *et al.*, 2013). Thus, the main goal of using social media is to improve innovation and OL (Petiz *et al.*, 2013).

- ***The use of Web 2.0 for sharing information and material***

A study conducted by Dinh *et al.* (2011) that allowed employees to share learning material on a Web 2.0 platform, revealed that the use and the collaborative nature of the Web 2.0 platform in an organisation improved the learning and teaching capabilities of the employees involved. The employees also felt that Web 2.0 was useful and easy to use (Dinh *et al.*, 2011). The employees valued the information provided by the Web 2.0 platform and they described it as very high quality information (Dinh *et al.*, 2011). Employees could share their perceptions on the Web 2.0 platform and their perceptions were displayed in a manner that made it easy for other colleagues to easily engage with (Dinh *et al.*, 2011).

A majority of employees reported that social media allowed them to gain real-life and relevant information from their colleagues, and also take charge of their learning as they were responsible for acquiring, storing, sharing and applying knowledge (Dinh *et al.*, 2011). The fact that they could access the information using a computer meant that the information was easily accessible and did not require much effort on their part (Dinh *et al.*, 2011). The process of using social media to store the experiences and intellectual property of the employees allows organisations to retain knowledge and make it available to the next generation of employees (Dinh *et al.*, 2011; Vuori, 2012).

- ***The use of social networking sites***

Social media micro-blogging sites such as Twitter have been used in organisations to share knowledge and contribute to OL (Kane *et al.*, 2010). Twitter allows employees to communicate by asking each other questions and providing each other with answers (Kane *et al.*, 2010). It is easy for users to share information by retweeting or sharing tweets with other users, and employees can also make use of Twitter to follow experts or mentors in their field, plus share new ideas and maintain discussions with their fellow employees (Kane *et al.*, 2010).

Social networking sites such as Ning, Myspace and Facebook are used by employees to share information and promote networking (Kane *et al.*, 2010). Employees are allowed to create profiles and can indicate their fields of expertise, which then allows them to share their experiences and know-how (Kane *et al.*, 2010). This makes it easy for employees to search for mentors, to get advice and find other colleagues to share solutions to problems experienced in an organisation (Kane *et al.*, 2010).

IM is another Web 2.0 platform used by employees in organisations to discuss and share work-related experiences (Kane *et al.*, 2010). Employees usually share knowledge on the IM platform and can repost the conversations on a blog to ensure that valuable information is also available to other employees (Kane *et al.*, 2010).

- ***Expectations of management and leaders in organisations***

Overall, organisational leaders have shown support for using social media and literature suggests that employees should be trained to use these social media to encourage collaboration (Zhao & Kemp, 2013). The implementation of social media in organisations is said to create a learning atmosphere and subsequently promote OL (Zhao & Kemp, 2013). Thus, the support from the organisation inspires employees to learn and contribute to OL through using social media (Zhao & Kemp, 2013).

Baxter and Connolly (2013) reveal that the success of blogging in an organisation depends on the support that management provides to employees. Management is required to research the challenges that the organisation might face when implementing blogs so that they can mitigate against them (Baxter & Connolly, 2013). Management is expected to take a leading role and lead by example in using blogs, by posting and commenting on articles published on blogs (Baxter *et al.*, 2011). Dreher (2014) adds that the managers and leaders of an organisation need to embrace the use of social media, for employees to be open to the idea of successfully adopting the use of social media in an organisation.

Leaders in an organisation are responsible for fostering an environment that is conducive to learning (Nazem & Mozaiini, 2014). Management's use of social media determines whether employees will be encouraged or discouraged to use social media within an organisation (Filstad *et al.,* 2018). In their study, Filstad *et al.* (2018) reported that management shared articles and held discussions with the employees to update them

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about the company's affairs. This was well received by the employees and allowed them to have a voice and participate in what was happening in the company (Filstad *et al.,* 2018).

Management is expected to offer guidance and support to staff members on how to use social media (such as blogs). Offering support by using administrators who can facilitate employees is one alternative (Baxter *et al.*, 2010; 2011). Management should take a leading role and communicate to their staff members about the benefits of using social media in organisations (Baxter *et al.*, 2010). Employees who have used wikis revealed that organisations should provide clear instructions on how to use social media (such as wikis or blogs) and provide incentives, to encourage the effective adoption and use of social media in organisations (Baxter & Connolly, 2014). Employees should be briefed on the benefits of using these social media for the implementation and use of social media to succeed in an organisation (Baxter & Connolly, 2014).

Support from the leaders of an organisation allows IS to contribute to encouraging employees to use social media (Dreher, 2014). Baxter and Connolly (2014) also add that support from management to staff members (top to bottom level) is needed for social media to be successfully adopted in organisations. Therefore, the use of social media needs to supplement existing learning practices in an organisation for it to be successful and maintainable (Dinh *et al.*, 2011).

- *Employee training on social media*

Managers are expected to offer rewards and training to employees to use social media effectively, for the benefit of the organisation (Baxter *et al.*, 2010; Dreher, 2014). The training is supposed to teach employees to embrace and recognise organisational values, character and beliefs - which inherently improve OL (Dreher, 2014). Baxter and Connolly (2014) also reveal that training sessions and the reassurance that knowledge shared on social media is secured can improve the use of social media in organisations.

Employees also expect organisations to train them and assist them in effectively using social media to improve internal and external communication (Petiz *et al.*, 2013; Filstad *et al.,* 2018). Ideally, organisations are expected to offer guidelines on how employees should behave when using social media, to ensure effective use (Vuori, 2012).

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- *Issues and challenges of social media*

In contrast, the use of social media has also raised issues regarding employees engaging in social activities rather than professional work (Zhao & Kemp, 2013). Some employees that used wikis reported issues, such as the organisation being too small, the organisation lacking proper IT infrastructure or the implementation of social media being too expensive (Baxter & Connolly, 2014). Some staff members reported that they were not confident in sharing their knowledge through wikis as they feared criticism; others reported that they were not comfortable commenting on content created by management (Baxter & Connolly, 2014). Other employees reported that there was a lack of clarity and motivation in the use and implementation of social media (Vuori, 2012; Baxter & Connolly, 2014).

Employees also mentioned platforms such as Google and Facebook offered more in terms of usability and user-friendliness when compared to the Web 2.0 platform (Dinh *et al.*, 2011; Filstad *et al.,* 2018). Employees further revealed that they found it challenging to access the Web 2.0 platform and that its content was not properly organised (Dinh *et al.*, 2011). Employees from Filstad *et al.'s* (2018) study found using the Web 2.0 platform difficult, specifically when searching for information on it. Other issues that they encountered were lack of experience in using and adopting the Web 2.0 platform, the language barrier when using the platform and the fear that what they shared on the platform would be misunderstood and damage their reputation (Filstad *et al.,* 2018).

Some employees feared that since knowledge is power, they would lose their importance in the organisation if they shared their knowledge with other employees (Filstad *et al.,* 2018). Other complaints included colleagues who posted negative comments, which resulted in discouraging other employees, the difficulty in monitoring the content on the platform and making sure that the information shared is of high quality (Dinh *et al.*, 2011; Breunig, 2016; Filstad *et al.,* 2018).

3.3.2   Social media (Web 2.0 platforms) Organisational Learning frameworks

After reviewing the articles that focused on social media frameworks, seven social media frameworks/models were found in the literature. The social media frameworks/models that were revealed from the literature mainly focused on the OL approach; applicability of social media and OL; individual, social and organisational effects on Web 2.0-based workplace learning; social media facilitating OL; collaborative learning; IT-supported OL

and enterprise supported OL. Each relevant social media framework/model that was found in the literature is presented as a sub-section below.

- *OL approach*

Baxter *et al.* (2009a) recommend an investigation into the use of blogging in an organisation. According to the authors, it is important to know if the use of blogs is applicable; if OL happens at the individual level or collective level; if the use of blogs leads to new ways of thinking and learning; if the new ways of thinking lead to reflection and practice; and if the use of blogs leads to cultural change.

Figure 3-8: OL approach
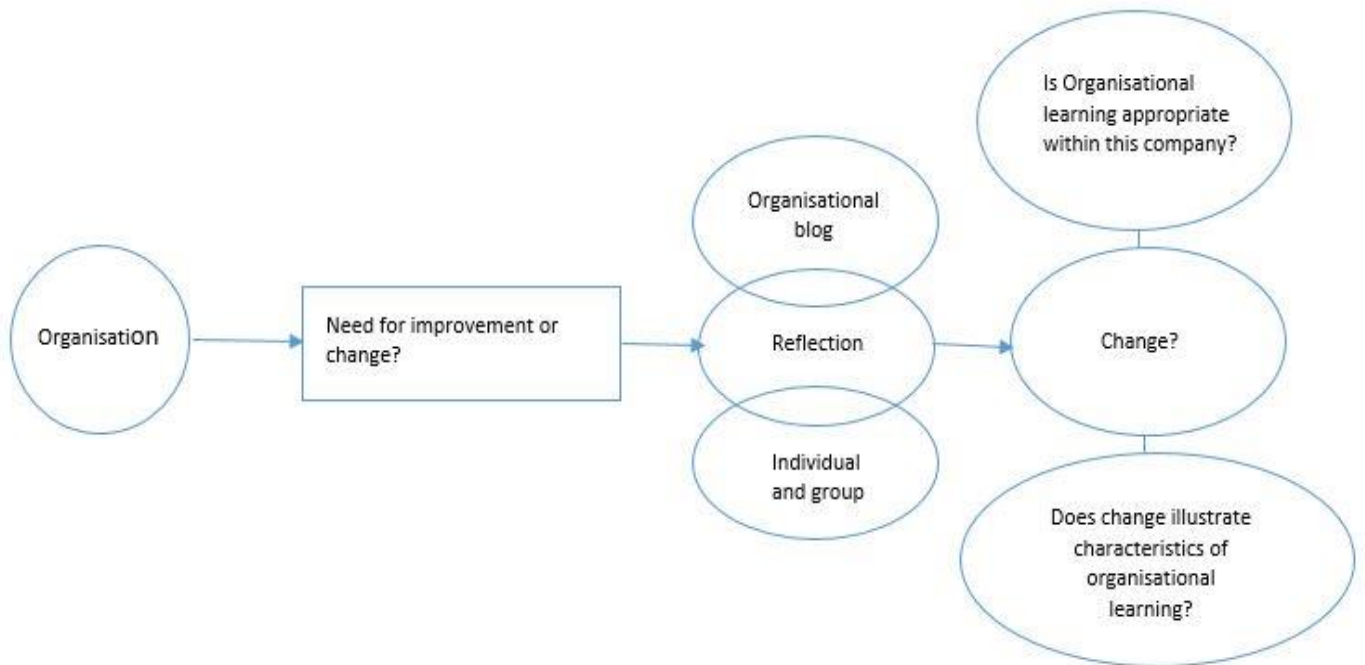
Source: Adapted from Baxter *et al.* (2009a)

- *Applicability of blogs and OL*

Baxter *et al.* (2011) have also developed another framework that highlighted the theoretical association between social media (blogs) and OL. The framework is adopted from a previous model created by Baxter *et al.* (2009b), which emphasises how blogs could be used to facilitate learning in organisations.

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Figure 3-9: Applicability of blogs and OL

- ***Effects on Web 2.0-based workplace learning***

Zhao and Kemp (2013) propose a theoretical model that describes how individual, social and organisational variables affect Web 2.0-based workplace learning. They explain that the communities of practice (CoP) are a mediating variable and organisational support is a moderating variable that makes Web 2.0-based workplace learning possible.

Figure 3-10: Individual, social and organisational effects on Web 2.0-based workplace learning
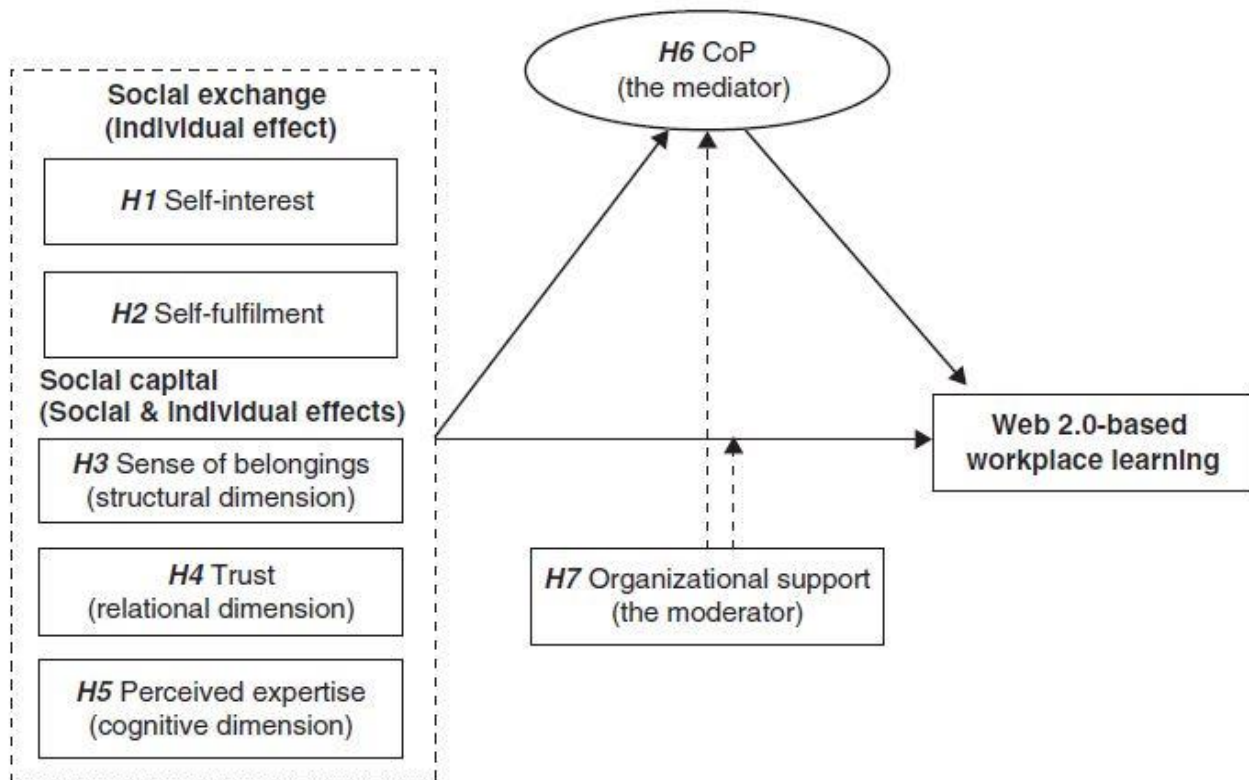
Source: Adapted from Zhao and Kemp (2013)

- *Web 2.0 tools facilitating OL*

Boateng *et al.* (2009) propose a framework in their paper on how organisations can use social media to make knowledge available to employees to subsequently enhance learning in an organisation. Organisations are expected to choose the appropriate social media that fits in with the business values and also develop strategies that foster collaboration among employees to facilitate OL (Boateng *et al.*, 2009).

Figure 3-11: Web 2.0 tools facilitating OL

Organisational context

Organisational Process

Tools & Applications

SECI

2) Process Support (software development)

4) shared platform to share and generate

3) Collaboration 7) Time or Place Invariant

Web 2.0

Implicit (Thoughts, Experiences) Explicit (Wikis, documentation discussions, Blogs, etc)

Implicit (Thoughts, Experiences) Explicit (Wikis, documentation discussions, Blogs, etc)

6) Integrate sources of knowledge

1) Communication and Interaction
5) distribute and diffuse knowledge

Source: Adapted from Boateng *et al.* (2009)

- *Collaborative learning model*

Dinh *et al.* (2011) have conducted a study in which they propose an OL model that is based on employees working together and sharing information in a network of autonomous sites within one organisational domain. The idea behind the model is to move away from the traditional way of learning and sharing information in an organisation which involves one central IS (for example website with the course and learning materials) that disseminates information to all the employees (Dinh *et al.*, 2011).

The proposed model highlights the idea that social media should be used to encourage employees to take charge of their learning and collaborate with other employees in an organisation (Dinh *et al.*, 2011). The OL model presumes that all employees have intellectual property (implicit/tacit and explicit knowledge) that is useful to the operational functions of an organisation (Dinh *et al.*, 2011). The model is based on an interconnected network of entities (which are employees in this case) who are responsible for teaching, learning and contributing to the sites hosted on the network.

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Figure 3-12: Collaborative learning model
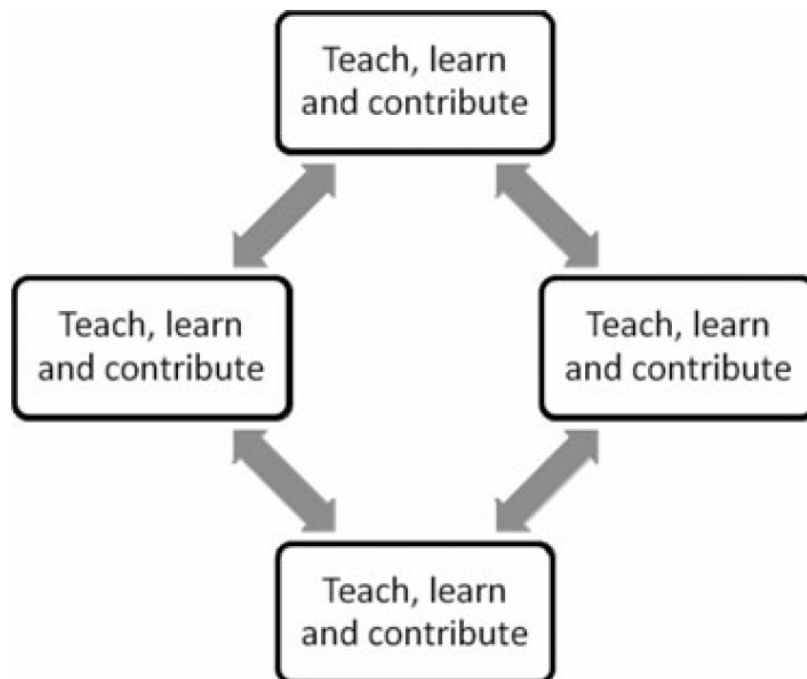
- *IT-supported OL model*

A study conducted by Schlagwein and Bjørn-Andersen (2014) proposes a framework (adapted from Crossan *et al.*, 1999) that incorporates the use of IT (for example IS) and OL, accompanied by the learning processes and levels that come with OL. The framework highlights the three levels of learning in an organisation, namely individual, group and organisational levels (Schlagwein & Bjørn-Andersen, 2014).

The framework also explains the four processes that occur throughout the three levels of learning that take place in an organisation, namely the 4I (Schlagwein & Bjørn-Andersen, 2014). Intuiting and interpreting take place at the individual level, interpreting and integrating take place at the group level, and integrating and institutionalising take place at the organisational level (Crossan *et al.*, 1999). The upward arrows in the figure below highlight the feedforward, which regards new learning occurring from the individual level to the organisational level (Crossan *et al.*, 1999). The downward arrow highlights the feedback, which regards using the knowledge that has already been acquired or learned occurring from the organisational level to individual learning level (Crossan *et al.*, 1999).

Figure 3-13: IT-supported OL model
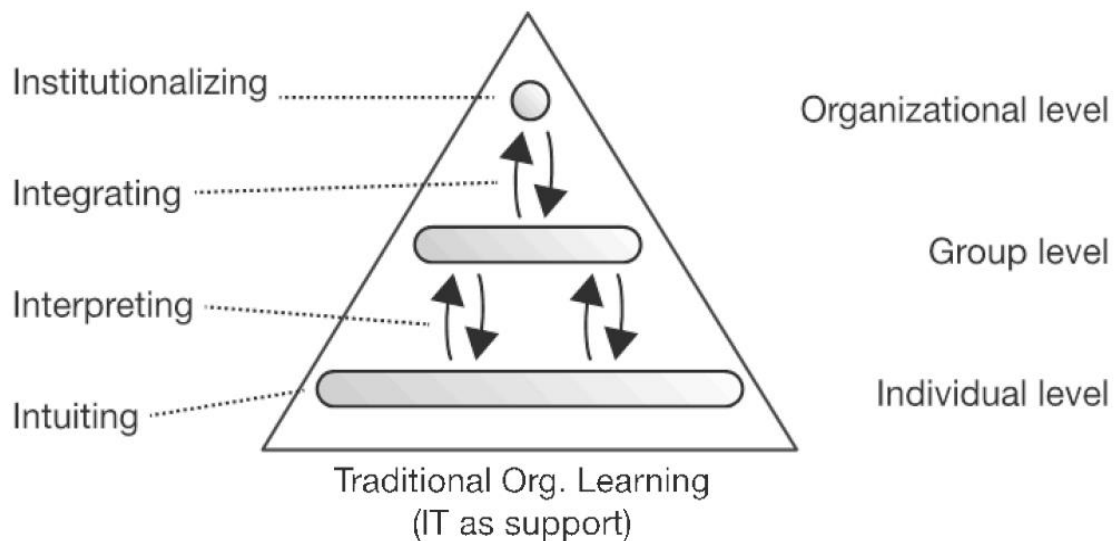
Schlagwein and Bjørn-Andersen (2014) explain that the traditional OL that occurs in an organisation is a result of members or employees of the organisation being included and taking part in the learning process of the organisation. The learning process in this case is supported by the use of an IT system that allows employees to discuss, collaborate and upload ideas or information, which then contributes to OL (Schlagwein & Bjørn-Andersen, 2014). Although the OL model proposed by Schlagwein and Bjørn-Andersen (2014) involves the use of IT in an organisation, it has failed to indicate i) whether the IT system in use falls under social media and ii) the type of OL that occurs in the organisation. Therefore, the model falls short of what this study aims to cover.

- *Enterprise supported OL model*

Qi and Chau (2016) have conducted a study where they propose a model that highlights the effect of the use of Enterprise Social Networking Systems (ESNS) on OL. The study reveals that the use of ESNS improves knowledge innovation/creation and the sharing/exchange of knowledge among the employees in an organisation (Qi & Chau, 2016). The study also reveals that the overall use of ESNS in an organisation proves to have a positive effect, as it improves OL since both knowledge creation and sharing lead to OL (Qi & Chau, 2016). The model (as shown below) further highlights that the use of ESNS (as an informal way of learning) and knowledge management activities (as a formal way of learning) carried out by employees, all play a vital role in the OL process.

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Figure 3-14: Enterprise supported OL model
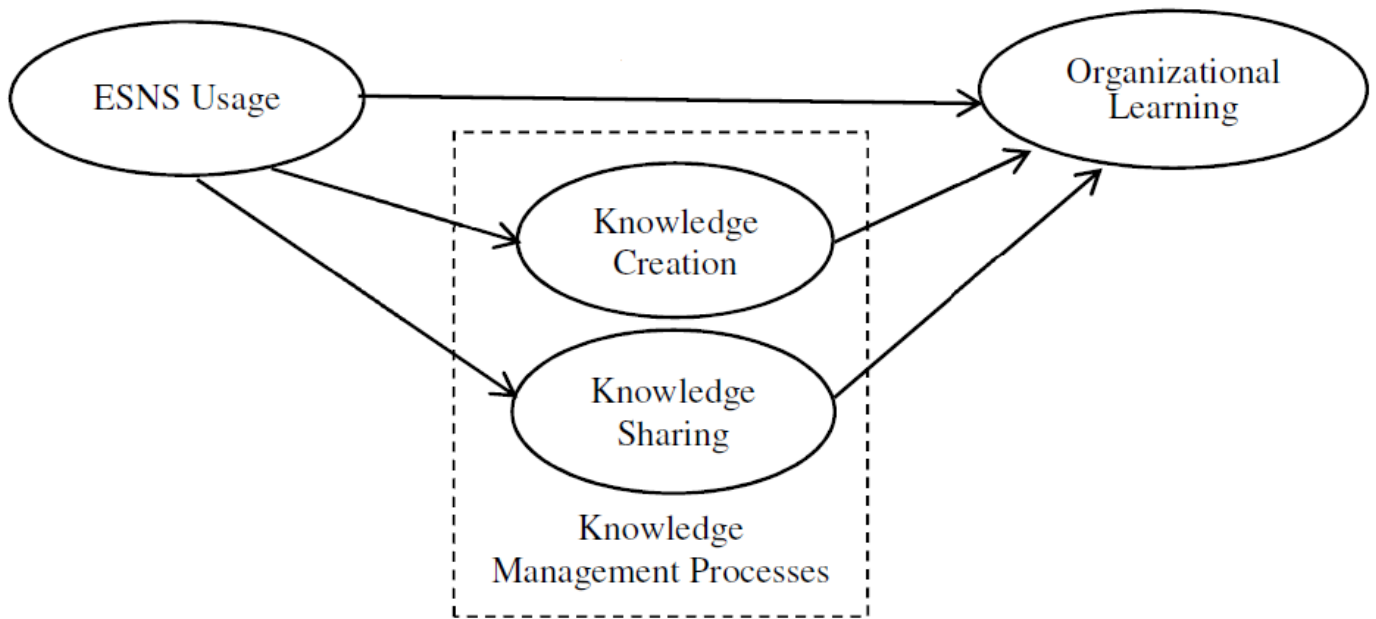
: Adapted from Qi and Chau (2016)

3.3.3   Applicability to this study

Although the OL frameworks above mention the use of social media in an organisation, the frameworks failed to indicate the level and type of OL that occurs. Therefore, the frameworks fall short of what this study aims to cover. This is because the level and type of OL that occur are of vital importance for this study, as they were revealed to play a vital role in the OL literature.

3.3.4   Summary

Chapter Four presented the systematic literature review protocol and strategy that was used and the relevant literature was systematically presented under the relevant headings or topics. The chapter presented OL and social media as the main concepts of this study. In the OL section, the researcher revealed the types, processes, dimensions and knowledge regarding OL.

The researcher then discussed the scope of learning in an organisation, as well as the OL levels. Some of the existing frameworks regarding OL adopted from the literature were discoursed. The chapter later presented the social media section, in which the researcher revealed the social media used in organisations and explained how social media are used.

Finally, the chapter presented the existing frameworks of social media adopted from literature.

3.3.5   Insights

Social media seems to be used interchangeably with Web 2.0 tools, as they are all used to create and share information and knowledge. This allows employees to network, collaborate and interact with each other, which then inevitably leads to OL. Organisations can use social media to benefit all stakeholders, both internally (staff members) and externally (customers, suppliers). Blogs and wikis mainly provide a platform that fosters the sharing of ideas, access and storing of information, whilst creating an environment that allows employees to work on group projects. The storing of information on a centralised platform also allows employees to revisit past encounters to provide guidance and prevent future mistakes. Social networks and micro-blogging sites encourage employees to communicate, network, interact with each other, create, and share their content, which allows the sharing of knowledge.

Using social media has also raised issues, ranging from employees engaging more in social activities rather than professional activities, employees not being confident to share their knowledge, employees questioning the quality of information shared on social media, an unfriendly user interface of social media and finding it difficult to access content on social media. Nevertheless, it seems most of these issues can be countered through management providing much-needed support to employees. Leaders in an organisation have an important role to play to encourage employees to use social media for OL. Organisational leaders are expected to offer guidance and training to employees on how to use social media effectively to promote OL.

The general feeling of using social media in organisations is reported to be beneficial to OL. It is worth noting that scholars have proposed several frameworks that have combined social media and organisational. Even though that is the case, none of the frameworks has mentioned which type of OL and at which level OL takes place when social media are used in an organisation. Therefore, this study aims to fill the gap and finally draw up a framework that discusses the main concepts, which include social media, type of OL and the level at which OL happens.

3.4 CONCLUSION

There are several important concepts revealed in the literature which deal with social media and OL. The researcher identified and presented the following major concepts: (1) various definitions of social media/Web 2.0 tools; the common theme is that social media describes any platform that allows users to interact and share information. (2) It is reported that there is ample use of social media in organisations, which then results in OL at the end of the day. (3) Social media used in organisations for OL range from instant massaging tools, blogs, wikis, micro-blogging sites and social networking sites.

(4) Employees interviewed in other studies have also revealed the advantages and disadvantages of using these social media alongside their experiences with social media. (5) Literature mentions that the success of using social media in organisations mainly depends on the support that comes from management or people in power. The success of using social media in organisations also depends on training employees on how to use social media effectively. (6) Literature also revealed at least twelve frameworks or models proposed by scholars, which incorporated the use of social media and how it relates to OL. Based on the major concepts regarding OL and social media that were revealed in this chapter, the researcher can therefore state that study addressed the scope of learning in an organisation, the social media tools that are used by organisations for OL and how organisations use social media tools for OL. The OL frameworks and the social media frameworks were then integrated by adapting important concepts from both, to develop a new theoretical conceptual framework, as discussed in the next chapter.

CHAPTER 4.THEORETICAL UNDERPINNING AND PROPOSED FRAMEWORK

4.1 INTRODUCTION

In this chapter, the researcher presents the theoretical lens and foundations that were used to guide this research. Under the theoretical lens section, the researcher discusses why OL theory is the ideal theory for this study, where the OL theory has been used in literature, the benefits of the OL theory and the criticism towards the OL theory. The researcher also presents and explains, in detail, the main concepts of OL theory as the theory that guided this research study. The researcher later presents the proposed theoretical framework adopted from the literature and also explains the components that make up the theoretical framework. The researcher also explains how the components that make up the theoretical framework relate and feed into each other.

4.2 THEORETICAL LENS

Literature has revealed theories that have been used in the organisational context, some of which include institutional theory, social capital theory and OL theory (Suter *et al.*, 2013; Ngai, Tao & Moon, 2015; Birasnav, Chaudhary & Scillitoe, 2019; Hamedinasab, Ayati & Seraji, 2020). The institutional theory deals with examining and analysing the internal and external influences of organisations (Suter *et al.*, 2013). The social capital theory deals with developing social relationships and promoting cooperation between companies to have access to and create valuable and critical resources (Birasnav *et al.,* 2019; Hamedinasab *et al.,* 2020). OL theory deals with the learning capacity of an organisation and how an organisation adapts to certain environmental uncertainties to stay competitive (Odor, 2019; Hamedinasab *et al.,* 2020). This study does not focus on business-to-business or organisational influences, rather it deals specifically with employees who operate internally in an organisation; therefore, the OL theory or lens would be appropriate to use in this case.

Theories used in an organisational context can be used through different perspectives and approaches, either through an intra- or inter-organisational perspective (Ngai *et al.,* 2015). An intra-organisational perspective or lens deals with activities that involve employees and peers in an organisation while an inter-organisational perspective or lens

deals with activities that involve customers, business partners and external organisations (Ngai *et al.,* 2015; Pedersen, Soda & Stea, 2019). Inter-organisational perspective theories primarily highlight a customer orientation (customer relationships) and marketing orientation (brand building) (Ngai *et al.,* 2015; Agostini *et al.*, 2020). The focus of this study deals with employees and peers in an organisation and therefore a theory with an intra-organisational perspective theory or lens is appropriate.

OL theory has been used before as a theoretical lens for studies that have used an interpretive approach/philosophy to understand and interpret a social phenomenon through the perceptions and experiences of the employees (Saadat & Saadat, 2016; Myers, 2019; Odor, 2019). Since the objective of this research is to understand how social media can be used to facilitate OL among employees and peers in an organisation, the OL theory was chosen as the ideal theoretical lens to guide this research.

Furthermore, OL theory is ideal because it presents organisations with a competitive advantage and a learning opportunity over other organisations (O'Keeffe, 2002; Wang & Ahmed, 2003; Saadat & Saadat, 2016; Odor, 2019). The idea behind the OL theory is to make sense, understand and interpret the perspective of innovation and creativity in organisations as a strategy to sustain a competitive advantage (Wang & Ahmed, 2003; Odor, 2019). This is similar to and in line with the competitive and learning opportunity offered by social media in organisations, which is another topic of interest in this research.

OL theory is described as a process that allows organisations to question their existing systems, processes, strategies, services and products and apply different modes of learning to gain a competitive advantage over competitors (Wang & Ahmed, 2003; Odor, 2019). The OL theory involves the organisation taking actions to provide a solution to a problem and therefore building on existing knowledge which then leads to learning and further knowledge creation (Argyris & Schon, 1996; Wang & Ahmed, 2003; Pahl-Wostl, 2009). Organisations take the necessary steps and actions when they experience a mismatch between the actual results and expected results; they respond to the mismatch by thoughtfully taking the right actions to bring the desired outcomes to solve the problem encountered in the organisation (Wang & Ahmed, 2003).

Researchers such as Argyris (1976), Anderson (1994), Argyris and Schon (1996), Wang and Ahmed (2003), Kamya, Ntayi and Ahiauzu (2011), and Reddick, Chatfield and Ojo

(2017) have extensively used OL theory in their research. Anderson (1994), Argyris (1976) and Argyris and Schon (1996) have explained the definition and the important concepts of OL theory in their literature. Wang and Ahmed (2003) identified and described the vital focuses and perspectives of OL, including creativity and innovation, in their literature. Kamya *et al.* (2011) discussed OL concerning knowledge management and innovation to achieve a competitive advantage. Reddick *et al.* (2017) discussed and developed a framework using OL theory and social media.

Literature has also revealed the benefits and drawbacks of the OL theory. The benefit of OL theory is that it is used by organisations as a solution to detect and correct errors, to gain a competitive advantage over other organisations (Robinson, 2001; O'Keeffe, 2002; Saadat & Saadat, 2016; Odor, 2019). OL theory allows companies to improve their employees' performance in the long run and this allows the companies to stay ahead of their peers (Kamya *et al.,* 2011; Saadat & Saadat, 2016). Companies without OL or with a low level of OL are usually found to be stagnant and cannot adjust to changes within and outside the organisation (Odor, 2019). Other benefits include OL theory empowering employees in an organisation, encouraging innovation and creativity among employees, increasing the speed of changing processes in an organisation and enhancing the science level in an organisation by using shared understanding and points of view (Wang & Ahmed, 2003; Kamya *et al.,* 2011; Saadat & Saadat, 2016; Odor, 2019).

Criticism of the OL theory reveals that the description is too broad - it refers to all the changes that take place in the organisation (Wang & Ahmed, 2003). OL theory is further criticised for its limited role in detecting errors whilst being selective of how to correct the errors found (Robinson, 2001). OL theory also requires organisations to continuously improve and be devoted to permanent learning (Wang & Ahmed, 2003; Saadat & Saadat, 2016). OL is not a single process, thus scholars need to carefully consider different perspectives when improving on the theory (Robinson, 2001). Another criticism is that OL theory is known for being biased toward the importance of system thinking and the traditional scientific approach to management (Wang & Ahmed, 2003).

This study will guard against biased and selective OL practices as different employees with distinctive roles and titles will be interviewed from different companies to get a different point of view that will help build on the existing theory. In addition, the fact that

this study incorporates the different types and levels of OL will also provide a new perspective on existing theory.

4.3   CONCEPTS OF ORGANISATIONAL LEARNING THEORY

The researcher explains the main concepts of OL theory below (Anderson, 1994; Argyris & Schon, 1996):

- **Governing values:** The core or underlying rules and values that help govern an organisation;
- **Actions:** The actions and reactions taken by the organisation to correct an identified problem; and
- **Consequences:** The intended and unintended outcomes that result from actions taken.

When the action that has been taken, results in an intended consequence, then there is a match between action and consequence (Anderson, 1994). When the action taken results in an unintended consequence, then there is a mismatch between action and consequence and this may hinder achieving a certain goal in line with organisational governing values (Anderson, 1994). The mismatches between actions and consequences result in single-loop learning and double-loop learning (Anderson, 1994), which involves trying to correct the actions until the desired consequence is reached (Argyris & Schon, 1996). According to Anderson (1994), Argyris and Schon (1996) and Pahl-Wostl (2009):

- **Single-loop learning** involves making minor repetitive changes to the current organisational behaviour. Changes are made within the current norms of an organisation and the core rules and values remain unchanged;
- **Double-loop learning** involves making radical changes to the current organisational rules and values which subsequently change behaviour. The underlying core rules and values of the organisation are evaluated, changed, questioned and challenged; and
- **Triple-loop learning** involves making changes to the governing rules, values and norms of the organisation. It makes considerations of the fundamental beliefs, values, and worldviews of the organisation, especially if the worldview assumptions do not apply anymore.

Using the concepts from the OL theory, this study explores what kind of learning occurs from the use of social media by employees in an organisation. It also explores the changes that the use of social media by employees may have on the organisation's governing values, actions and resulting consequences.

Figure 4-1: OL theory
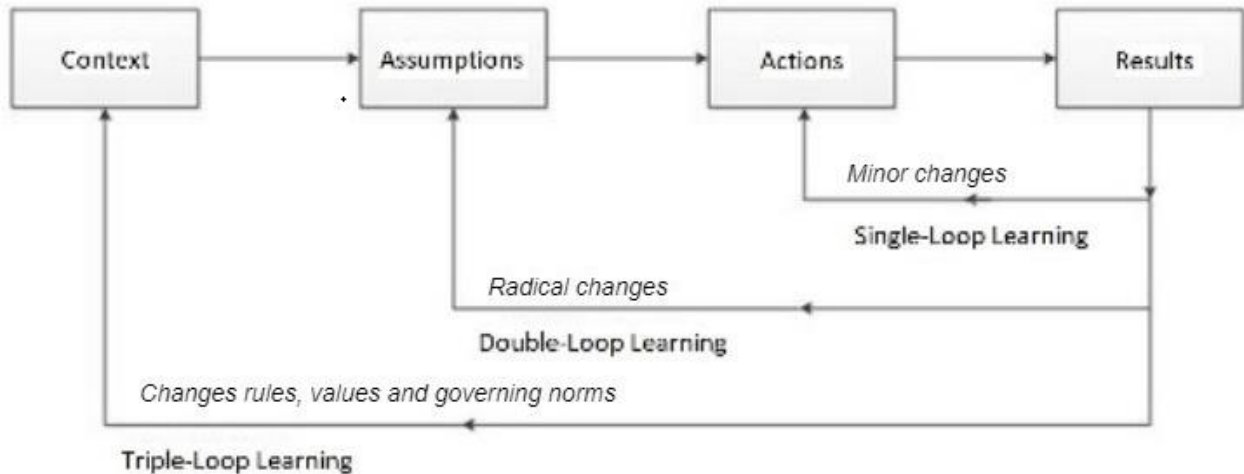
4.4 PROPOSED THEORETICAL FRAMEWORK COMPONENTS

The proposed theoretical framework consists of three components adapted from OL frameworks and social media frameworks. These components were derived from various literature sources (cf. Sections 4.2 and 4.3). The three main theoretical framework components are discussed below.

4.4.1 Types of Organisational Learning

The types of OL components were extracted from studies conducted by Argyris and Schon (1978; 1996), Argyris (1983; 1994), Fiol and Lyles (1985) and a model presented by Pahl-Wostl (2009). As mentioned, **single-loop learning** involves making minor repetitive changes to the current organisational behaviour (Argyris & Schon, 1996; Pahl-Wostl, 2009); **double-loop learning** involves making radical changes to the current organisational rules and values which subsequently change behaviour (Argyris & Schon, 1996; Pahl-Wostl, 2009) and **triple-loop learning** involves making changes to the governing rules, values and norms of the organisation (Pahl-Wostl, 2009). The types of OL feed into the different levels of the organisation (discussed in the next section), and

this is where the actions that result from the loops of learning take place, at different OL levels (cf. Section 4.2.2).

4.4.2 Organisational Learning levels

The OL level components were extracted from studies conducted by Baxter *et al.* (2009); Anica-Popa (2011); Baxter *et al.* (2011); Petiz *et al.* (2013); and Hasson *et al.* (2016). These components were also adopted from models and frameworks created by Crossan *et al.* (1999); Baxter *et al.* (2009); Schlagwein and Bjørn-Andersen (2014) and Tam and Gray (2016). **Individual learning** involves an individual learning new skills or ideas on behalf of the organisation (Baxter *et al.*, 2009; 2011; Anica-Popa, 2011). **Group learning** involves a group creating collective knowledge, shared by all group members (Baxter *et al.*, 2009; Anica-Popa, 2011; Hasson *et al.*, 2016). OL involves the organisation as a whole acquiring and developing knowledge (Baxter *et al.*, 2009; Anica-Popa, 2011). The types of OL (single-, double- and triple-loop learning) feed into the above-mentioned OL levels. The OL levels are the initial points of learning in the organisations, and entities must interact on all levels for successful OL to take place. These three OL levels are related to social media. As entities will make use of social media at each level, social media is the next component that will be presented (cf. Section 5.4.3).

4.4.3 Social media

Social media is the other main component that was extracted from research studies, models and frameworks conducted and created by Baxter *et al.* (2009); Boateng *et al.* (2009); Baxter *et al.* (2011); Zhao and Kemp (2013); Schlagwein and Bjørn-Andersen (2014); and Qi and Chau (2016). In this research study, social media is referred to as platforms that allow users to create and share content, unlike Web 1.0 platforms which only involve providing access to information and content for users (Agerdal-Hjermind, 2014). Social media can also be described as technologies that allow users to network and accumulate knowledge, drawing from personal experiences and practice (Boateng *et al.*, 2010). Zhao and Kemp (2013) simply describe Web 2.0 as the second-generation web platforms that permit users to interrelate and network with one another.

The social media component is linked to the different OL levels, as social media are used at each learning level, be it at individual, collective (group) or OL levels. Once employees

have made use of social media, the platforms enable different types of OL (single-, double- and triple-loop learning) mentioned previously. OL allows changes and actions to be implemented into the organisation. These changes and actions are then fed back into the different levels of the organisation to complete the OL loop (cf. Sections 4.3.1 and 4.3.2).

The figure below highlights the three key components of the proposed framework that will guide this research. The framework highlights the **levels of OL** (individual, group and organisational levels), the **Web 2.0 tools** used in organisations and the **types of OL** (single-, double- and triple-loop learning). The main key components (**Levels of OL** and **Web 2.0 tools)** that were added to the initial OL framework are highlighted to show emphasis. It is worth noting that the double- loop learning terms: assumptions and frames (which was used originally in the article by Pahl-Wostl (2009)), represent the same concept as this involves employees questioning the underlying assumptions and frame of reference that already exists in the organisation (Pahl-Wostl, 2009). This is all part of the process called reframing which allows employees to reflect on problem framing, goals and making assumptions on how these goals can be accomplished (Pahl-Wostl, 2009). The terms: outcomes and results also represent the same concept, as this involves the end result or end product after all the **types of OL** (single-, double- and triple-loop learning) have taken place in the organisation (Pahl-Wostl, 2009). This indicates that there is a feedback loop and a constant cycle change to the outcomes or results of learning in an organisation (Pahl-Wostl, 2009).

Figure 4-2: Proposed theoretical framework and key components
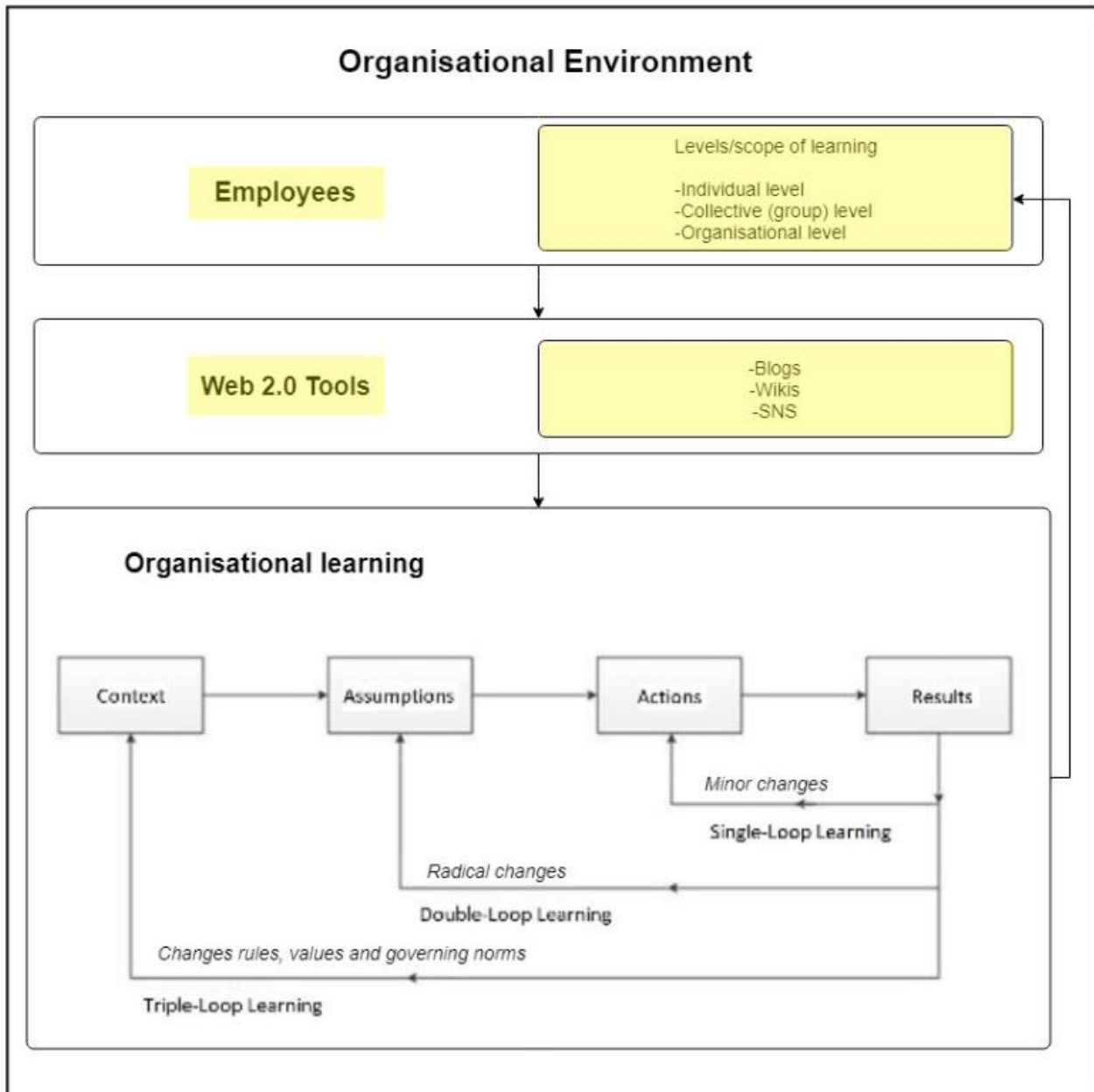
4.5   CONCLUSION

Chapter Five presented and highlighted the (1) theoretical lens that may be suitable for this study. (2) The chapter then highlighted why the theory was chosen (as it best suits the study at hand), where the theory has been used and the criticism towards the theory. (3) The researcher proposed a theoretical framework adopted from literature which could then be evaluated in organisations.

Since previous researchers have used OL theory to focus on studies that dealt with employees internally, studies using qualitative data, studies using an interpretive approach/philosophy and studies using an intra-organisational perspective involving employees and peers, the researcher concludes that this study should use OL theory as its theoretical lens. This also justifies why the proposed theoretical framework is guided and informed by the OL theory and social media frameworks adapted from literature. The following chapter, Chapter Five, will discuss the research methodology used in this study. This includes the research philosophy, research design, type of data and data collection method employed.

CHAPTER 5.METHODOLOGY

5.1 INTRODUCTION

This chapter presents and discusses the research methodology. The researcher explains and motivates the research design, as well as the sampling, data collection and data analysis methods. A discussion on why certain research methods are appropriate for this study follows. Thereafter, ethical concerns are considered.

For this study, an interpretive research philosophy gave rise to a case study design. In addition, interviews and focus groups from a targeted population were used in order to collect qualitative data. In the following section, the researcher highlights the phases that this study had to go through to reach its final deliverable, which is drawing up a new OL and social media framework.

5.2 RESEARCH PHASES

This study can be broken down into six phases of research. It is, therefore, necessary for this section to provide a detailed overview of the phase; Figure 5-1 below gives a visual representation of the six phases as they occurred.

Figure 5-1: Phases of the research

In **Phase 1,** the researcher conducted a systematic literature review on key concepts of the research (namely OL and social media). The researcher presented the review protocol and strategy that was used and the relevant literature was presented under the appropriate headings or topics. The systematic literature review was used to provide an in-depth understanding of the key concepts whilst presenting the terms, processes and frameworks that exist under each concept.

In **Phase 2,** the researcher created a draft of the theoretical framework of OL and social media, adopted from the systematic literature review. This preliminary theoretical framework includes all relevant concepts, key terms, processes and frameworks of OL and social media that were extracted from the literature review.

In **Phase 3,** the researcher conducted an expert review at Company A. Interviews were conducted with key participants who had experience using social media for OL. The researcher collected and analysed the data; thereafter he re-evaluated the framework by including all the missing key components that were adopted from the interview findings. The expert review tested the preliminary theoretical framework, which was then updated based on the results from expert reviewers.

In **Phase 4,** the researcher conducted an expert review at Company B. As with Phase 3, interviews were conducted with key participants who had experience using social media for OL. The researcher collected and analysed the data; thereafter he re-evaluated the framework by including all the missing key components that were adopted from the interview findings. The expert review tested the preliminary theoretical framework, which was then updated based on the results from expert reviewers.

In **Phase 5,** the researcher conducted an expert review at Company C. Again, the process in Phases 3 and 4 was followed. Interviews were conducted with key participants who had experience using social media for OL. The researcher collected and analysed the data; thereafter he re-evaluated the framework by including all the missing key components that were adopted from the interview findings. The expert review tested the preliminary theoretical framework, which was then updated based on the results from expert reviewers.

In **Phase 6,** the researcher triangulated the research findings from all three companies that were interviewed, evaluated the framework, updated the framework and created a final theoretical framework that included new findings. In this case, multiple methods and data sources were used in this research to understand the findings and develop a comprehensive framework. Validity and reliability were ensured by using the findings from three different sources or case studies. Data collected from different expert reviewers and organisations offered rich results that were useful for re-evaluating and updating the framework, to create the final conceptual theoretical framework.

5.3   RESEARCH DESIGN

In this section, the researcher discusses the research philosophy in-depth; specifically, what it entails and why it relates to the topic and concepts of the research. Thereafter, the research strategy and how it pertains to this study are explained, as well as its advantages and disadvantages. A specific sub-section will deal with how to guard against the disadvantages.

5.3.1   Research philosophy/paradigm

Different types of research philosophies/paradigms are used to guide research studies; these include the interpretive research paradigm, positivist research paradigm and critical research paradigm (Olivier, 2009; Žukauskas, Vveinhardt & Andriukaitienė, 2018; Myers, 2019). The interpretive research paradigm involves the researcher trying to make sense, understand and interpret a social phenomenon through the perceptions, experiences, values and biases of the people involved (Szyjka, 2012; Romani *et al.*, 2018; Myers, 2019; Bonache & Festing, 2020). The positivist research paradigm involves the researcher trying to observe, measure, compare, predict and manipulate the causal relationships between values and variables of a phenomenon; these relationships can be explained logically and objectively (Szyjka, 2012; Romani *et al.*, 2018; Myers, 2019; Bonache & Festing, 2020). The critical research paradigm involves the researcher trying to focus on the relationship between power, knowledge and theory; the researcher places more emphasis on studying the structures, oppression and status quo of the phenomenon being studied (Romani *et al.*, 2018; Myers, 2019).

This study uses an interpretive research philosophy as it aims to understand how social media facilitate effective OL. The OL theory is used together with the interpretive philosophy/paradigm to determine how employees use Web 2.0 tools in organisations and how that use leads to OL. Another point of interest that is explored is to find out what type of OL occurs and at what level it occurs when employees engage with social media. Interpretive research is a commonly used research philosophy amongst IS researchers (Johari, 2006; Walsham, 2006) and has become a well-known research philosophy in the IS field (Klein & Myers, 1999). Interpretive research involves taking an inductive approach by considering participants' subjective opinions, to understand the phenomenon of interest by analysing peoples' interpretations (Walsham, 1995; Myers, 1997; Johari,

2006). Klein and Myers (1999) and Goldkuhl (2012) add that the interpretive research philosophy aims to explore and understand in-depth perceptions, the subjective meaning behind the perceptions and the actions of people. Thus, interpretive research is suitable for this research, since this study aims to understand - from employees' perspectives - how social media facilitate effective OL.

Interpretative research is an ideal paradigm to use regarding qualitative research because it is a well-expanded and established paradigm (Klein & Myers, 1999; Goldkuhl, 2012). The main objective of interpretivism research is to acknowledge, analyse restructure, comprehend and avoid altering the perceptions of people, to use them as a foundation for theory construction (Goldkuhl, 2012). Interpretative research usually focuses on the people (who are part of a social group) and the relationships and interactions that they form (Klein & Myers, 1999; Goldkuhl, 2012). Researchers then try to find meaning and link how these meanings influence actions (Goldkuhl, 2012). With interpretivism, it is important to have a holistic understanding of the topic of interest instead of only understanding the different parts (Goldkuhl, 2012). The holistic understanding of the study forms the foundation of interpretative research (Goldkuhl, 2012); thus, the researcher in must engage in the understanding of the study by carrying out a field study and generating data through interpretation (Klein & Myers, 1999; Goldkuhl, 2012).

5.3.2   Research strategy

Different types of research strategies/methods are used to guide qualitative research studies; these include ethnography, grounded theory, phenomenology, narrative research, and case studies (Lewis, 2015; Creswell & Poth, 2016; Mengmeng, 2018; Renjith *et al.*, 2021). Ethnographic research involves the researcher trying to understand the cultural patterns, cultural knowledge and behaviours of people and also focuses on narrating and interpreting the shared customs, common meanings and shared experiences of a group of people (Mengmeng, 2018; Tomaszewski, Zarestky & Gonzalez, 2020; Renjith *et al.*, 2021). Grounded theory research involves the researcher trying to develop or create a theory in the setting of the social phenomenon that is being studied and is more focused on generating a new theory (Ngenye & Kreps, 2020; Renjith *et al.*, 2021). Phenomenological research involves the researcher trying to define the root importance and the central meaning of the common experiences of individuals regarding

a certain phenomenon being studied (Ngenye & Kreps, 2020; Tomaszewski *et al.*, 2020; Renjith *et al.*, 2021). Narrative research involves the researcher trying to tell the story of an individual's experiences to a larger audience whilst exploring the life of an individual (Mengmeng, 2018; Tomaszewski *et al.*, 2020; Renjith *et al.*, 2021). Case study research involves the researcher trying to understand a particular case, event or activity by gaining an in-depth analysis of the case(s) and focusing on describing the issues revealed by those being studied (Mengmeng, 2018; Tomaszewski *et al.*, 2020; Renjith *et al.*, 2021).

According to literature, interpretive research philosophy generally uses the case study as a research strategy, as case studies can provide sufficient information for an interpretive perspective (Walsham, 1995; 2006; Andrade, 2009). Case studies have also proven to be appropriate in providing an interpretative understanding of phenomena in their natural setting in the IS research field (Andrade, 2009). Walsham and Han (1993) concur by stating that case studies are linked to the interpretive theoretical lens. This, therefore, justifies the suitability of using a case study under the research philosophy for this study.

A case study is a method of investigating and observing a phenomenon within its usual setting or questioning people to collect data (Myers, 1997; Klein & Myers, 1999; Kaplan & Maxwell, 2005). The researcher aims to have a primary understanding of individuals or events surrounding a phenomenon and tends to collect information from various sources, which is used for triangulation (Walsham & Han, 1993; Yin, 1994; 2004; Kaplan & Maxwell, 2005). Information is gathered from various sources to ensure that data are valid and accurate (Meredith, 1998).

A case study can take an interpretative research paradigm approach, which then makes use of qualitative or quantitative methods to conduct in-depth investigations and understand the phenomenon being studied (Meredith, 1998; Malhotra & Grover, 1998). Case studies are also used if the phenomenon being studied is not common, not well understood, needs to be clarified and the study is likely to reveal unique results (Yin, 1994; Mann, 2003). A case study was justified for this study as i) it falls under the IS purview, and ii) it seeks to answer *How social media facilitate effective OL,* which may yield new results and information (Myers, 1997).

There are several benefits of using case studies when it comes to studying a specific phenomenon (Walsham, 1995). Specifically, the researcher is allowed to study the

phenomenon of interest with a complete first-hand understanding, in its natural setting (Myers, 1997; Yin, 2004; Iacono, Brown & Holtham, 2011). Case studies allow researchers to use various sources of data, such as comparing documents and conducting observations and interviews to collect different types of data (Yin, 1994). Furthermore, the data collected can be used to evaluate existing theories and create new theories (Meredith, 1998). Case studies also allow researchers to ask profound questions, reflect thoroughly on findings and have an in-depth understanding of the topic of interest (Gable, 1994; Darke, Shanks & Broadbent, 1998).

Unfortunately, case studies are also found to have drawbacks (Walsham, 1995). They are known to take up a lot of time, are costly and yield a plethora of documents, especially when conducting observations (Yin, 1994; Meredith, 1998). In an attempt to save time and costs, this study employed purposive sampling, which involved selecting several participants that were likely to provide data that were useful to the study. Findings from case studies cannot be generalised to the overall population but can only be generalised in the event of proposing theories. Therefore, results from this study were not generalised to all organisations but results were presented for each specific case study.

Case studies are known to yield bias and subjective perceptions, which then tend to have an undesired impact on the outcomes of the research (Yin, 1994; Mann, 2003; Iacono *et al.,* 2011). To guard against biases, this study gathered data from different organisations, from different sectors and the participants with different roles and experiences in the organisations. This helped to mitigate subjective opinions and helped the researcher gain more objective perceptions from participants. Case studies are generally difficult to conduct and require the researcher to understand the procedures and accuracy involved, as well as methods and tools to use in triangulation (Meredith, 1998). Conducting a good case study is challenging and ultimately rests on the researcher's abilities (Yin, 1994).

Two types of case studies can be conducted in research, namely single and multiple case studies (Yin, 1994). Multiple case studies are used when creating a framework that can be replicated in multiple cases to get similar or different results, in order to validate the research results (Yin, 2004; 2009). The motivation to use interpretive case studies is to create a theoretical framework which considers all the previous knowledge and forms a basis to inform the research conducted earlier (Walsham, 1995; Edwards, 1998). A conceptual framework is seen as one of the outputs from case studies which can be used

to develop, gain an understanding or extend a theoretical framework and to inform other research work in the IS field (Walsham, 1995; Edwards, 1998). Therefore, multiple case studies were carried out in various organisations for this study, to help formulate and inform the framework. As mentioned above, the case study was suitable for this study because this study aimed at investigating the phenomenon of interest in its natural setting. Therefore, the study made use of a qualitative interpretivism approach and collected data by questioning participants to understand their perceptions.

5.4   SAMPLING

This section presents the target population of the study. It also describes the sample method and sample size for the study. The section also explains and justifies how the sample was selected.

5.4.1   Target population

Target population refers to the whole or entire group of participants that a research study is focused on and represents a group from which a study sample is selected (Stratton, 2019; Raifman *et al.*, 2022). Individuals that are selected to be part of a research study should always represent or reflect the target population (Stratton, 2019; Raifman *et al.*, 2022). The target population for this study were employees from organisations in Gauteng Province, South Africa, who have experience in using social media for OL. This study focuses on employees at different levels of the organisation (from management to mid-level employees), as they are the main actors involved in the use of social media for OL. The researcher asked for key informants from the target population and these informants were chosen based on certain criteria that met the requirements of the study (expertise in using social media for OL), as suggested by Bricki and Green (2007).

5.4.2   Sampling method

Purposive sampling was appropriate for this study since participants needed to meet certain criteria to be interviewed (employees who have and those that do not have experience in using social media for OL) (Bricki & Green, 2007). Purposive sampling involves choosing informants and judging who is most likely to reveal data that is useful to the study (Bricki & Green, 2007). Researchers are expected to identify the appropriate sources that will likely provide relevant data, determine the important questions to ask the

participants and have an idea of who to interview when it comes to sampling (Harrell & Bradley, 2009).

The suggested sampling method that was used to supplement the purposive sampling method, in this case, is the maximum variation sampling method (Bricki & Green, 2007). Bricki and Green (2007) explain that maximum variation sampling considers key demographic variables that have a high probability of influencing the participants' perspectives on the topic of interest (Coyne, 1997; Bricki & Green, 2007). Variables that were considered in this case were job title, professional rank and experience of employees, as these might influence employees' use of social media in organisations to enhance OL. Importantly, choosing a diverse sample group ensures that participants provide rich data and valuable experiences (Alhazmi & Rahman, 2014).

5.4.3   Sample size

Sample sizes in qualitative research are usually small, especially when planning to interview key informants (Nastasi, 1998; Bricki & Green, 2007; Raifman *et al.*, 2022). As this is a qualitative study, the researcher carried out interviews with seven expert key informants (in total) from three different organisations. The key informants that were interviewed held prominent management positions in their organisations, ranging from chief executive officer (CEO), general manager (GM) in Global Leadership and Learning Innovation, senior manager in Learning and Development, managing director (MD), IT manager and functional manager in Business Intelligence and Analytics and supervisor for their respective organisations.

The interviews that were conducted yielded rich data, thus only a small sample size was needed to collect data. The data that were collected reached saturation point when no new information or insights was discovered in the data analysis, this was after collecting data from the third organisation. The fact that there was a repetition in terms of the data collected in the first, second and third organisation (after 7 interviews), this indicated that the saturation point was reached. Participants reached a point where they had similar responses when answering the research objectives of the study, this included discovering the scope of learning in an organisation by investigating the types and levels of OL, discovering which social media tools are used by organisations for OL by identifying the names and types of social media tools, discovering how organisations use social media

tools for OL by investigating how employees learn within the organisation through social media and discovering how organisations manage social media-supported OL platform content. To ensure that there was a balance in the interviews, they were carried out in both organisations that do and do not currently use social media to facilitate OL.

Other studies that conducted in-depth interviews and reached saturation point using a similar small sample size include a study by Hennink & Kaiser (2021) and Hennink et al. (2017; 2019) where concrete code extraction and code saturation was reached between four to nine interviews or four to six focus groups. A study that aims to identify core issues in data, capture unique items, capture explicit concrete codes/themes and seek code/theme saturation usually requires a smaller size sample (Weller et al., 2018; Hennink et al., 2019). Most codes were reported to reach saturation by interviews 4, 7, and 9, also some of the codes were reported to reach saturation much sooner or much later in order to capture all dimensions of the code (Hennink et al., 2017). The study states that an effective sample size of a particular research is usually determined by the saturation of interviews and when all important themes have been identified and developed (Hennink et al., 2017; Hennink et al., 2019).

A related study by Guest et al. (2006) was reported to reach saturation somewhere between seven and twelve interviews and reveals that a small number of interviews can be adequate to capture a comprehensive range of concepts and ideas in data (Hennink et al., 2017; 2019), this is similar to the study at hand that reached saturation by the seventh interview. This evidence shows that for qualitative research, collective data from small sample sizes are effective and can represent peoples' experiences because they are able to reach saturation which is a benchmark for an adequate sample size in qualitative research (Weller et al., 2018; Young & Casey, 2019; Hennink & Kaiser, 2021). The size of the sample was limited to a few key participants which was a limitation to the research study and this might have impacted the validity of the findings and the saturation of the data. To mitigate this, in-depth and thorough interviews were conducted with key participants and they managed to reveal a substantial amount of data that was adequate for saturation of data to be reached.

5.5   DATA COLLECTION

The table below summarises the data that were collected to inform this research study:

Table 5-1: Data collection summary

Type of data	Data collection method	Informant	Number of participants
Literature	Systematic literature review	Research articles	N/A
Qualitative, Interpretive Data	Interviews	Company A	Two expert key participants
Qualitative, Interpretive Data	Interviews and Focus Group	Company B	Three expert key participants
Qualitative, Interpretive Data	Interviews	Company C	Two expert key participants

5.5.1   Similarities and differences of the 3 case studies

The table below summarises the similarities and differences of the 3 case studies of this research study:

Table 5-2: Similarities and differences of the 3 case studies

Similarities and differences	Company A	Company B	Company C
Type of industry	Mobile telecommunications	Industrial supply	Digital business consultancy
Location of Headquarters	Johannesburg, Gauteng, South Africa	Pretoria, Gauteng, South Africa	Pretoria, Gauteng, South Africa
Size of company	Large enterprise	Small enterprise	Medium-sized enterprise
Number of employees	Around 16 000 employees	32 employees	Over 200 employees
Number of hierarchical organisational levels	9	5	5
Number of departments	6	7	7
Data collection method	Interviews	Interviews and Focus Group	Interviews
Number of participants	Two expert key participants	Three expert key participants	Two expert key participants

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5.5.2 Type of data collected

Initial data collection occurred through the use of a systematic literature review protocol and strategy. The researcher used relevant research articles from the literature to present the main concepts of this study (see Chapter Four). Using an interpretive and inductive research philosophy involves collecting qualitative data (Johari, 2006). Qualitative data is data that is not numerical and is more concentrated on trying to reveal the meaning of the phenomenon being studied rather than revealing the frequency (Yin, 2004; Iacono *et al.,* 2011). Qualitative data involves uncovering the participants' perceptions of how they comprehend the phenomenon of interest (Iacono *et al.,* 2011). Since this study used an interpretive philosophy, qualitative data was suitable for this study and was collected through conducting interviews and focus groups.

5.5.3 Types of data collection methods (interviews)

Using a qualitative philosophy involves answering questions by gathering information through focus groups, observations or interviews (Bricki & Green, 2007). In qualitative research, qualitative interviews are recognised as one of the important data collection tools (Myers & Newman, 2007). DiCicco-Bloom and Crabtree (2006) also add that interviews are one of the most popular data collection methods for gathering qualitative data. Interpretive studies generally use interviews as a way of probing participants' perceptions on the topic of interest (Walsham, 2006).

Case studies are also known for using interviews as a mode of inquiry (Myers, 1997). Interviews are used by researchers to learn more about participants and discover their points of view on a topic (DiCicco-Bloom & Crabtree, 2006; Azungah, 2018). As this is an interpretive case study, interviews were considered one of the suitable data collection methods. Overall, four individual interviews and one focus group were conducted; they helped to uncover the participants' in-depth perceptions.

It is advisable for the interviewer to ensure that every question in the interview is answered and to ask more questions if more information is required from the participants (Harrell & Bradley, 2009). The researcher made sure that all interview questions were answered, the researcher also posed more questions in the case where it felt like the participants had more to say or explain, and the researcher also encouraged the participants to add and elaborate on their perceptions.

5.5.4 Types of data collection methods (focus groups)

As mentioned above, a focus group was also used to uncover participants' perceptions in this study. A focus group is a group interview that can stand alone or be combined with other methods in a research project and is mainly used to collect qualitative data (Oates & Alevizou, 2017). Focus groups are used to facilitate interaction and discussions between participants and are meant to explore the topic in depth (Oates & Alevizou, 2017). Data collected from focus groups are usually rich qualitative data which consists of participants' interpretations and meanings, as well as how participants make sense of things and explain them to other participants (Oates & Alevizou, 2017).

There are various advantages of focus groups that allow researchers to effectively conduct research. Focus groups are known to be flexible, as they can be used on their own or with other mixed-methods of research (Oates & Alevizou, 2017). Focus groups can also be done online, in the digital environment; this opens up innovative and exciting opportunities for the researcher (Oates & Alevizou, 2017). Focus groups can produce multiple layers of data and have the potential to provide vast, complex and rich data focused on a specific topic of interest (Oates & Alevizou, 2017).

Focus groups are also known to have several disadvantages, the first of which is that they are time-consuming in terms of planning and running the groups, recruiting participants, transcribing scripts and possibly translating them (Oates & Alevizou, 2017). Additionally, moderating the focus group can be quite challenging as it requires a certain skillset before being able to collect data, this includes being able to manage a group of people, being able to handle dominant participants who usually overwhelm the group and being able to encourage quiet members of the group to participate (Oates & Alevizou, 2017). Oates and Alevizou (2017) affirm that focus groups offer more advantages than disadvantages and are more suited for qualitative research with a small group of participants.

Since this study focused on generating in-depth qualitative data and interviewing a small number of participants, the focus group was used as one of the data collection methods. One focus group was conducted at one of the organisations that was selected as a case study. Participants of the focus groups took turns answering the questions that were posed to them. Participants were given a chance to give their opinions and perceptions on each of the questions posed. The interviewer also ensured that participants were able to add to

one another's answers. This allowed in-depth, vast, complex and rich qualitative data to be collected.

5.5.5 Data collection devices and software used

Interviews were conducted by making use of an audio/tape recorder which is the most common, practised and preferred method; additional notes were taken throughout the interview and recordings were then transcribed (Lewis, 1992; Krueger & Casey, 2002; Fernandez & Griffiths, 2007; Rabionet, 2011). Audio/tape recorders are ideal for interviews if taking down notes proves to be difficult or when the data that is being collected is less confidential (Walsham, 1995; Krueger & Casey, 2002; Fernandez & Griffiths, 2007). Recording is an effective method compared to taking notes, although researchers are still advised to take down notes during and after interviews, to supplement recordings in case the audio/tape recorders miss some of the data (Walsham, 1995; Cohen & Crabtree, 2006; Harrell & Bradley, 2009).

Ideally, the researcher should practise using the tape recorder before conducting the interviews and should keep the data in a safe place after finalising the data analysis (DiCicco-Bloom & Crabtree, 2006). The recorders ensure that information is reported accurately, completely and correctly (Barriball & While, 1994; Krueger & Casey, 2002; Fernandez & Griffiths, 2007). They also ensure that discussions during the interview and discussions that digress from the interview guide are recorded (Cohen & Crabtree, 2006).

The researcher recorded four of the interviews that were conducted in person using a smartphone recording app. The recordings were saved on the researcher's Google drive which was password protected, thus only one person had access to the recordings for confidentiality purposes. The other two online video interviews were conducted using a desktop application (Microsoft Teams) and online video recordings were saved in the same Google drive for privacy and security purposes.

5.5.6 Framework testing

The framework created from the systematic literature review was evaluated in an organisation by interviewing key participants that have and have not used social media for learning in an organisation. This ensured that all unique non-biased experiences and perceptions were gathered and considered. Data collected from these key informants

were used to re-evaluate and make suitable changes that reflect what participants had revealed in their interviews. As a result, the framework was anticipated to change after the data collection and analysis process was completed, to draw up the final artefact.

The researcher ensured that key informants came from different organisational levels, to gain employees' perspectives from both management-, mid- and junior levels. Thus, valid data were collected from different sources in the organisations. It is worth noting that the interviews were recorded and stored; the researcher also documented the analysis process and procedures in detail. Proof of all participants that took part in the study was recorded as all the participants had to sign the informant consent letter, in order to give their consent in participating in the research (see Appendix B).

Figure 5-2: Overview of the data collection process
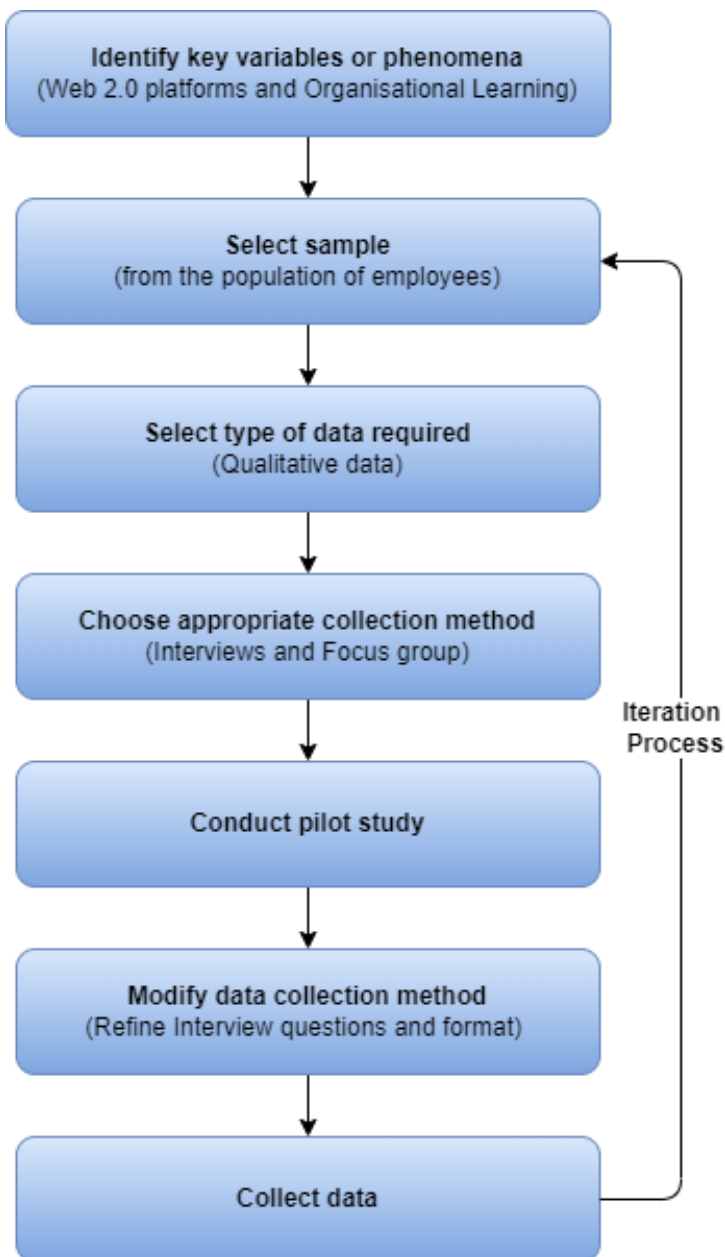
The figure above outlines the overview of the data collection process. The process was reiterated in all the organisations interviewed, in order to adjust the preliminary framework.

5.6   DATA TRANSCRIBING AND ANALYSIS

Once the interview process was completed, the researcher had to transcribe the interviews into data that were understandable (Dearnley, 2005). It is beneficial for recorded interviews to be transcribed by the researchers themselves, as this ensures

confidentiality; during this process, the researcher also becomes thoroughly acquainted with the data, creating a greater understanding of any emerging themes (Dearnley, 2005). The interview recordings were transcribed using online desktop software called Otter.ai; during the transcription process, the researcher ensured the correct reporting of the participant's words, grammar and pronunciation.

During data analysis, the researcher took a deductive approach, using concepts from theory to test the framework and draw conclusions. A deductive approach refers to the researcher finding answers to the research questions of the study (Harrell & Bradley, 2009). The deductive approach involves submerging oneself in the reading and processing of the data collected, to make sense of and understand the data set; it also uses a framework containing themes for the coding process (Azungah, 2018). By using a deductive approach, initial codes are taken from the existing literature on the topic of interest or what is known about the phenomenon being studied, which is then supplemented by the research aims, research questions and interview questions (Azungah, 2018).

A thematic content analysis method (following Braun and Clarke's (2006) six phases) was used to analyse the data. The thematic analysis focused on determining the main recurring themes to find a pattern of meaning from the data collected (Braun, Clarke & Terry, 2012). The thematic analysis simply tries to describe the data in more detail and organises the data in a manner that makes it easy to interpret (Braun & Clarke, 2006). The researcher attempted to find common themes and make sense of them by analysing participants' shared experiences (Braun *et al.,* 2012). Furthermore, the researcher tried to identify common themes proposed in theoretical frameworks from literature and tried to find similar themes that were revealed in participants' interviews. Therefore, the thematic analysis was an appropriate analysis method for this study.

A researcher should collect and analyse data at the same time as this allows the researcher to be familiar with the data collected (Vaismoradi *et al*., 2013; Azungah, 2018). Data were analysed using an interpretive data analysis tool called Atlas.ti. Code analysis was used to analyse data, which is a process of creating codes from what participants reveal in the interviews and themes are derived from those codes (Braun & Clarke, 2012). Atlas.ti can be used to code digital parts of the data collected from interviews, it also supports data analysis and transcribing (DiCicco-Bloom & Crabtree, 2006). Atlas.ti is

recognised as a software tool that is suitable for analysing qualitative data and transcribing the interviews, thus it makes sense that it was used to analyse data collected from this study.

5.7 ETHICAL CONSIDERATIONS

Ethical considerations and review is needed before data can be collected by the researcher (Bricki & Green, 2007; Yin, 2009). The researcher received ethical clearance (Reference number: EBIT/271/2019) from the Faculty Committee for Research Ethics and Integrity at the University of Pretoria in order to collect data from different organisations. Beauchamp (1993) and Beauchamp and Childress (2019) suggest that the researcher should i) respect the rights of the participants being interviewed, ii) aim to do good, iii) not do any harm to the participants and iv) aim to be fair. Yin (2009) adds that the researcher should not deceive participants and should protect them from any harm.

Consequences of carrying out research that has not been ethically approved include participants being reluctant to take part in the research and organisations not approving their employees to take part in the research from the get-go. This is done in order to protect the participants from any harm that may result from the research, to ensure that the research is conducted in a responsible way, and to ensure that the outcome of the research is beneficial to all parties involved (Yin, 2009). To mitigate against these outcomes, the researcher had to ask for approval and permission from the HR department to interview participants in their organisations. Another requirement was for the researcher to send out the ethical clearance to relevant organisations to prove the legitimacy of the research. The researcher also ensured to state the outcomes of the research and how they would be beneficial to all the organisations involved.

Interviewers need to ask for participants' permission and should not assume that permission has been given automatically (Harrell & Bradley, 2009; Van Teijlingen, 2014). A general interview guide that consists of interview questions must be created and needs to be sent in advance to participants (Alhazmi & Rahman, 2014). An interview guide informs participants about the purpose and confidentiality of the study, prepares participants on what to expect and gives an idea of what they will be dealing with, beforehand (Walsham, 2006; Alhazmi & Rahman, 2014). It is also up to the researcher to protect participants' identities so that they remain anonymous (Walsham, 2006). Finally,

the researcher must be sensitive to how the questions may affect the lives of the participants and how participants will view the researcher (Agee, 2009).

The researcher should ensure that they do not pressure participants into taking part in the interviews and should acquire consent from the participants (Bricki & Green, 2007; Yin, 2009). It is also important that the researcher assures potential participants that they are free to exclude themselves from the interviews (Bricki & Green, 2007; Yin, 2009). In this vein, the above was clearly explained, and key informants signed a consent form before participating in the research process. The interviewer also made it clear to the participants that they were not obliged to take part in the interviews and were free to withdraw at any time before and during the interviews.

5.8   CONCLUSION

Chapter Three highlighted the phases that this study had to go through to reach its final deliverable. The researcher identified and presented the following major concepts: (1) the research design, which explained the research philosophy/paradigm (interpretive research philosophy) and the research strategy (case study) that was used in the study. (2) The researcher further discussed the characteristics, advantages and disadvantages of the research strategy used. (3) The researcher then presented the target population, sampling method and sampling size of the study. (4) The researcher went on to present the data collection method, which included the type of data collected, the research instruments and the data collection devices and software used.

(5) The researcher further posed the data transcribing and analysis section, which included how data were transcribed, the data analysis approach, the data analysis method and the type of data analysis that was used. (6) The researcher then presented the ethics section, which explained the ethical procedures, ethical guidelines and ethical concerns that the researcher had to take into consideration to conduct this study. Based on the major themes extracted from the methodology chapter, the researcher can therefore state that every research phase needed to be taken into consideration and thoroughly followed, to ensure that relevant data was collected for the purpose of the study. The data analysis and discussion based on the OL and social media frameworks will be presented in detail in the next chapter.

CHAPTER 6.DATA ANALYSIS AND DISCUSSION

6.1 INTRODUCTION

In this chapter, the researcher discusses and presents the findings and analysis of the results derived from the interviews conducted. The analysis was performed based on the researcher's interpretation of the findings. Interviews were conducted using key experts from three different case studies, with each case study focusing on a different organisation. The interviews were collected over two months and each interview lasted roughly an hour. As mentioned in Chapter Three's (methodology chapter) data collection sub-section (cf. Section 3.5.), Phase A was based on collecting data from Company A and B, Phase B was based on testing the framework in Company C and Phase C was based on building the framework using all the findings from the three companies.

This chapter begins by presenting a profile of each company and its participants, to provide a contextual perspective of each participant and their unique experiences. An analysis of data from the interviews is then presented. Interview questions were formed following the research question guidelines. The researcher transcribed the interviews verbatim and used Atlas.ti as the analysis tool. Common themes were identified and coded, and are presented in this chapter, to provide an insight into creating an effective social media (Web 2.0) supported OL framework.

6.2 CASE STUDY: COMPANY A

Company A is a multinational mobile telecommunications company that operates in various African, European and Asian countries. Company A employs around 16 000 people, including permanent and contracting staff. The organisation consists of Marketing, Sales and Distribution, Customer Service, Network and Technology, Human Resource and Finance Departments/Teams. Figure 6-1 below outlines the hierarchical organisational structure of Company A.

Figure 6-1: Hierarchical organisational structure of Company A
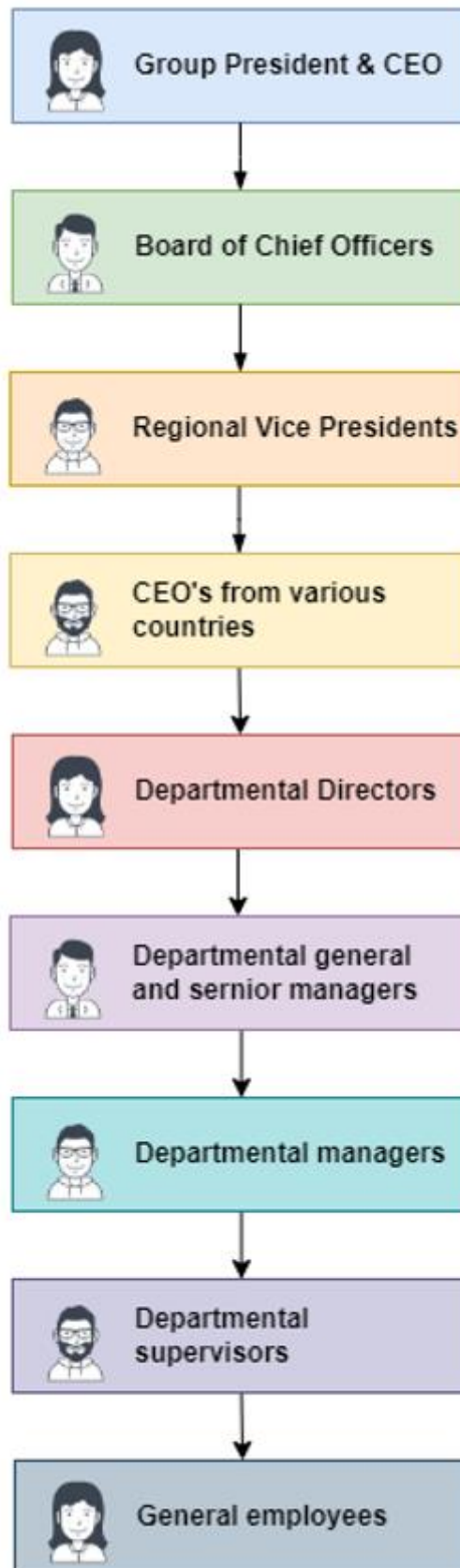
The hierarchical structure of Company A (see Figure 6-1) had a top-down approach, with the Group President and CEO on top. Below them is the C Suite, consisting of a board of Group Chief Officers, then the regional Vice Presidents. In the middle-rungs of the hierarchy are the CEOs for different countries then the departmental directors, followed by departmental general and senior managers. Closer to the bottom of the rung are the departmental managers, followed by the departmental supervisors, and finally the general employees.

Within each of the departments/teams, there are five levels. Level One has entry-level staff members, Level Two has supervisors, Level Three has managers, Level Four has GMs and Level Five has executive members. Company A uses social media throughout the entire organisation and social media are accessible to all employees, across all departmental levels, from the executive level to the entry-level staff members.

As mentioned, to complete Phase A of the data collection process, two participants were interviewed from Company A. These participants were identified as key informants who were in charge of OL and played a key role in the implementation and use of Web 2.0 tools in the organisation. The two participants met the interview criteria, as they were more likely to reveal data that is relevant and useful to the current study. The interviewees were ideal for this study, as they possessed experience in heading the use of social media at this particular organisation.

6.2.1   Company A: Results for scope of learning

The analysis of the data from the interviews revealed the themes and sub-themes presented in Table 6-1 below.

Table 6-1:Themes from *scope of learning* in Company A

Theme	Sub-themes
The scope of learning	Level of OL
	Type of OL

The table below shows the raw data extracts, the identified themes and the sub-themes that emerged from the data regarding the *scope of learning* in Company A. Figure 6-2 thereafter provides a mind-map as a visual representation of the themes and sub-themes mentioned in Table 6-2.

Table 6-2: Raw data, themes and sub-themes from the *scope of learning* in Company A

Raw data	Identified themes	Sub-themes
By design, we've tried to incorporate the elements of Web 2.0 that are used throughout the entire organisation. So for us I think there's an understanding that these tools are being used throughout the business. So it's at an enterprise level, so Yammer is enterprise wide, your collaboration teams is at an enterprise wide, SharePoint can be enterprise wide, your Microsoft Teams will craft for or curate for a particular team. Let's say the technology team has a team site, the marketing team they have a team site. And then you can extend your team site might be for my marketing team only in South Africa. And then we could have a marketing team for all the marketing teams in the countries. So because we are across Africa and the Middle East, I might have a team site for my marketing team in South Africa. Then I might have a team site for all marketers or CMO's (Chief Marketing Officers) all over the world. So South Africa, Nigeria, Zambia, Ghana, Cote d'Ivoire, Congo Brazzaville, all of them are in that team as well. (Participant 1) Within all these countries, you have intranet sites with collaboration tools, and access to Yammer, access to Microsoft SharePoint. Which again, depends on how people want to use these things and for what purposes. Learning happens at an individual level, it happens at the team level and happens at the departmental level. The largest concentration is with our more junior level staff and our support staff. The biggest utilisation of online learning platforms sits in our bottom three levels of the organisation, which is probably about 70%, which means that about 30%, I would say would not engage that frequently with online learning platforms. Although we've made a big shift in investing in new infrastructure and to push more online learning access to all 20 000 people in the organisation. So there's no limits anymore that constraints anybody. (Participant 2)	The scope of learning	Level of OL: • Individual level • Collective (group) level • Organisational level

So for me, I think it would be on the first one, the single-loop, when it comes to the double-loop and the triple-loop, it can play an influential role. In terms of what I mean by that is that you are drip feeding stuff that constantly needs to be at the top of mind. So, when you're talking about norms and values and you're trying to change a culture, it can play into that, your double- and triple-loop learning. When it comes to you being drip fed or changing consciousness or bringing stuff to bubble to the top constantly as a constant reminder. (Participant 1) It's a combination between double and triple. What I've just explained in the examples is giving access to learning content that's relevant to facilitate change in personal effectiveness, but also to facilitate change in the organisational culture of the organisation behaviour. So that'll be combination of double-loop learning and triple-loop learning, I mean we use our intranet sites to communicate content with people and to engage with people. So if there's a feedback loop, you know, there's always an opportunity where people can contribute using Yammer or Microsoft Teams or collaboration platforms, you know, which is to stimulate a two-way feedback process. Yeah, it's engagement tactics and feedback loops. So sometimes it's used in a consultative manner. So they are very much used as engagement platforms to solicit feedback. And that feedback goes back then into improvements, modifications and innovations. (Participant 2)		Type of OL: - Single-loop learning - Double-loop learning - Triple-loop learning

Figure 6-2: Mind-map of themes from *scope of learning* in Company A
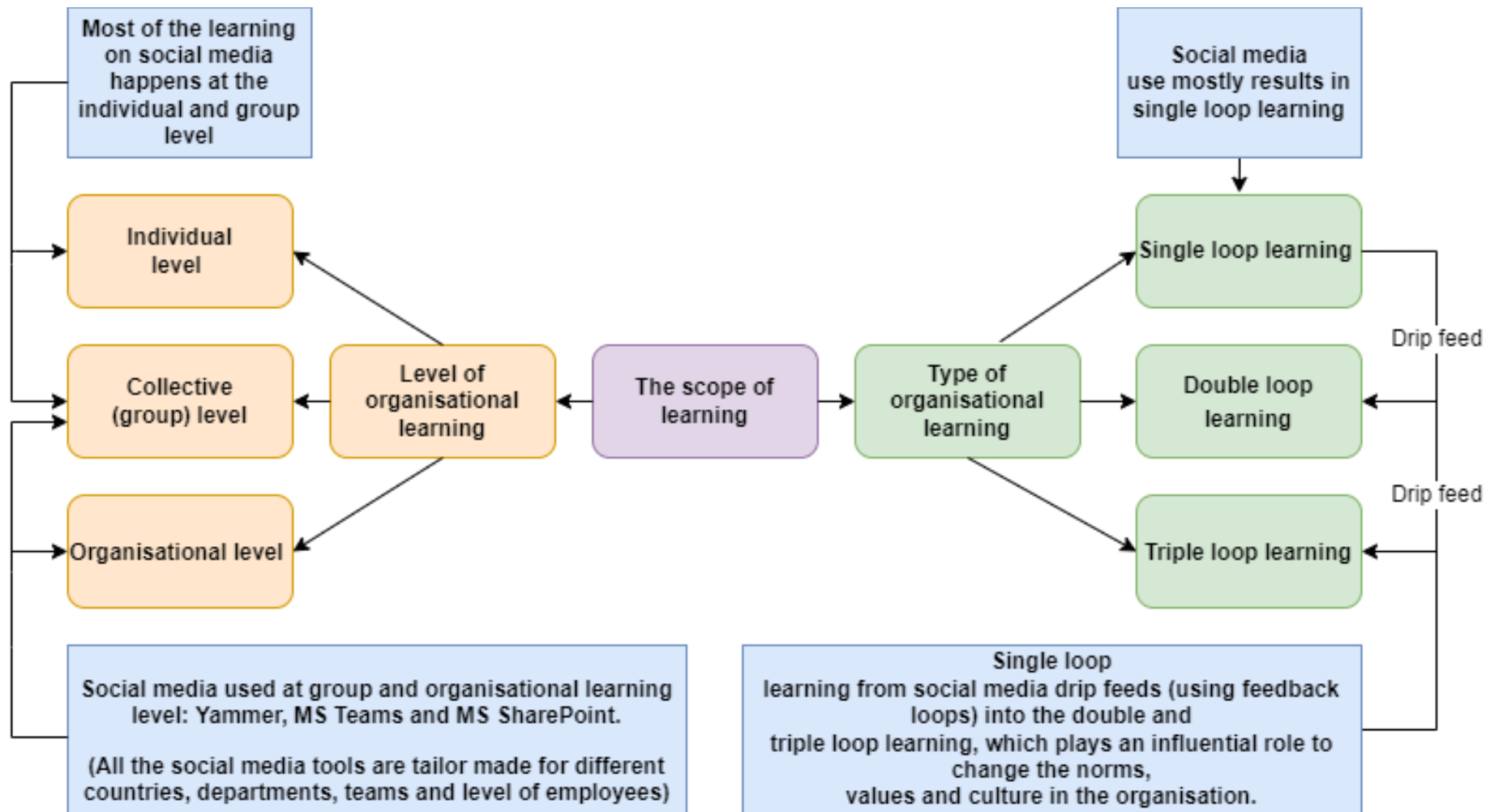
6.2.2 Discussion of results: The scope of learning in Company A

The sub-section below discusses the results of the theme "Scope of learning" in Company A.

- ***Level of OL***

Company A's results show that most OL happens online, as they believe that the use of social media is a new way of learning and working. Therefore, the company provided access to social media across all levels in the organisation and confirmed that the use of social media covered the entire organisation. Certain social media were used to cater to different departments and different teams throughout the entire organisation. This was evident in Participant 1's response:

> *By design, we've tried to incorporate the elements of Web 2.0 that are used throughout the entire organisation. So, for us I think there's an understanding that these tools are being used throughout the business. So, it's at an enterprise level, so **Yammer** is enterprise wide, your collaboration teams is at an enterprise wide, **SharePoint** can be enterprise wide, your **Microsoft Teams** will craft for or curate for a particular team. Let's say the technology team has a team site, the marketing team they have a team site. And then you can extend your team site, might be for my marketing team only in South Africa. And then we could have a marketing team for all the marketing teams in the countries.*

> *So, because we are across Africa and the Middle East, I might have a team site for my marketing team in South Africa. Then I might have a team site for all marketers or CMO's (Chief Marketing Officers) all over the world. So South Africa, Nigeria, Zambia, Ghana, Cote d'Ivoire, Congo Brazzaville, all of them are in that team as well.* (Participant 1)

Participant 2 further emphasised that different social media are used at different levels of the organisation and for different aspects of learning. This meant that OL in Company A took place at all levels of the organisation, as covered in the literature review (namely individual, collective [group] and organisational levels) (Baxter *et al.*, 2009; Petiz *et al.*, 2013). This was evident in Participant 2's response:

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Within all these countries, you have intranet sites with collaboration tools, and access to Yammer, access to Microsoft SharePoint. Which again, depends on how people want to use these things and for what purposes. Learning happens at an individual level, it happens at the team level and happens at the departmental level.

The largest concentration is with our more junior level staff and our support staff. The biggest utilisation of online learning platforms sits in our bottom three levels of the organisation, which is probably about 70%, which means that about 30%, I would say would not engage that frequently with online learning platforms. Although we've made a big shift in investing in new infrastructure and to push more online learning access to all 20 000 people in the organisation. So there's no limits anymore that constraints anybody. (Participant 2)

- **Type of OL**

Company A reported that social media that were used provided different types of learning. Literature states that there are three different types of OL, namely single-, double- and triple-loop learning (Argyris, 1983; Fiol & Lyles, 1985; Pahl-Wostl, 2009). The company reported that the use of social media begins as single-loop learning (learning that leads to making minor changes in behaviour and outcomes in an organisation) and ends up feeding into both double-loop learning (learning that leads to making changes to general principles and rules of an organisation) and triple-loop learning (learning that leads to making changes to the governing rules, values and norms of the organisation). This was apparent in Participant 1's response:

So for me, I think it would be on the first one, the single-loop, when it comes to the double-loop and the triple-loop, it can play an influential role. In terms of what I mean by that is that you are drip feeding stuff that constantly needs to be at the top of mind.

So, when you're talking about norms and values and you're trying to change a culture, it can play into that, your double- and triple-loop learning. When it comes to you being drip fed or changing consciousness or bringing stuff to bubble to the top constantly as a constant reminder. (Participant 1)

Participant 2 added that, at times, a combination of double-loop learning and triple-loop learning took place when employees used social media:

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It's a combination between double and triple. What I've just explained in the examples is giving access to learning content that's relevant to facilitate change in personal effectiveness, but also to facilitate change in the organisational culture of the organisation behaviour. So that'll be combination of double-loop learning and triple-loop learning…

I mean we use our intranet sites to communicate content with people and to engage with people. So if there's a feedback loop, you know, there's always an opportunity where people can contribute using Yammer or Microsoft Teams or collaboration platforms, you know, which is to stimulate a two-way feedback process.

Yeah, it's engagement tactics and feedback loops. So sometimes it's used in a consultative manner. So they are very much used as engagement platforms to solicit feedback. And that feedback goes back then into improvements, modifications and innovations. (Participant 2)

Double-loop learning usually leaves long-lasting effects on the whole organisation (Argyris, 1983; Fiol & Lyles, 1985). Participant 1 also explained that it takes some time for double-loop learning to have an influential role in the organisation:

I think double-loop learning needs to be orchestrated right. Because it can't be a rushed thing where you just decide, okay, "Hey guys, we're changing our strategy in the organisation throw something out on Facebook and let everybody read it" you know.

I mean that's not ideal, however if you've got a three to four months' strategy that says: "Okay, here we launch and we are drip feeding, something good is coming, something new is coming. There's a change coming. What do you think? tell us what you'd like to see" and all of a sudden the change becomes a point of people engaging with it and that's long term you know, it's not me just throwing some things on the wall and hoping that something's going to stick, but it's intentional and it's planned. (Participant 1)

6.2.3   Summary and insights of results on scope of learning at Company A

The sub-section below summarises the results of the theme "Scope of learning" in Company A.

- *Summary*

The data collected that correlated to the scope of learning in Company A identified two stand-out themes: i) level of OL and ii) type of OL in Company A. It was highlighted that OL took place at all three levels, namely at individual, collective (group) and organisational levels. It was also noted that social media at Company A provided three types of OL, namely single-, double- and triple-loop learning. Single-loop learning was the initial type of learning that later fed into double-loop and triple-loop learning.

- *Insights*

It seems that social media provided by Company A cater to every level of the organisation and the company makes sure that every employee has access to them. Certain social media that thrive on building team interactions are made specifically available for different teams in the organisation to take advantage of the team-building features and communication enhancement of social media. Social media are used to cater to employees' needs depending on what employees would like to use them for.

High usage of social media comes from the lower-level staff members of the company, who are found to engage more with the online content. The company has subsequently decided to boost and invest in social media infrastructure to encourage the use of social media in their organisation, to ensure that everyone in the company has access to the platforms. This guarantees that no limitations would serve as stumbling blocks to the use of online social media.

6.2.4   Discussion of results: Social media in Company A

Company A reported that they use a variety of social media in the organisation. Different social media were made accessible to employees, as the company had to cater to several employees and also provide a choice to the employees in the process. The company reported that they used social media such as Yammer, Microsoft SharePoint, Microsoft Teams, WhatsApp groups, an internal learning management system, an internal wiki platform, and a blogging platform all created by the company to collaborate and communicate among employees. This is supported by literature, which states that social networking sites, blogs and wikis are used in organisations (Baxter & Connolly, 2014). Table 6-3 below shows the social media that were used in Company A.

Table 6-3: Social media used in Company A

Social media used in Company A
●   Yammer
●   Microsoft SharePoint
●   Microsoft Teams
●   WhatsApp groups
●   Internal learning management system
●   Internal wiki platform
●   Internal blogging platform

The literature revealed that Web 2.0 tools provide a platform that allows users to freely communicate and collaborate, which then could be used to foster OL (Kane *et al.*, 2010). Social media, such as wikis and project management tools, allow employees to access information, collaborate on team projects and share their experiences in organisations (Petiz *et al.*, 2013; Baxter & Connolly, 2014; Breunig, 2016). The interviewees supported this finding, as they stated that the Web 2.0 collaboration platforms that they used at their company allowed employees to talk to one another and ask questions:

We've got a Yammer platform, which is, you know, a tool that's designed for the game, social collaboration and discussion. We've got Microsoft SharePoint, which is also built around sharing things. We've got Microsoft Teams, which also is a subdivision of all of this kind of stuff. So I mean for us in our organisation, we have our learning management systems platform which has is a social collaboration tool in it.

But I think something that's not very often spoken about, but it's probably had the biggest impact recently is your WhatsApp group. So WhatsApp and the likes of telegram, so your instant messaging services. I think, for me, are almost superseding any of the other Web 2.0 tools because the stuff can come to me almost instantly and it's at my fingertips. (Participant 1)

Participant 2 further added that the internal sites or intranet sites provided another environment for employees to seamlessly collaborate and engage on social media. The fact they had their intranet sites gave employees a centralised platform that allowed them to share their opinions, have their point of view heard and get feedback from other employees. This is what Participant 2 had to say:

6.2.5   Summary and insights of results on social media at Company A

The sub-section below summarises the results of the theme "Social media" in Company A.

- ***Summary***

Data collected from interviewees revealed the social media that were used in Company A. As mentioned, Company A used notable social media such as Yammer, Microsoft SharePoint, Microsoft Teams, WhatsApp groups, an internal learning management system, and an internal wiki platform, internal blogging platforms and intranet sites. The company provided a wide range of social media to give employees the freedom of choice and decide which social media was ideal for them and for their teams to use. This then allowed employees to interact and collaborate on social media. Furthermore, it provided a platform that would encourage employees to share ideas and valuable knowledge amongst themselves.

- *Insights*

It seems employees gravitated more towards social media that they were used to and that they could access on their phones, such as WhatsApp groups. Employees found these social media convenient to use as they are easily and instantly accessible. The company tried to push the use of social media to get employees to share their opinions on certain matters of the company. This allowed the company to get valuable feedback from the employees, who felt their voices were heard.

6.2.6 Company A: Results for how social media are used for Organisational Learning

The analysis of the data from the interviews revealed the themes and sub-themes presented in Table 6-4 below.

Table 6-4: Themes from *how social media are used for OL* in Company

Theme	Sub-themes
How social media are used for OL	I.Fast-paced information sharing
	II.Source of quick feedback
	III.Improve technical and behavioural skills
	IV.Employees' empowerment

The table below shows the raw data extracts, the identified themes and the sub-themes that emerged from data regarding *how social media are used for OL* in Company A. Figure 6-3 thereafter provides a mind-map as a visual representation of the themes and sub-themes mentioned in Table 6-5.

Table 6-5: Raw data, themes and sub-themes from *how social media are used for OL* in Company A

Raw data	Identified themes	Sub-themes
So Web 2.0 tools, I see them more as tools that can help at the point of need, answer questions but almost immediately, but in bite size chunks, short, sharp kind of answers to questions. It's not ICU, you know if I'm sick it's not ICU but it's vitamins. Yeah and it will sustain you and it can augment you, what you already know. So I think the big thing is that from a Web 2.0, is it's more about answering questions and getting help in the moment of need. So, if you're looking to update, upgrade, get an answer, or look for recommendations on where you can get a skill set, or looking for a person who knows an answer then that's where the Web 2.0 tools can help but I don't think it can take you from zero to a high level of competence on a particular topic. (Participant 1)	How social media are used for OL	Fast-paced information sharing
Well, it happens contextually. So it happens within the context of a specific objective you're trying to achieve. So we let's say we want to find out how to improve customer service in the mobile money market, you can solicit the campaign using your social media, using your communication channels, or even using your e-learning systems, to solicit feedback of ideas and improvements, innovations can be done. So it's an enabler, and it's becoming a very fast and agile way of connecting to people soliciting feedback. I always call it the push and the pull. Somebody can push the content out there and then you ask. (Participant 2)		Source of quick feedback
Well again it can be for technical skills advancement. So subject matter expertise. I need to know more about data analytics or digital marketing or in my role about performance management or whatever. And then you have, you know, the behavioural stuff, which is how to improve personal effectiveness, team effectiveness, you know, basically how to embrace the expectations of the organisation in terms of living the values, conduct, emotional intelligence. So, we always like to talk about it from a behavioural perspective, behavioural performance perspective or from a technical career skill, advancement perspective.		Improve technical and behavioural skills

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So technical would be you know, in your specialists' field. So, access is given, pending on what specific. For example, at the moment we are trying to build greater skills for agility. So we are giving more learning content and learning infrastructure support to that domain. So that skills area can be boosted in the organisation, because we want people to speed up things, we want people to be able to collaborate better, we want people to have more empathy. And then you can prioritise that, so now you design your organisational infrastructure to support those priorities. (Participant 1)		
So here in our business, from an admin perspective on the social media, the staff can create a group if they want to. Yeah, anyone can. Microsoft Teams are generally set up by IT. But also, you can set up a team you just go to IT and go I want this, you know, team site set up with these people in it and it's generally easily done. And Yammer is open to the entire enterprise. Just by default of you being a staff member, you're a part of it. They just login with their staff details. (Participant 1)		Employees' empowerment

Figure 6-3: Mind-map of themes from *how social media are used for OL* in Company A
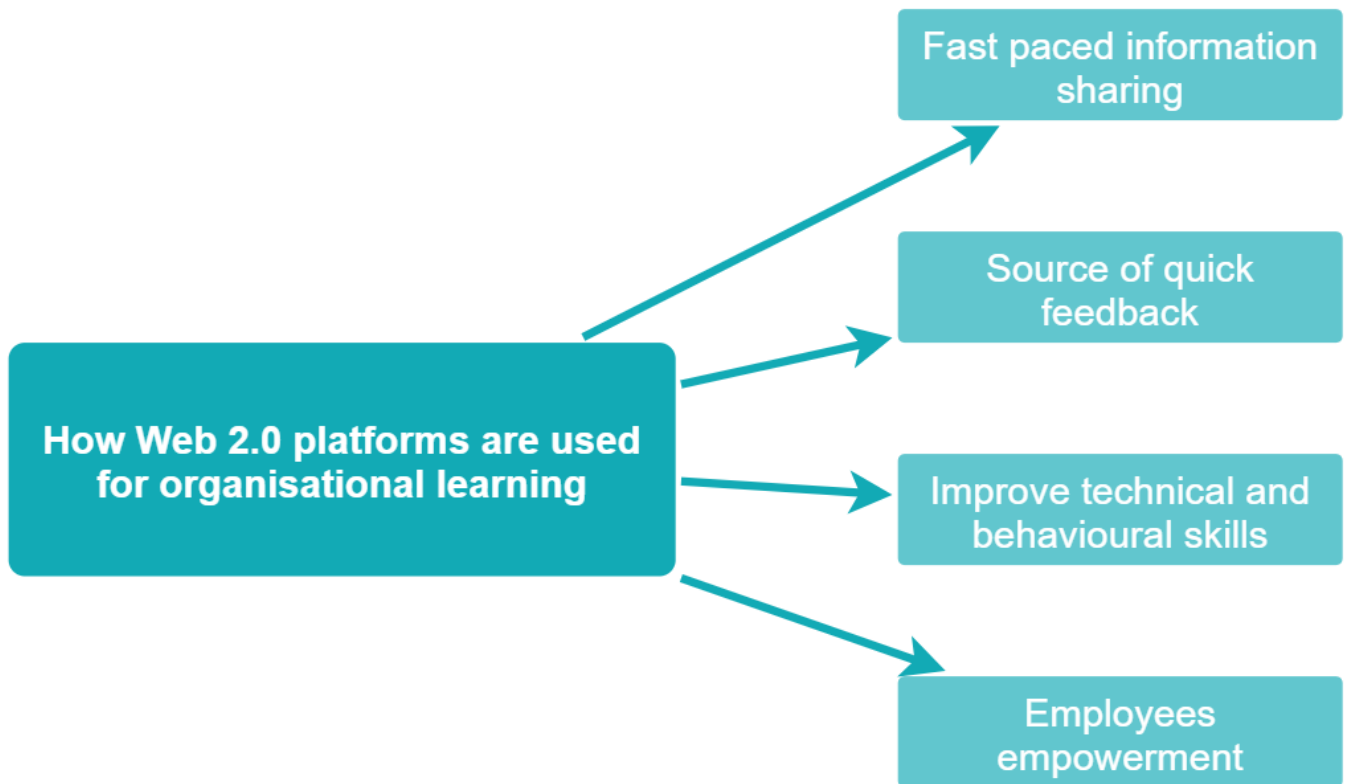
6.2.7 Discussion of results: How social media are used in Company A for Organisational Learning

The sub-section below discusses the results of the theme "How social media are used" in Company A.

- ***Fast-paced information sharing***

Social media serve as interactive communication channels that allow users to connect and share information regarding their common interests (Chatti *et al.*, 2007; Ezeah *et al.*, 2013). Company A emphasised that they used social media in a way that allowed employees to share relevant information, quickly and conveniently. Using social media allows employees to find and share solutions to previously encountered problems rapidly (Petiz *et al.*, 2013). The Web 2.0 tools used in Company A provided a platform where employees could ask quick questions and get instant responses.

Although literature mentions that social media play an important role as they improve knowledge management activities and skills (Alavi & Leidner, 2001; Olafsen & Cetindamar, 2005), Company A reported that social media were not necessarily a source

of vast information that employees could rely on to gain a set of skills or become competent in a specific field. However, Web 2.0 tools provided more of a platform that employees could access to get recommendations or quick answers that would steer them in the right direction:

So Web 2.0 tools, I see them more as tools that can help at the point of need, answer questions but almost immediately, but in bite size chunks, short, sharp kind of answers to questions. So I think the big thing is that from a Web 2.0, is it's more about answering questions and getting help in the moment of need.

So, if you're looking to update, upgrade, get an answer, or look for recommendations on where you can get a skill set, or looking for a person who knows an answer then that's where the Web 2.0 tools can help but I don't think it can take you from zero to a high level of competence on a particular topic. (Participant 1)

- *Source of quick feedback*

Participant 2 agreed that social media was more of a tool that was used to get quick feedback. This describes a type of learning dimension called dialogue and enquiry, where the company creates a platform for the employees to ask questions and provide feedback (Hasson *et al.*, 2016). This feedback allows employees to reflect on matters experienced in the working environment, thus inviting organisational development and learning (Baxter *et al.*, 2011). The new ideas created by employees and presented on social media greatly improve the organisation and allows for innovation (Petiz *et al.*, 2013). Participant 2 stated:

Well, it happens contextually. So it happens within the context of a specific objective you're trying to achieve. So we let's say we want to find out how to improve customer service in the mobile money market, you can solicit the campaign using your social media, using your communication channels, or even using your e-learning systems, to solicit feedback of ideas and improvements, innovations can be done.

So it's an enabler, and it's becoming a very fast and agile way of connecting to people soliciting feedback. I always call it the push and the pull. Somebody can push the content out there and then you ask. (Participant 2)

- *Improve technical and behavioural skills*

Social media plays a significant role in organisations as it improves knowledge management activities and skills (Alavi & Leidner, 2001; Olafsen & Cetindamar, 2005). This is part and parcel of what OL is, which involves employees networking and learning from each other to create and gain new knowledge and skills (Baxter *et al.*, 2009). Company A reported that their employees used social media to improve their technical skills (up-skilling) and their behavioural skills in the workplace:

> *Well again it can be for technical skills advancement. So subject matter expertise. I need to know more about data analytics or about digital marketing or in my role about performance management or whatever. And then you have, you know, the behavioural stuff, which is how to improve personal effectiveness, team effectiveness, you know, basically how to embrace the expectations of the organisation in terms of living the values, conduct, emotional intelligence. So, we always like to talk about it from a behavioural perspective, behavioural performance perspective or from a technical career skill, advancement perspective.*

> *So technical would be you know, in your specialists' field. So, access is given, pending on what specific. For example, at the moment we are trying to build greater skills for agility. So we are giving more learning content and learning infrastructure support to that domain. So that skills area can be boosted in the organisation, because we want people to speed up things, we want people to be able to collaborate better, we want people to have more empathy. And then you can prioritise that, so now you design your organisational infrastructure to support those priorities.* (Participant 1)

- *Employees' empowerment*

Organisations are expected to choose the appropriate social media that suits business values, whilst developing strategies that foster collaboration among employees to facilitate OL (Boateng *et al.*, 2009). Company A reported that the employees were in charge of choosing which social media they wanted to use, creating their channels within these social media and then creating their content on these platforms. This is in line with the literature, as employees revealed that social media allowed them to take charge of their learning because they were responsible for acquiring, sharing, applying and storing

knowledge (Dinh *et al.*, 2011). Thus, employees took ownership of their learning and created initiatives to drive their learning in the organisation.

This is reiterated by Schneckenberg (2009), who states that social media have the potential to empower employees to exchange knowledge and contribute to OL. Empowering employees in an organisation and encouraging creativity and innovation among employees is also one of the building blocks of OL theory (Saadat & Saadat, 2016). Organisations are expected to drive and delegate the empowering of employees by allowing them to make key decisions regarding enhancing collaboration and interaction on social media (Schneckenberg, 2009; De Hertogh, Viaene & Dedene, 2011). Employee empowerment was evident in Company A, as Participant 1 revealed that:

> *So here in our business, from an admin perspective on the social media, the staff can create a group if they want to. Yeah, anyone can. Microsoft Teams are generally set up by IT. But also, you can set up a team you just go to IT and go I want this, you know, team site set up with these people in it and it's generally easily done. And Yammer is open to the entire enterprise. Just by default of you being a staff member, you're a part of it. They just login with their staff details.* (Participant 1)

6.2.8 Summary and insights of results of how social media are used for Organisational Learning in Company A

The sub-section below summarises the results of the theme "How social media are used for OL" in Company A.

- *Summary*

The data collected from the interviews reveal how Company A used social media for OL. It was reported that Web 2.0 tools provided a platform for employees to share important information quickly. It was highlighted that employees could ask questions and get quick feedback from social media.

The data also reports that social media is the ideal tool to use to get fast answers and recommendations, to help steer employees in the right direction, rather than expecting them to gain and master a vast set of skills in a specific field. However, the company did report using social media to help enhance employees' behavioural and technical skills.

The participants also highlighted that employees had the freedom to choose which social media was appropriate for them, as well as how to use them.

- *Insights*

Social media is a source of information that can be consumed in small portions rather than providing a large amount of information at once. This allows employees to get quick answers to questions immediately so that they can build on their existing knowledge and skills. Social media are seen to be the ideal tools to enhance communication networks and are used to get quick feedback when a company is looking for new ideas, improvements and innovations. Social media are also seen as enablers for employees to network at a very fast and flexible rate, as users can ask questions and push content onto the platforms whilst simultaneously receiving feedback from other users.

The organisation also used social media to drive employees to improve their technical and behavioural skills. Technical skills involve career enhancement skills; behavioural skills involve enhancing personal effectiveness, team effectiveness and emotional intelligence. The organisation laid the groundwork, as they designed the organisational structure to support learning content and infrastructure that helped employees' skills grow. The organisation made social media accessible to all employees, where employees could create collaboration teams within social media according to their needs.

6.2.9 Company A: Results for how Company A manages Organisational Learning platform content

The analysis of the data from the interviews revealed the themes and sub-themes presented in Table 6-6 below.

Table 6-6: Themes from how Company A *manages OL platform content*

Theme	Sub-themes
How Company A manages OL platform content	I.Code of conduct on social media
	II.Managing inappropriate conduct
	III.Curating relevant content
	IV.Privacy and security
	V.Valid and credible content
	VI.Updating the systems and content

The table below shows the raw data extracts, the identified themes and the sub-themes that emerged from data regarding how Company A *manages OL platform content* in Company A. Figure 6-4 thereafter provides a mind-map as a visual representation of the themes and sub-themes mentioned in Table 6-7.

Table 6-7: Raw data, themes and sub-themes of how Company A *manages OL platform content*

Raw data	Identified themes	Sub-themes
So that's where there's a social media policy around the comments that can and cannot be said, and that needs to be disseminated through your business up front. So that everybody knows that look, this is a platform that's used for learning, that we don't tolerate, you know, comments that are racist, sexist, you know, bigoted, something that would inspire violence, that is hate speech. I think you've got to make it clear. So that's something that we've got to finalise around our own rules around how we interact with social media in the company. Fortunately, we haven't had any issues where you know, we've got to kind of dismiss somebody or discipline anyone. (Participant 1) At the same time, people must understand that there is a level of responsibility that is associated with how you participate and how you engage and you know. And I think that's becoming clearer because companies are putting more social media policies in place, and governance structures to give frameworks within which conduct must take place. You cannot use foul language, you cannot use racist tones, you cannot use sexist comments, you know, you need to remind people within that. But to me those guidelines are part of informing the culture to say, well we have a freedom of expression culture, within boundaries and within limits, which are guided by our values and our code of conduct and our ethics in the organisation. (Participant 2)	How Company A manages OL platform content	Code of conduct on social media
So there is your challenge because I mean, it's like how do you control Facebook right? The reality is all you can do is open it up and have a flagging system that says somebody can flag the comment. As soon as the comment is flagged, it gets taken off, goes to a moderator, the moderator checks it. If the moderator deems it inappropriate, it gets taken off and you notify the person that: "Hey, that was inappropriate, don't do it again." If it's not inappropriate, it gets put back in.		Managing inappropriate conduct

And that's your challenge is because the thing is in an enterprise, if you just open it up, you know anybody can answer but what you hope is that there's an SME (subject-matter expert) and the team starts to become almost a kind of self-ratification and self-organising within that team. That if somebody puts a racist comment or a rude comment or you know, a sexually lascivious comment or something like that, that somebody in the group is going to call them out. You don't want it to be the comment section on a news 24 website. You know, it just becomes a mudsling. (Participant 1) Like for example our intranet platforms and engagement platforms, the communications guys will know how they will deal with that, but it will be dealt with. So probably, if somebody creates a post that is inappropriate, it'll be dealt with in a private matter. But they will engage with the individual to say, "Don't say certain comments, we don't like it," so it doesn't get ignored. I think it's a continuous learning process. You don't know what you don't know and I think that's the issue. It's like the first time that people are saying, "okay, here's a bicycle now go and ride." People are going to make mistakes, and the way they make the mistakes, the mistakes are dealt with, will set the tone for what's acceptable and what's not acceptable. So, I think it's just a process of feedback and transparency and letting experimentation take place but within boundaries as well. (Participant 2)		
Again, through curation, through selection processes. So for example, on our online learning platforms, we are only investing in content that's relevant to meet the technical learning and skills objectives of the organisation, as well as the behavioural and motivational objectives of the organisation. So, if we want people to build more emotional intelligence, then we will design and source platforms and content that aligns to that requirement in terms of communication objectives and engaging with people around topics relevant to the organisation. I mean again, it's in very specific context. So if we have an IT infrastructure that is Microsoft driven, then Microsoft SharePoint, cloud applications, cloud products and services or Oracle, will be integrated into the organisation as part of enabling and empowering people to achieve their objectives. So it's about strategic alignment. (Participant 2)		Curating relevant content

So you have cyber security rules or regulations and governance structures in place. They must validate it, they will do penetration tests, they will do credibility vetting. They have actually a whole governance framework, because I can't take an app and make it accessible to the entire organisation and send it and say download this wonderful app and then we can start talking to each other, without them vetting it. Because they must make sure that the POPI (Protection of Personal Information) acts are adhered to, if there are there any risks in terms of sensitive information being shared, etc.

But then of course, you have the cyber security teams who have monitoring systems and tools in place. More on the one side for monitoring any potential penetration by external hackers or illegitimate people. So we get attacked every day, because people want access to our employee data, they want access to our customer data. They know that companies like us have big pay roles, you know, so there is of a lot of confidential, sensitive information. Sometimes it's more for talent. So it can be a whole combination of things. (Participant 2) | | Privacy and security |
| Yeah well, it's the internal communications teams, and then it's the marketing teams, depending on if it's an external engagement. So, there are dedicated people who have roles in monitoring these types of things. (Participant 2)

So I think to answer the question, what you hope is that the right eyes are in your platform, and if you've got all eyes on it then the system becomes kind of self-organising. Where somebody will go: "Dude that's actually not true." This is the right answer. You know, that's what you ideally hope for. (Participant 1) | | Valid and credible content |
| So I mean for us just this year, we had a total revamp of our system, a total change after about six or seven years, we retired all our old content and literally replaced it with our whole new content. (Participant 1) | | Updating the systems and content |

Figure 6-4: Mind-map of themes from how Company A *manages OL platform content*
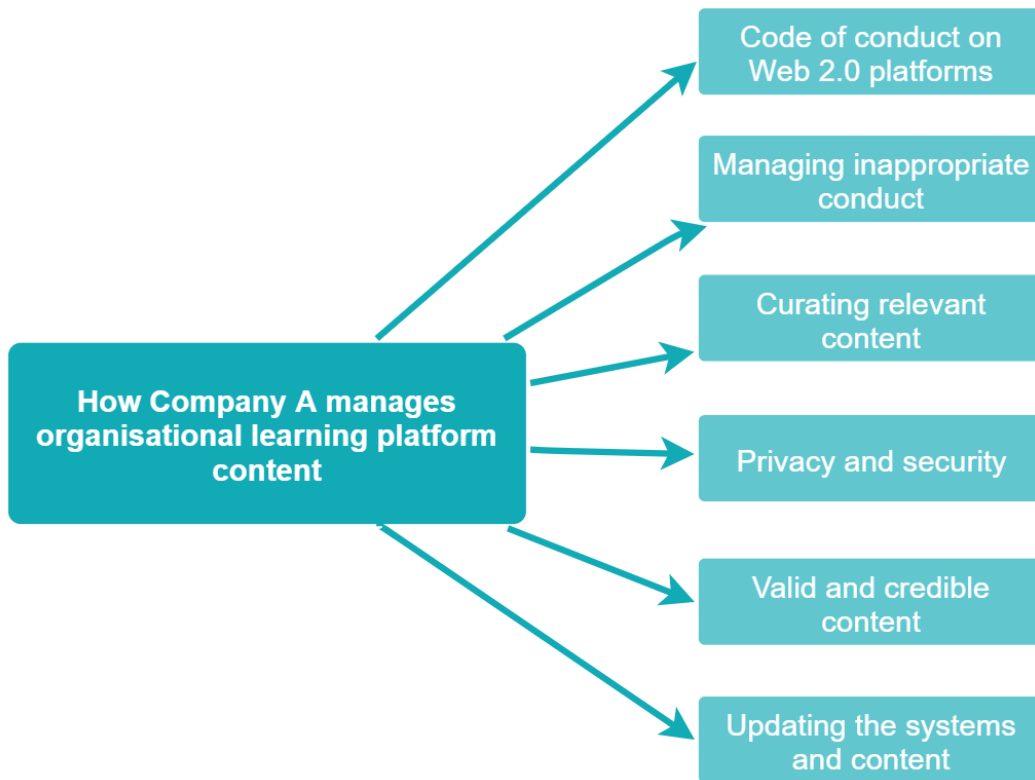
6.2.10 Discussion of results: How Company A manages Organisational Learning platform content

The sub-section below discusses the results of the theme "How the organisation manages OL content" in Company A.

- ***Code of conduct on social media***

The use of social media in organisations for OL means that content is being created and shared among employees (Olafsen & Cetindamar, 2005; Schneckenberg, 2009; Kaplan & Haenlein, 2010). However, organisations now need to consider how to manage this content (Treem & Leornardi, 2012). One of Company A's considerations was to create rules and regulations based on the etiquette employees were expected to practice on these social media. A barrier to OL exists if organisations do not create clearly stated rules and guidelines on how content can be managed (Kane *et al.*; 2010).

Company A created general ground rules that employees had to abide by which still gave employees the freedom to express themselves without feeling like they were restricted when using social media. Ideally, organisations are expected to offer guidelines on how

employees should behave when using social media to ensure that they are used effectively (Vuori, 2012). This is what Participant 1 had to say regarding the code of conduct on social media:

So that's where there's a social media policy around the comments that can and cannot be said, and that needs to be disseminated through your business up front. So that everybody knows that this is a platform that's used for learning, that we don't tolerate, comments that are racist, sexist, bigoted, something that would inspire violence and that is hate speech. I think you've got to make it clear.

So that's something that we've got to finalise around our own rules around how we interact with social media in the company. Fortunately, we haven't had any issues where you know, we've got to kind of dismiss somebody or discipline anyone. (Participant 1)

Company A's policies regarding social media etiquette were more centred around dealing with issues as they occurred. This gave Company A, a more flexible approach when it came to creating the rules and regulations for employees conducting themselves on social media. Organisations are encouraged to work with their legal, HR, and IT security departments to develop policies on how employees should conduct themselves on social media (Chui, Miller & Roberts, 2009). Part of giving the employees the freedom to create content meant that the company trusted the employees to conduct themselves accordingly on these social media:

At the same time, people must understand that there is a level of responsibility that is associated with how you participate and how you engage and you know. And I think that's becoming clearer because companies are putting more social media policies in place, and governance structures to give frameworks within which conduct must take place.

You cannot use foul language, you cannot use racist tones, you cannot use sexist comments, you know, you need to remind people within that. But to me those guidelines are part of informing the culture to say, well we have a freedom of expression culture, within boundaries and within limits, which are guided by our values and our code of conduct and our ethics in the organisation. (Participant 2)

- *Managing inappropriate conduct*

The participants further explained how the company deals with occurrences where employees conduct themselves in a way that is inappropriate in a business environment and how they informed the employees about these matters. Trying to control employees and manage what they say is challenging on its own; Chui *et al.* (2009) concur by stating that organisations usually find it difficult to find the right balance between controlling employees and offering them freedom. The company had to consider allowing employees to interact on social media alongside how transgressions could be dealt with.

Literature confirms that some companies incorporate a flag button on their social media to signal inappropriate content which temporarily removes suspicious postings until they are reviewed (Chui *et al.*, 2009). Companies that do not deal with inappropriate postings or that have implemented laid-back policies often find themselves in trouble (Chui *et al.*, 2009). Company A hoped that the employees would monitor themselves and report any inappropriate interactions made on social media. When asked about how they managed inappropriate conduct on social media, Participant 1 stated:

So there is your challenge because I mean, it's like, how do you control Facebook? Right? The reality is all you can do is open it up and have a flagging system that says somebody can flag the comment. As soon as the comment is flagged, it gets taken off, goes to a moderator, the moderator checks it. If the moderator deems it inappropriate, it gets taken off and you notify the person that: "Hey, that was inappropriate, don't do it again." If it's not inappropriate, it gets put back in.

And that's your challenge is because the thing is in an enterprise, if you just open it up, you know anybody can answer but what you hope is that there's an SME (subject-matter expert) and the team starts to become almost a kind of self-ratification and self-organising within that team. That if somebody puts a racist comment or a rude comment or you know, a sexually lascivious comment or something like that, that somebody in the group is going to call them out. You don't want it to be the comment section on a News24 website. You know, it just becomes a mudsling. (Participant 1)

Participant 2 further added that the company ensures that inappropriate behaviour is handled within the organisation. Handling inappropriate behaviour was seen as a learning process and mistakes were expected to be made. The company also ensured that there

was always room for improvement to learn from mistakes so that they were not repeated in future:

Like for example our intranet platforms and engagement platforms, the communications guys will know how they will deal with that, but it will be dealt with. So probably, if somebody creates a post that is inappropriate, it'll be dealt with in a private matter. But they will engage with the individual to say, "Don't say certain comments, we don't like it," so it doesn't get ignored.

I think it's a continuous learning process. You don't know what you don't know and I think that's the issue. It's like the first time that people are saying, "Okay, here's a bicycle now go and ride." People are going to make mistakes, and the way they make the mistakes, the mistakes are dealt with, will set the tone for what's acceptable and what's not acceptable. So, I think it's just a process of feedback and transparency and letting experimentation take place but within boundaries as well. (Participant 2)

- ***Curating relevant content***

One of the aims of OL is to keep track and store knowledge, and then provide employees with access to useful information (Anica-Popa, 2011). Participant 2 explained that Company A ensured all content on social media platforms was relevant to the employees. Relevant content relates to selecting, organising and presenting the content on social media to the employees by using professional or expert knowledge. The relevant content also had to benefit the objectives of the organisation, as well as the skills and learning of the employees. When asked about how the company manages content on the platforms, Participant 2 revealed:

Again, through curation, through selection processes. So for example, on our online learning platforms, we are only investing in content that's relevant to meet the technical learning and skills objectives of the organisation, as well as the behavioural and motivational objectives of the organisation.

So, if we want people to build more emotional intelligence, then we will design and source platforms and content that aligns to that requirement in terms of communication objectives and engaging with people around topics relevant to the organisation. I mean again, it's in very specific context. So if we have an IT infrastructure that is Microsoft driven, then Microsoft SharePoint, cloud applications, cloud products and services or

Oracle, will be integrated into the organisation as part of enabling and empowering people to achieve their objectives. So it's about strategic alignment. (Participant 2)

- *Privacy and security*

Another consideration of how organisations managed content on social media was centred around the privacy and security of the data. Employees are reported to be more comfortable when they are reassured that the knowledge shared on social media is secured, and this inherently improves the use of social media in organisations (Baxter & Connolly, 2014). Company A reported that they had structures in place that ensured that the content on social media was well secured and protected from external threats. Company A also had structures in place and laws to abide by, to certify that the social media users within the organisation were trustworthy:

So you have cyber security rules or regulations and governance structures in place. They must validate it, they will do penetration tests, they will do credibility vetting. They have actually a whole governance framework, because I can't take an app and make it accessible to the entire organisation and send it and say download this wonderful app and then we can start talking to each other, without them vetting it. Because they must make sure that the POPI (Protection of Personal Information) acts are adhered to, if there are there any risks in terms of sensitive information being shared, etc.

But then of course, you have the cyber security teams who have monitoring systems and tools in place. More on the one side for monitoring any potential penetration by external hackers or illegitimate people. So we get attacked every day, because people want access to our employee data, they want access to our customer data. They know that companies like us have big pay roles, you know, so there is of a lot of confidential, sensitive information. Sometimes it's more for talent. So it can be a whole combination of things. (Participant 2)

- *Valid and credible content*

Furthermore, another consideration that organisations must contemplate is guaranteeing that the content shared on social media was credible and valid, as one of the challenges that organisations face when using social media is the difficulty of examining the content on the platform and ensuring that the information shared is of high quality (Dinh *et al.*,

2011; Breunig, 2016; Filstad *et al.,* 2018). Company A reported that there were people who were in charge of ensuring that the content shared on social media was reliable:

Yeah well, it's the internal communications teams, and then it's the marketing teams, depending on if it's an external engagement. So, there are dedicated people who have roles in monitoring these types of things. (Participant 2)

Participant 1 further added that employees themselves could act as agents who ensured that the right information or content was being shared. This could be done by correcting the information that was known to be incorrect or correcting other employees when they shared inaccurate content:

So I think to answer the question, what you hope is that the right eyes are on your platform, and if you've got all eyes on it then the system becomes kind of self-organising. Where somebody will go: "Dude that's actually not true." This is the right answer. You know, that's what you ideally hope for. (Participant 1)

- *Updating the systems and content*

One of the important benefits of using social media is the ability to provide employees with updated information (Zhao & Kemp, 2013; Dreher, 2014; Breunig, 2016). Sharing updated information means that IT systems and the social media that are being used must also be updated so that the data are relevant to employees. Participant 1 revealed how they maintained and updated the systems and the content on social media:

So I mean for us just this year, we had a total revamp of our system, a total change after about six or seven years, we retired all our old content and literally replaced it with our whole new content. (Participant 1)

6.2.11 Summary and insights of results of How Company A manages Organisational Learning platform content

The sub-section below summarises the results of the theme "How the organisation manages OL platform content" in Company A.

- *Summary*

The data analysis that focused on how social media content is managed at Company A revealed six main themes. It was reported that Company A created a code of conduct that

employees had to follow to manage the content on social media. It was noted that Company A had put procedures in place that dealt with inappropriate content that was posted on social media. It also emerged that another way of managing content was to curate the content in such a way that the content was relevant to the employees. Company A further reported that they had measures in place that safeguarded the privacy and security of the content, whilst monitoring the content for validity and credibility. To ensure that up-to-date content on social media was shared, Company A revealed that they updated their systems and the content that was stored in the system.

- *Insights*

The company faces challenges when it comes to managing content on social media. An organisation needs to develop policies on how employees should conduct themselves on social media. This is to ensure that employees know that social media are tools used to foster learning and to ensure that they know what kind of information is suitable to be shared. Employees are also expected to share a level of responsibility for conducting themselves appropriately on social media. An organisation must build a culture that allows employees to freely express themselves but within a limit that aligns with the organisation's values and code of conduct.

Content that intentionally or unintentionally offends other people is usually dealt with within the organisation. Employees are expected to monitor the content on social media, call out any inappropriate posts and bring them to the attention of the moderator. The moderator oversees the content to ensure its appropriate, if the content is inappropriate then the perpetrator is dealt with to ensure similar actions do not reoccur. This is deemed as a continuous learning process and employees are expected to make mistakes and learn from them. This then sets the tone for the kind of behaviour that is expected from employees regarding what is acceptable and what is not.

The organisation curates the content on social media to ensure that relevant information is accessible to the employees. Relevant information is used to meet the technical learning and skills objectives, and the behavioural and motivational objectives of the organisation. Cyber security rules and regulations are put in place to ensure that content on social media is not at risk of being breached. The security team is in charge of monitoring social media and making sure that external attackers do not access the content. The security team is

also responsible for vetting and checking which social media is credible to use in the organisation in terms of assessing the risks the platform(s) may pose. The communications team in the organisation and the employees themselves have the responsibility to ensure that the content shared is correct and reliable. The organisation also ensures that its systems and the content on the systems are updated to ensure that employees always have the latest information.

6.2.12 Company A: Results for considerations of implementing social media in organisations

The analysis of the data from the interviews revealed the themes and sub-themes presented in Table 6-8 below.

Table 6-8: Themes from *considerations of implementing social media* in Company A

Theme	Sub-themes
Considerations of implementing social media in organisations	I.Considering employees' needs and wants
	II.Mobile devices and data availability
	III.Reason for implementing social media
	IV.Ethical considerations for using AI tools
	V.Cybersecurity considerations
	VI.Investing in learning resources and infrastructure
	VII.Fostering a learning environment

The table below shows the raw data extracts, the identified themes and the sub-themes that emerged from data regarding *considerations of implementing social media* in Company A. Figure 6-5 thereafter provides a mind-map as a visual representation of the themes and sub-themes mentioned in Table 6-9.

Table 6-9: Raw data, themes and sub-themes from the *considerations of implementing social media* in Company A

Raw data	Identified themes	Sub-themes
I think it depends on what people need and what they want. So when I look at it, the probably most efficient and most effective one to use is your learning experience platform. And what we've tried to do is design it around preferences of what people like. So, do you like to watch? Do you like to read? Or do you like to listen to content. And so, we've got an elastic algorithm at the back of the system and an AI engine in the back-end, which starts watching your behaviour. And that starts to in the same way as Amazon works or in the same way Instagram works, the same way Facebook works, to start pushing you more stuff that you like and less of what you don't like. So, if you go onto the system, and you start looking only for stuff related to design thinking and diversity inclusion and you only watch videos. The system will start seeing the new videos of diversity and inclusion and design thinking. It's not going to send you stuff on customer service and technology. So for me, that becomes the most efficient way, provided you are using the system. And that's the caveat to the whole thing. It's the same thing with Facebook. It's the same thing with YouTube. It's only as good and as efficient as how much you put in, is also how much you're going to get out of it. So the key thing is around, getting people to start becoming discerning about what they are interacting with, I think that becomes the point and that becomes your measure of success is around what works best for you. Because everybody can throw anything on the platform. It's around how am I engaging with it? And what I do after? So I think that the short answer of what's going to work, is if I want the training, if I need the training, and I can access to it. If I want it, I know I want it, I know I need it, and I can access it, then it works. And that for me is your trifecta, you hit the sweet spot, if you can meet those three things with whatever platform you're using, is it that the person knows they need it? They want it and they can access it, then your platform irrespective of which one it is, is working. (Participant 1)	Considerations of implementing social media in organisations	Considering employees' needs and wants

And then the other thing that's a measure of success is something that, obviously we don't necessarily think about it, but I think every other organisation is thinking about it, is data and the cost of data. Because if you want your people to use it offline, outside of your business, because that's what you want, you want them to interact with the learning all the time, then you have to make data available for them. But you don't only have to make data available for them, you have to make the device available to them. Because we're and I'm only using South Africa as an example, you'd be astounded at the number of people who still have relatively "for a lack of a better word" dumb phones, that can't have heavy apps running on them or download heavy content or watch a video offline on the handset. So those are all of the things that kind of impede your opportunity for success with social media and then security also. (Participant 1)		Mobile devices and data availability
Well, you know, that's why I'm saying there needs to be more why questions asked. Why do we want to have this platform in the organisation? What are we trying to achieve? Because you can't put anything out there anymore just for the sake of putting it out there and saying we are having it because remember, you're competing for time, attention and trust. The latest research basically says that people now in a work week, in organisations have 1% of time. I think they worked it out at 27 minutes to dedicate to learning. So the modern learner is overwhelmed by demands for the attention, to give up their time and to trust that the content they are accessing is credible and of the right quality. So what's happening is there's a greater discipline emerging in terms of what content, what platforms, and for what purpose? And that's very important, so it needs to be thought through. Well it needs to be purpose driven content. Again, like I said it's about alignment. It's not either we should have social media or we don't have platforms. It's how do we integrate these platforms to help us become more effective? Because at the end of the day, if performance is not going up, and productivity is not going up and we're not achieving our objectives, then it doesn't matter whether we have it or we don't have it, it doesn't matter. That's why I'm saying, "Why do we need this, for what purpose?" is very important. I find that people in organisations forget to step back, and just think about why do we have this platform, to achieve what? There's always a cost benefit analysis that has to be taken into account because I mean, sometimes you will make an investment now, in the short term and only reap the benefits in the long term. (Participant 2)		Reason for implementing social media

Now the issue though is when we sit here, we don't have insight into what learning channels people are accessing on a day to day basis, although there are more developments that have started happening with platforms such as Degreed (Online learning platform) which is building this type of machine learning systems. Which actually can start tracking how you as an employee are acquiring knowledge in the organisation. So this is a new development. I mean, there's also an ethical dilemma about, how much interrogation of people's behaviour you are going to allow in the organisation in terms of monitoring these tools. And that to me I think is very important, because I mean social media trends and social media behavioural analytics tools are becoming more sophisticated, to see what people are accessing, what are they tweeting, what are they sharing, what are they posting, etc. But again in that context, I think there's an ethical dilemma as well, because it's the same what's happened with Facebook. Like how much how much leeway is there, of monitoring what people access and what they don't? So from an OL perspective, it's an important governance framework that needs to be put in place is to say, well you know, how are we going to monitor, what you access and what you do? (Participant 2)		Ethical considerations for using AI tools
So your other big consideration is the issue of risk, cybersecurity, and ethics. Because as these social media are becoming more sophisticated, they are also posing more risk, there is also more ethical debates emerging. And there's also more cyber security things that have to be considered. And in companies like ourselves, we have very strong governance. We have a fully dedicated cybersecurity department. So you cannot just open any social media and throw it out to the entire organisation. Because we don't know where some of the content or some of the discussions that are happening are going to end up. (Participant 2)		Cybersecurity considerations
It all depends on whether or not the organisation sees the link between learning and its strategic intent. So, if they believe that learning is an important driver of motivation, productivity, innovation, creativity, and performance, then they will put more resources in it. So they will make time to create opportunities for people to access learning infrastructure investments that will be made in learning infrastructure. So it's simple. How much money do you put aside to create OL processes in your business? Okay, practically, what does it mean? Do you create opportunities where people come		Investing in learning resources and infrastructure

together and problem solve? Do you create opportunities for people to acquire new skills, whether it's formal classroom-based learning or whether it's through online learning platforms? Do you integrate social media to speed up your communication, your engagement and your innovation processes in the organisation? So, give me examples, if you cannot give me examples of what you are doing, then you're doing nothing, then this is all talk and there is no action. Okay, so tangibly, what learning infrastructure do you have in place? What knowledge management systems you have in place? What communication processes and tools do you use? And how will you digitise it? Our entire building in the past three years has been revamped, more lighting, more digital facilities as you walk around, and you can see how much digital communication is happening. Why? because we want people to consciously become more aware and connected to what's happening in the organisation, what's expected of them, how they can contribute, and that results in higher levels of engagement, high levels of engagement results in better customer experience, more revenues, shareholder value appreciates etc. You must think of this systemically. (Participant 2)		
So what you've got to encourage is the belief that you're able to ask anyone for help, and people are able to help. And I think the biggest thing is when people ask for help is to give them the help and say thank you, here is the answer. Yeah not "hey dumb ass, you should know this stuff, it's your job" kind of thing, because then you defeat the purpose of why you created it. So it's around creating a culture of learning, creating a safe space, and a space where people can ask questions, and not feel scared about asking. That's the only way it can work. (Participant 1)		Fostering a learning environment

Figure 6-5: Mind-map of themes from *considerations of implementing social media* **in Company A**
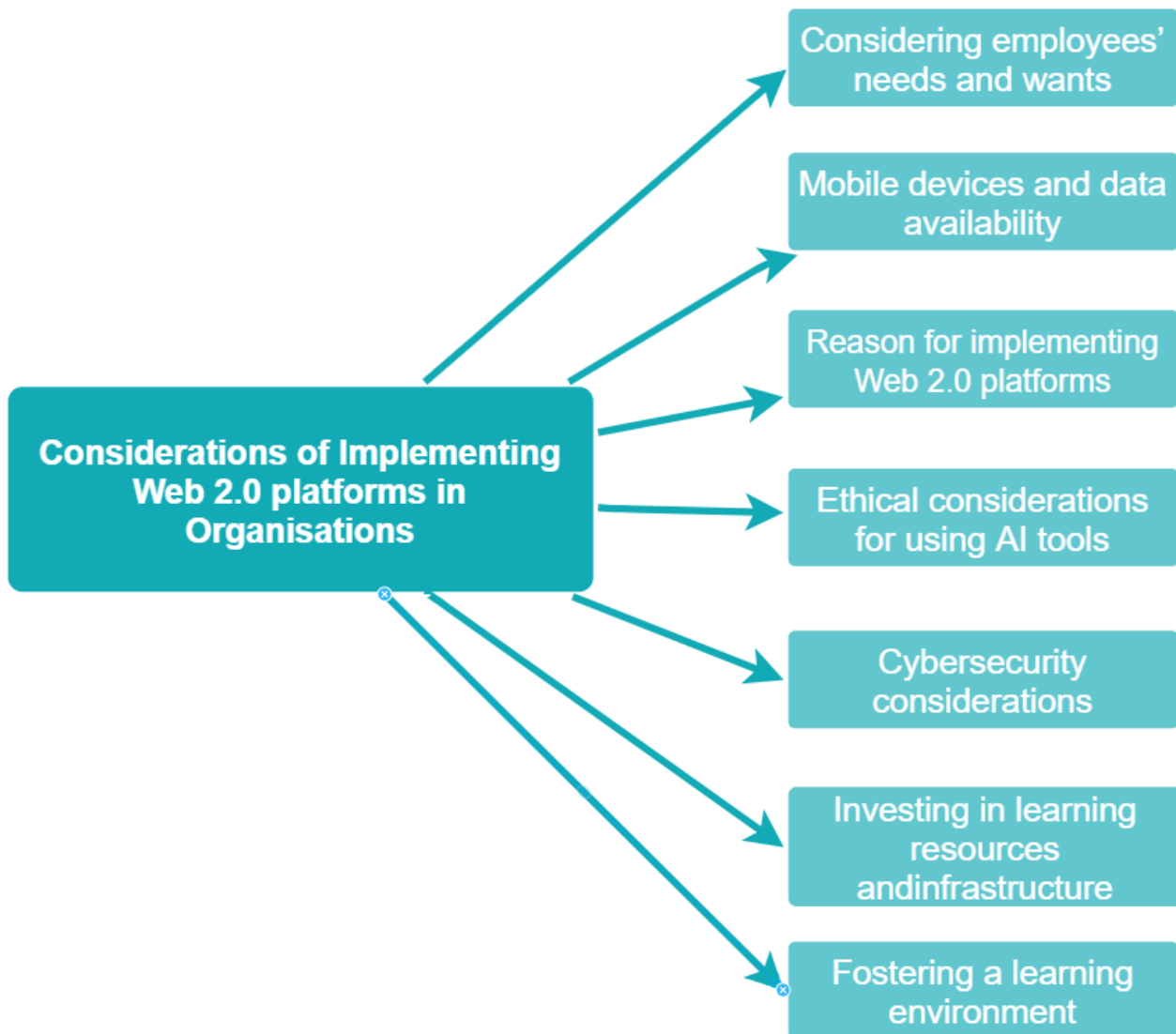
6.2.13 Discussion of results: Considerations of implementing social media in organisations

Company A revealed several considerations that they felt every organisation needed to consider when deploying the use of social media, to ensure that they were effective in promoting OL within their organisations. Literature reveals that the organisation is expected to carry out research regarding the challenges that the organisation may face when implementing social media so that it can mitigate against the challenges posed (Baxter & Connolly, 2013).

Organisations are also expected to inform employees about the benefits of using social media, for the implementation and use of social media to succeed in an organisation (Baxter & Connolly, 2014). Data analysed from the interviews from Company A revealed seven themes regarding what organisations needed to consider when it comes to employing social media in the workplace. These are discussed below.

- ***Considering employees' needs and wants***

Organisations initially have to consider various factors when it comes to implementing the use of Web 2.0 to enhance OL. Organisations must provide clear instructions on how to use social media to encourage the effective adoption and use of social media in organisations (Baxter & Connolly, 2014). Participant 1 highlighted that organisations should focus more on trying to work out what their employees need, what the employees want, how they can get employees to access social media and how they can get employees to engage more with social media. Another consideration that organisations have to consider, is how content should be presented to employees for it to be effective for employee learning in the organisation. This was evident in what Participant 1 stated:

I think it depends on what people need and what they want. So when I look at it, the probably most efficient and most effective one to use is your learning experience platform. And what we've tried to do is design it around preferences of what people like. So, do you like to watch? Do you like to read? Or do you like to listen to content.

So I think that the short answer of what's going to work is, if I want the training, if I need the training, and I can get access to it. If I want it, I know I want it, I know I need it, and I can access it, then it works. And that for me that is your trifecta, you hit the sweet spot. If you can meet those three things with whatever platform you're using, is it that the person knows they need it? They want it and they can access it, then your platform irrespective of which one it is, is working. (Participant 1)

Literature reveals that participatory development and empowerment regard asking people what they want and providing it, and then allowing them to participate and follow up to measure its success (Connell, 1997; Schwittay & Braund, 2019). Participatory development involves putting people first and using them as agents to drive transformational development, participatory learning and participatory culture (Connell, 1997; McLoughlin & Lee, 2007; Schwittay & Braund, 2019). In this case, participatory

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development deals with involving employees to contribute and add value to the use of social media in the organisation.

To meet the needs and wants of the employees, Participant 1 revealed that they had an algorithm in place which runs their social media. The algorithm monitors employees' behaviour, which allowed the system to provide relevant information to the employees in line with what they wanted and needed:

And so, we've got an elastic algorithm at the back of the system and an AI engine in the back-end that starts watching your behaviour. And that starts to in the same way as Amazon works or in the same way Instagram works, the same way Facebook works, to start pushing you more stuff that you like and less of what you don't like. So, if you go onto the system, and you start looking only for stuff related to design thinking and diversity inclusion and you only watch videos. The system will start seeing the new videos of diversity and inclusion and design thinking. It's not going to send you stuff on customer service and technology.

So for me, that becomes the most efficient way, provided you are using the system. And that's the caveat to the whole thing. It's the same thing with Facebook. It's the same thing with YouTube. It's only as good and as efficient as how much you put in, is also how much you're going to get out of it.

So the key thing is around, getting people to start becoming discerning about what they are interacting with, I think that becomes the point and that becomes your measure of success is around what works best for you. Because everybody can throw anything on the platform. It's around how am I engaging with it and what I do after. (Participant 1)

- ***Mobile devices and data availability***

Participant 1 revealed that much of the success of implementing social media relied on organisations making mobile data and devices available for employees, to use social media remotely or away from the office environment. Thus, the organisation had to consider the cost of mobile data and mobile devices to ensure that employees had access to learning at all times:

And then the other thing that's a measure of success is something that, obviously we don't necessarily think about it, but I think every other organisation is thinking about it,

is data and the cost of data. Because if you want your people to use it offline, outside of your business, because that's what you want, you want them to interact with the learning all the time, then you have to make data available for them.

But you don't only have to make data available for them, you have to make the device available to them. Because we're and I'm only using South Africa as an example, you'd be astounded at the number of people who still have relatively "for a lack of a better word" dumb phones, that can't have heavy apps running on them or download heavy content or watch a video offline on the handset. So those are all of the things that kind of impede your opportunity for success with social media and then security also. (Participant 1)

Literature states that the practice of adopting and using technological devices for learning can fall under the Bring Your Own Device/Technology (BYOD or BYOT) concept (Solomon & Schrum, 2007; Ackerman & Krupp, 2012). The BYOD concept enables the employees to actively take part in learning, both within and outside of the organisational setting, by allowing employees to use personal devices and connect to the employer's network anywhere on multiple devices (Solomon & Schrum, 2007; Ackerman & Krupp, 2012; De Waard, 2014).

The devices used by the employees can include tablets, smartphones, e-readers, laptops, iPad devices and more (Ackerman & Krupp, 2012; Stead, 2014). Organisations must consider funding and security for proper internet bandwidth, personnel, infrastructure and the devices themselves when it comes to making BYOD a success (Ackerman & Krupp, 2012; De Waard, 2014; Stead, 2014).

- ***Reason for implementing social media***

Participant 2 reported that organisations need to discover why they would want to implement social media and what the organisation is trying to achieve in the long run by implementing social media. Organisations should also take into consideration that there may be limited time for employees to engage with social media. Thus, it is important to make use of employees' time effectively by ensuring that the aim of implementing social media is clearly stated. This was evident as Participant 2 revealed:

Well, you know, that's why I'm saying there needs to be more why questions asked. Why do we want to have this platform in the organisation? What are we trying to

achieve? Because you can't put anything out there anymore just for the sake of putting it out there and saying we are having it because remember, you're competing for time, attention and trust.

The latest research basically says that people now in a work week, in organisations have 1% of time. I think they worked it out at 27 minutes to dedicate to learning. So the modern learner is overwhelmed by demands for the attention, to give up their time and to trust that the content they are accessing is credible and of the right quality. So what's happening is there's a greater discipline emerging in terms of what content, what platforms, and for what purpose? And that's very important, so it needs to be thought through. Well it needs to be purpose driven content. Again, like I said it's about alignment. (Participant 2)

Participant 2 further reiterates that the debate is not about whether one should use social media or not. The focus should be on *how* social media are used to benefit the organisation's objectives and productivity:

It's not either we should have social media or we don't have platforms. It's how do we integrate these platforms to help us become more effective. Because at the end of the day, if performance is not going up, and productivity is not going up and we're not achieving our objectives, then it doesn't matter whether we have it or we don't have it, it doesn't matter.

That's why I'm saying, "Why do we need this, for what purpose?" is very important. I find that people in organisations forget to step back, and just think about why do we have this platform, to achieve what? There's always a cost benefit analysis that has to be taken into account because I mean, sometimes you will make an investment now, in the short term and only reap the benefits in the long term. (Participant 2)

- ***Ethical considerations for using AI tools***

Participant 2 reveals that organisations should take into account the ethical dilemmas regarding artificial intelligence (AI) tools to track their employee's activity on social media. Literature concurs by stating that it is important for organisations to pay attention to the ethical and moral issues that are associated with AI, to handle AI policy issues (Wang & Siau, 2018; Ouchchy, Coin & Dubljević, 2020). Ethical issues or problems with AI

technology are known to pose a threat to the end users and they cannot be ignored (Wang & Siau, 2018).

Organisations are expected to provide guidelines on what data they would like to monitor, what data they would like to access and what they would like to do with the data. Literature states that the use of AI and AI principles must be transparent regarding who will bear the responsibility of making moral decisions (Ouchchy *et al.,* 2020). This was evident as Participant 2 stated:

> *Now the issue though is when we sit here, we don't have insight into what learning channels people are accessing on a day to day basis, although there are more developments that have started happening with platforms such as* **Degreed** *(Online learning platform) which is building this type of machine learning systems. Which actually can start tracking how you as an employee are acquiring knowledge in the organisation. So this is a new development. I mean, there's also an ethical dilemma about, how much interrogation of people's behaviour are you going to allow in the organisation in terms of monitoring these tools.*

> *And that to me I think is very important, because I mean social media trends and social media behavioural analytics tools are becoming more sophisticated, to see what people are accessing, what are they tweeting, what are they sharing, what are they posting, etc. But again in that context, I think there's an ethical dilemma as well, because it's the same what's happened with Facebook. Like how much how much leeway is there, of monitoring what people access and what they don't? So from an OL perspective, it's an important governance framework that needs to be put in place is to say, well you know, how are we going to monitor, what you access and what you do?* (Participant 2)

- *Cybersecurity considerations*

Participant 2 discussed the topic of cybersecurity and how companies should ensure that every social media used in the organisation does not pose a threat to security. Literature concurs by stating that organisations need to effectively manage the risks posed by the dynamic and complex environment that social media creates (Salim, 2014). The primary concern of employees using social media in organisations is usually centred around cyber security; this can affect the integration of social media in organisations (Almeida, 2012).

Therefore, organisations are expected to invest substantial resources in the form of software and hardware, to enhance and maintain their cyber security (Salim, 2014).

Participant 2 further added that measures should be put in place to make sure that security concerns regarding posted content are addressed, as the use of social media in organisations has made implementing cyber security policies a more complex issue (Almeida, 2012). Therefore, organisations need to respond and adapt to new security measures to deal with cyber security (Salim, 2014). Organisations' security teams need to address a security policy regarding protocols, communications, server weaknesses, information sources, and structures of social media (Almeida, 2012). This was evident as Participant 2 revealed:

> *So your other big consideration is the issue of risk, cybersecurity, and ethics. Because as these social media are becoming more sophisticated, they are also posing more risk, there is also more ethical debates emerging. And there's also more cyber security things that have to be considered.*
>
> *And in companies like ourselves, we have very strong governance. We have a fully dedicated cybersecurity department. So you cannot just open any social media and throw it out to the entire organisation. Because we don't know where some of the content or some of the discussions that are happening are going to end up.* (Participant 2)

- *Investing in learning resources and infrastructure*

Participant 2 further stated that companies should take into consideration what their vision is for learning. It is in the interest of the organisations to invest capital and resources towards their employees' learning within the organisation (Qi & Chau, 2018). OL resources can be expensive and they may require a vast amount of investment; whilst the costs are immediate, the benefits are usually gained in the future (Ege *et al.*, 2017). Participant 2 stated:

> *It all depends on whether or not the organisation sees the link between learning and its strategic intent. So, if they believe that learning is an important driver of motivation, productivity, innovation, creativity, and performance, then they will put more resources in it. So they will make time to create opportunities for people to access learning infrastructure investments that will be made in learning infrastructure.*

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So it's simple. How much money do you put aside to create OL processes in your business? Okay, practically, what does it mean? Do you create opportunities where people come together and problem solve? Do you create opportunities for people to acquire new skills, whether it's formal classroom-based learning or whether it's through online learning platforms? Do you integrate social media to speed up your communication, your engagement and your innovation processes in the organisation? (Participant 2)

Participant 2 further added that the organisations are expected to develop a clear strategy of how and where they plan on investing the resources, to enhance OL. A well-thought-out plan on infrastructure can be used to enhance the interaction and engagement of employees on social media. Literature supports this by stating that organisations must specify and define organisational strategies that ensure that certain structures and practices are implemented to facilitate and improve OL (Crossan *et al.*, 1999; Boateng *et al.*, 2009). This was evident as Participant 2 stated:

So, give me examples, if you cannot give me examples of what you are doing, then you're doing nothing, then this is all talk and there is no action. Okay, so tangibly, what learning infrastructure do you have in place? What knowledge management systems you have in place? What communication processes and tools do you use? And how will you digitise it?

Our entire building in the past three years has been revamped, more lighting, more digital facilities as you walk around, and you can see how much digital communication is happening. Why? because we want people to consciously become more aware and connected to what's happening in the organisation, what's expected of them, how they can contribute, and that results in higher levels of engagement, high levels of engagement results in better customer experience, more revenues, shareholder value appreciates etc. You must think of this systemically. (Participant 2)

- *Fostering a learning environment*

Participant 1 revealed that organisations should foster an environment on social media that offers ample opportunities for employees to learn. Literature states that the organisation should create a dialogue and enquiry environment, which relates to creating

an environment that encourages employees to be inquisitive, ask more questions and provide feedback to other employees (Hasson *et al.*, 2016; Qi & Chau, 2018)

Participant 1 further added that organisations were also expected to create an environment that encouraged employees to be confident in the fact that someone would be willing to respond and help them. Literature concurs by stating that organisations should put into practice activities that lead to OL and subsequently foster and lead a positive working environment (Boateng *et al.*, 2009; Nazem & Mozaiini, 2014). This was evident as Participant 1 revealed:

> *So what you've got to encourage is the belief that you're able to ask anyone for help, and people are able to help. And I think the biggest thing is when people ask for help is to give them the help and say thank you, here is the answer. Yeah not "hey dumb ass, you should know this stuff, it's your job" kind of thing, because then you defeat the purpose of why you created it. So it's around creating a culture of learning, creating a safe space, and a space where people can ask questions, and not feel scared about asking. That's the only way it can work.* (Participant 1)

6.2.14 Summary and insights of results of considerations of implementing social media in organisations

The sub-section below summarises the results of the theme "Considerations of implementing social media in organisations" in Company A.

- *Summary*

The data analysis that was conducted regarding the considerations of implementing social media in organisations revealed seven main themes. The first theme mentioned that organisations were expected to take the needs and wants of their employees into consideration as they relate to their learning. Organisations were also expected to find a way to provide access to and encourage involvement in social media.

The second theme involved organisations making mobile devices and data available to employees to access social media remotely. The third theme regarded organisations discovering the purpose of implementing social media as it pertains to their overall goal for the future. Organisations are expected to clearly state the main aim of implementing social media to ensure that employees' time is used efficiently.

The fourth theme involved organisations considering the ethical aspects of using AI tools in their social media to monitor their employees' learning patterns. An organisation is expected to develop a framework that clearly states what kind of behaviour they would like to monitor from their employees, what data their employees are accessing, sharing, posting and the activities they engage in. The fifth theme involved organisations considering the risks that come with cybersecurity. A framework should be in place that vets the social media/content shared on them to ensure that they do not pose a security threat to the organisation.

The sixth theme involved organisations considering the number of resources, capital and infrastructure that they would like to invest in OL. Organisations are expected to have a well-thought-out strategy on what infrastructure should be implemented and the resources needed to enhance learning among employees. The seventh theme involved organisations creating an environment that is conducive to learning. Organisations are expected to encourage employees to freely ask questions and have their fellow employees help and share knowledge to enhance learning in the organisation.

- *Insights*

As mentioned, there are several factors that organisations are expected to take into consideration when implementing social media. They must:

- research employees' wants and needs;
- provide portable devices and data to ensure remote accessibility;
- communicate their objectives regarding social media goals;
- ensure AI ethics are dealt with and monitored;
- prevent cybersecurity breaches by choosing safe social media;
- invest in OL infrastructure and resources; and
- create a suitable learning environment for employees to learn from one another.

6.2.15   Company A: Results for benefits of social media

The analysis of the data from the interviews revealed the themes and sub-themes presented in Table 6-10 below.

Table 6-10: Themes from *benefits of social media* in Company A

Theme	Sub-themes
Benefits of social media	I.Remote collaboration and ease of use
	II.Top-down and bottom-up hierarchical interaction
	III.Increases the sharing of information

The table below shows the raw data extracts, the identified themes and the sub-themes that emerged from data regarding the *benefits of social media* in Company A. Figure 6-6 thereafter provides a mind-map as a visual representation of the themes and sub-themes mentioned in Table 6-11.

Table 6-11: Raw data, themes and sub-themes from *benefits of social media* in Company A

Raw data	Identified themes	Sub-themes
So for example, I've got a learning group with all of my learning heads across the countries, if I fire off one WhatsApp, there's a great chance I'll get a response on WhatsApp than I would on an email, or even an SMS. Or on the platform, because I know the guys are on this platform. Your WhatsApp almost becomes the easiest way to adopt to, you know, because it's built into your normal way of your daily life. It's not a change from your daily life. Yeah, like they are comfortable in it. (Participant 1)	Benefits of social media	Remote collaboration and ease of use
Yeah that's part of the benefits. If this group CEO has a dedicated talk to me digital channel that's where the more the movement is happening, is to facilitate non-hierarchical communication and an interaction. Okay, so it's not about what level you are, what your job title is. It's more about, you know, giving opportunity to express your voice, or making a contribution or share an opinion. (Participant 1)		Top-down and bottom-up hierarchical interaction
Well, it's speeds up the process of acquiring relevant knowledge, information and even skills. Because this is why the trends are moving into more object based micro learning capabilities. Because I mean people are overwhelmed by emails, by meetings, by having mini workshops, by attending seminars, by delivering results. So what's happening is I think, social media if they are designed well and curated well, they speed up the process, to make sure that relevant content reaches people. So that there's no scrap learning. You want to get more knowledge and information that's relevant, to build capacity for you, to act relevantly and appropriately, to improve your productivity and achieve your goals. That's the big shift I think with social media, if managed well. Like I said, we have not for example, opened up a Facebook page for legitimate reasons. And research has been done and investigations have been done. It's important to find out, what do you want to use it for? As opposed to putting it out there, and it's available? Because at the end of the day, you have so much time and you have so much attention that you can give. And at the end of the day, you want to trust. So I call it time, attention and trust, is three critical things that I believe social media need to have, to be credible. I'm willing to give it my time, because I trust what's being put on there is of value to me, and it's credible, and therefore I'm willing to give it my attention to engage. (Participant 2)		Increases the sharing of information

Figure 6-6: Mind-map of themes from *benefits of social media* in Company A
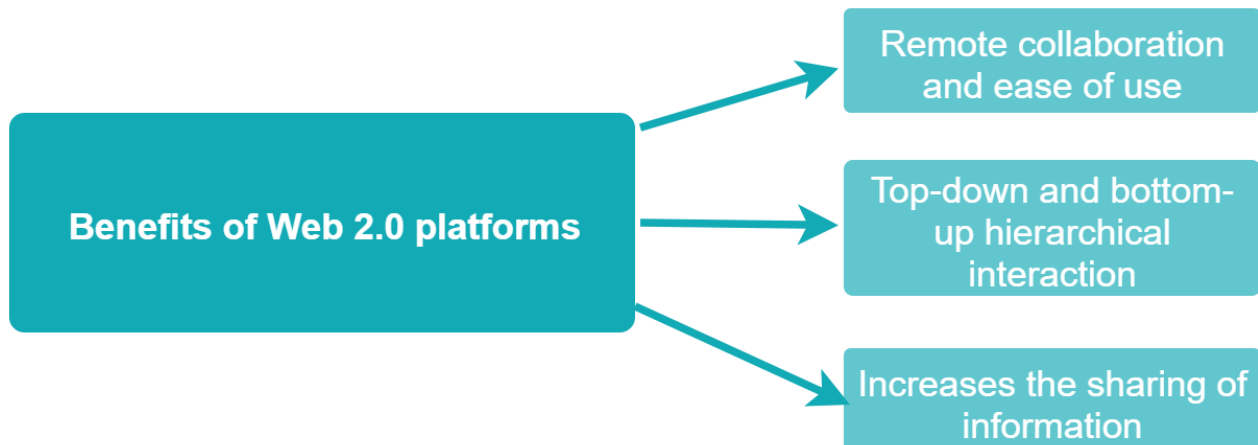
6.2.16 Discussion of results: Benefits of social media

The sub-section below discusses the results of the theme "Benefits of social media" in Company A.

- ***Remote collaboration and ease of use***

As an organisation that has experience in using social media, Company A has found out that social media come with several benefits. The benefits ranged from employees exchanging information across the organisation without having to worry about the geolocation of other employees, and the ability to get quick responses from your peers to the ability to use social media with ease.

Literature concurs by stating that employees must feel that social media were useful and easy to use, as the sharing of information within an organisation has a positive impact on team collaboration and OL (Dinh *et al.*, 2011; Petiz *et al.*, 2013). As a consequence, OL empowers employees in an organisation and increases the speed of exchanging information in an organisation (Saadat & Saadat, 2016). This was evident as Participant 1 responded:

So for example, I've got a learning group with all of my learning heads across the countries, if I fire off one WhatsApp, there's a great chance I'll get a response on WhatsApp than I would on an email, or even an SMS. Or on the platform, because I know the guys are on this platform.

Your WhatsApp almost becomes the easiest way to adopt to, you know, because it's built into your normal way of your daily life. It's not a change from your daily life. Yeah, like they are comfortable in it. (Participant 1)

- ### *Top-down and bottom-up hierarchical interaction*

Company A also stated that they benefited from the use of social media as it allowed and facilitated the top-down and bottom-up hierarchical interaction. Baxter and Connolly (2014) added that support from management to staff members (top to down level) is needed for social media to be successfully adopted in organisations. The top-down and bottom-up approach is seen as a formal organisational process that allows employees to access and contribute to the knowledge in the organisation (Qi & Chau, 2018). This was evident as Participant 1 responded:

Yeah that's part of the benefits. If this group CEO has a dedicated talk to me digital channel that's where the more the movement is happening, is to facilitate non-hierarchical communication and an interaction. Okay, so it's not about what level you are, what your job title is. It's more about, you know, giving opportunity to express your voice, or making a contribution or share an opinion. (Participant 1)

- ### *Increases the sharing of information*

Participant 2 reported that another benefit of social media was that it accelerated the process of sharing knowledge and information, which then subsequently enhances OL. Literature concurs as it states that social media have been found to encourage interaction and sharing of information and knowledge among employees (Baxter *et al.*, 2009; 2011; Agerdal-Hjermind, 2014). This was evident as Participant 2 stated:

Well, it's speeds up the process of acquiring relevant knowledge, information and even skills. Because this is why the trends are moving into more object based micro learning capabilities. Because I mean people are overwhelmed by emails, by meetings, by having mini workshops, by attending seminars, by delivering results. So what's happening is I think with social media, if they are designed well and curated well, they speed up the process, to make sure that relevant content reaches people. So that there's no scrap learning. (Participant 2)

Participant 2 also revealed that if social media are managed well, they have the potential to provide relevant and useful information to employees and increase productivity. The literature agrees by stating that social media allows employees to gain real-life and relevant information from their colleagues (Dinh *et al.*, 2011; Baxter & Connolly, 2014). This was evident as Participant 2 stated:

You want to get more knowledge and information that's relevant, to build capacity for you, to act relevantly and appropriately, to improve your productivity and achieve your goals. That's the big shift I think with social media, if managed well. (Participant 2)

6.2.17 Summary and insights of results of benefits of social media

The sub-section below summarises the results of the theme "Benefits of social media" in Company A.

- *Summary*

The data analysis that was carried out as regards the benefits of using social media in organisations revealed three main themes. The first theme cited that the benefits of social media included allowing employees to remotely collaborate on information and allowing employees to use the platform with ease. The second theme mentioned that another benefit of social media is that it encourages the interaction between employees at the executive level with employees at lower levels of the organisation. The third theme was that another benefit of social media is that it increases the sharing of knowledge and information, and this inherently improves learning in the organisation.

- *Insights*

One of the benefits of social media is that employees relish the opportunity that social media allows them to interact with other employees from different locations. Social media has also allowed employees to get help on social media and get quick responses from other employees. Employees also found out that the ease of use of social media made the interaction between employees seamless, which was an added advantage.

Employees also benefited more from being able to interact with the executive staff members in the company, thus encouraging employees to learn from management and provide input. This made the employees feel like they were contributing to the success of the organisation and made them feel appreciated. It seemed that employees also

benefited a lot from social media as it allowed them to acquire and share relevant information, knowledge and skills at a faster rate. When information is shared at a faster rate, it inherently improves the efficiency and productivity of the employees, which allows the organisation to reach its goals and objectives.

6.2.18 Company A: Results for using social media effectively

The analysis of the data from the interviews revealed the themes and sub-themes presented in Table 6-12 below.

Table 6-12: Themes of *using social media effectively* in Company A

Theme	Sub-themes
Using social media effectively	I.Convenient information and time
	II.Aggregating information
	III.Maximising productivity

The table below shows the raw data extracts, the identified themes and the sub-themes that emerged from data regarding *using social media effectively* in Company A. Figure 6-7 thereafter provides a mind-map as a visual representation of the themes and sub-themes mentioned in Table 6-13.

Table 6-13: Raw data, themes and sub-themes from *using social media effectively* in Company A

Raw data	Identified themes	Sub-themes
I think it boils down to that whole thing around meeting people at the point of need. And I think the solution is, "Am I able to get an answer, get the right answer, at the right time, when I need it?" Then if you've done that, then you've cracked the nut in terms of being able to help people. So if whatever tool I'm using, if I can get an answer to a question that I have, you get a greater adoption. But you're going up against the likes of a Google and a wiki, and a YouTube. Yeah, and that's the reality. (Participant 1)	Using social media effectively	Convenient information and time
If you're looking at where technology is going with new xAPI and the likes of aggregators, so in the same way your Netflix is able to aggregate movies and series, and your iTunes can aggregate all music, your Spotify, your music times, your files, all of that kind of stuff can aggregate music. Learning is also going through a bit of an aggregation where you getting a lot of guys now who are aggregating content. Because there's so much out there and to answer the question around, how do I know what I'm getting from Google is right? You know, people are curating content, Universities are curating content. And you can have an aggregator that trolls the entire internet for the right stuff, and pushes you the stuff that you need when you need it. Yeah, so that I think this is where your future will go and answer a little bit to the question around how do you make the most of your Web 2.0 tools. (Participant 1)		Aggregating information
Well, I'm putting it down as to say there needs to be some criteria. Because otherwise, you know, you can put any platforms out there and give access to the entire organisation. And before I know it, you know, staff are spending four hours a day browsing through 35 different platforms. And if you ask them at the end of the day, well what did you learn? What did you acquire? Or is productivity going up? It has to be in the context of, is it helping achieve and support? Is it helping to support the achievement of the individuals' objectives, the team's objectives and then the organisational objectives? The organisational objectives are formulated based on what it is the organisation is trying to achieve financially, and then it's cascaded to what the team has to achieve. And the team is a function of the members of the team. So you want to make sure that there's alignment between the individuals' objectives, to the team objectives, to the organisation objectives. So the ultimate measure of success is, are we achieving the organisational strategic intent? Are we delivering on the promise to our customers and our stakeholders? Are we fulfilling our organisational purpose? But the process to get there is through teams and through individuals. (Participant 2)		Maximising productivity

Figure 6-7: Mind-map of themes from *using social media effectively* in Company A
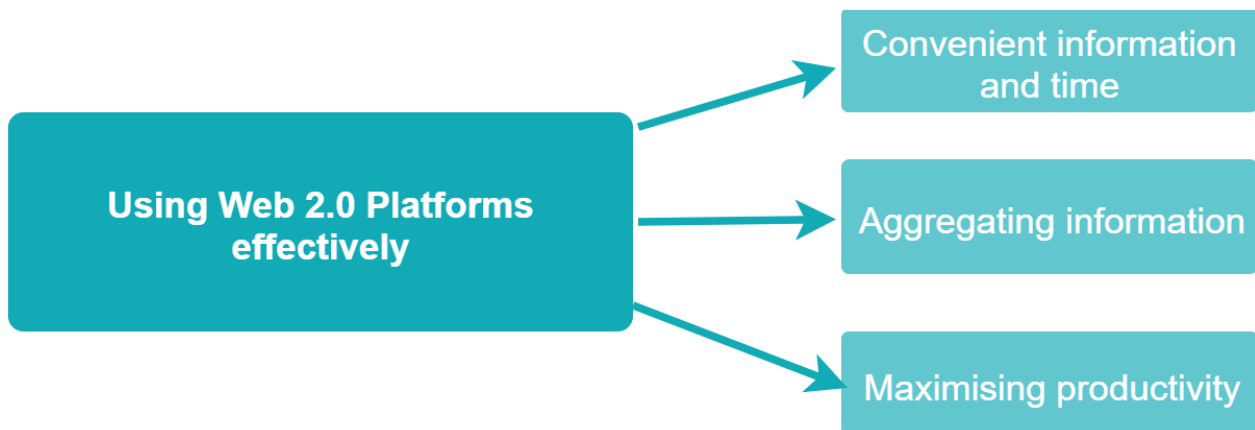
6.2.19 Discussion of results: Using social media effectively

Company A had various recommendations on how social media can be used effectively in an organisation. The recommendations put forward held merit since the company was well versed in the use of social media to enhance OL. The recommendations would also serve as a basis and be beneficial to other organisations that were thinking of implementing social media for OL.

- ***Convenient information and time***

One of the important recommendations that Participant 1 stated was that for organisations to use social media effectively, they had to ensure that they provided relevant information to the employees, at a convenient time and when employees needed the information. If organisations can cater to the aforementioned conditions, then the likelihood of employees adopting social media and enhancing OL is very high.

Literature states that the success of the implementation and the use of social media is more likely to be high when employees are provided with sufficient information (Baxter & Connolly, 2014). Social media should be able to improve learning potential and motivation in the organisation by providing content that is relevant to the employees' learning needs (Wang, 2011). Literature also adds that employees who have used social media revealed that organisations should provide clear information to encourage the effective adoption and use of social media in organisations (Baxter & Connolly, 2014). This was evident in the response from Participant 1:

I think it boils down to that whole thing around meeting people at the point of need. And I think the solution is, "Am I able to get an answer, get the right answer, at the right time, when I need it?" Then if you've done that, then you've cracked the nut in terms of being able to help people.

So if whatever tool I'm using, if I can get an answer to a question that I have, you get a greater adoption. But you're going up against the likes of a Google and a wiki, and a YouTube. Yeah, and that's the reality. (Participant 1)

- ***Aggregating information***

Participant 1 advised that organisations should take advantage of the aggregating feature in the software that could be used to curate relevant information. The curating feature allows the software to collect all relevant information and provides it to the employees when they need it; the feature will allow social media to be used effectively. Literature reveals that aggregating allows information to be collected from different sources into a single accessible user space which then brings great value to the end users (Tredinnick, 2006; Guy *et al.*, 2008).

To highlight the importance of accessing well-organised information on social media, employees found it challenging to access the content on social media when information was not properly organised (Dinh *et al.*, 2011). Therefore, the aggregation feature usually enhances the social media platform, makes it more complete, provides a bigger picture to end users, and also makes it useful to the end users (Guy *et al.*, 2008). This was evident as Participant 1 stated:

If you're looking at where technology is going with new xAPI and the likes of aggregators, so in the same way your Netflix is able to aggregate movies and series, and your iTunes can aggregate all music, your Spotify, your music times, your files, all of that kind of stuff can aggregate music.

Learning is also going through a bit of an aggregation where you getting a lot of guys now who are aggregating content. Because there's so much out there and to answer the question around, how do I know what I'm getting from Google is right? You know, people are curating content, Universities are curating content. And you can have an aggregator that trolls the entire internet for the right stuff, and pushes you the stuff that you need when you need it. Yeah, so that I think is where your future will go and answer

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a little bit to the question around how you make the most of your Web 2.0 tools. (Participant 1)

- **Maximising productivity**

Participant 2 revealed that companies need to consider the productiveness of social media, to use them effectively in an organisation, by vetting and working out how effective it will be for the employees. Literature states that the more social media are implemented and deployed in the organisation, the more productivity can be expected (Andriole, 2010). Literature further states that an increase in the performance or productivity of the company means that there is an increase in OL, while a decrease in performance or productivity means that OL has decreased (Garwin, 1993). This is what Participant 2 had to say:

Well, I'm putting it down as to say there needs to be some criteria. Because otherwise, you know, you can put any platforms out there and give access to the entire organisation. And before I know it, you know, staff are spending four hours a day browsing through 35 different platforms. And if you ask them at the end of the day, well what did you learn? What did you acquire? Or is productivity going up? It has to be in the context of, is it helping achieve and support? Is it helping to support the achievement of the individuals' objectives, the team's objectives and then the organisational objectives? (Participant 2)

Participant 2 also states that the productivity of social media also needs to feed into or align with what the organisation is trying to achieve. Literature states that the main objectives of organisations are to transform how employees learn, enhance the quality of learning in organisations, introduce cost-effectiveness and allow organisations to compete at a global level (Chatti *et al.*, 2007). This was evident as Participant 2 stated:

The organisational objectives are formulated based on what it is the organisation is trying to achieve financially, and then it's cascaded to what the team has to achieve. And the team is a function of the members of the team. So you want to make sure that there's alignment between the individuals' objectives, to the team objectives, to the organisation objectives. So the ultimate measure of success is, are we achieving the organisational strategic intent? Are we delivering on the promise to our customers and our stakeholders? Are we fulfilling our organisational purpose? But the process to get there is through teams and through individuals. (Participant 2)

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6.2.20 Summary and insights of results of using social media effectively

The sub-section below summarises the results of the theme "Using social media effectively" in Company A.

- *Summary*

The data analysis that was carried out concerning using social media effectively in organisations revealed three main themes. The first theme mentioned that organisations should focus on working out what employees need, and then providing convenient information at a convenient time on social media. The second theme mentioned that organisations should focus on taking advantage of the aggregating and curating feature on social media. This would allow social media to collect relevant information and provide it to employees, which would permit the effective use of social media. The third theme involved maximising the productivity of social media by ensuring that the social media platform that was chosen was thoroughly inspected to make sure that it increased productivity rather than decreased productivity. Productivity also had to go hand in hand with the main objectives of the organisation.

- *Insights*

The employees felt that there were ways in which social media can be used effectively in organisations. One of the insights is that providing relevant information on social media, at a convenient time, when employees needed the information, was seen as a way to get the most out of using social media. Another insight is that the curating and aggregation feature allows information to be selected, organised and presented on social media – thus, employees have access to relevant data. Another insight is that organisations had to emphasise how to maximise the productivity of using social media. This would be to ensure that employees' time is managed properly to meet work objectives and consequently use social media effectively.

6.3   CASE STUDY: COMPANY B

Company B is a local SME importer/wholesaler company that specialises in industrial supply, including maintenance, repair and operation (MRO) goods and consulting services, training, auditing, software, personal protective equipment (PPE), corporate work wear, health, safety, and hygiene products. The company employs 32 employees

who belong to different departments. The company consists of the Finance, Sales, Buying, IT, Procurement, Warehouse Operations and HR Departments. The figure below outlines the hierarchical organisational structure of Company B.

Figure 6-8: Hierarchical organisational structure of Company B
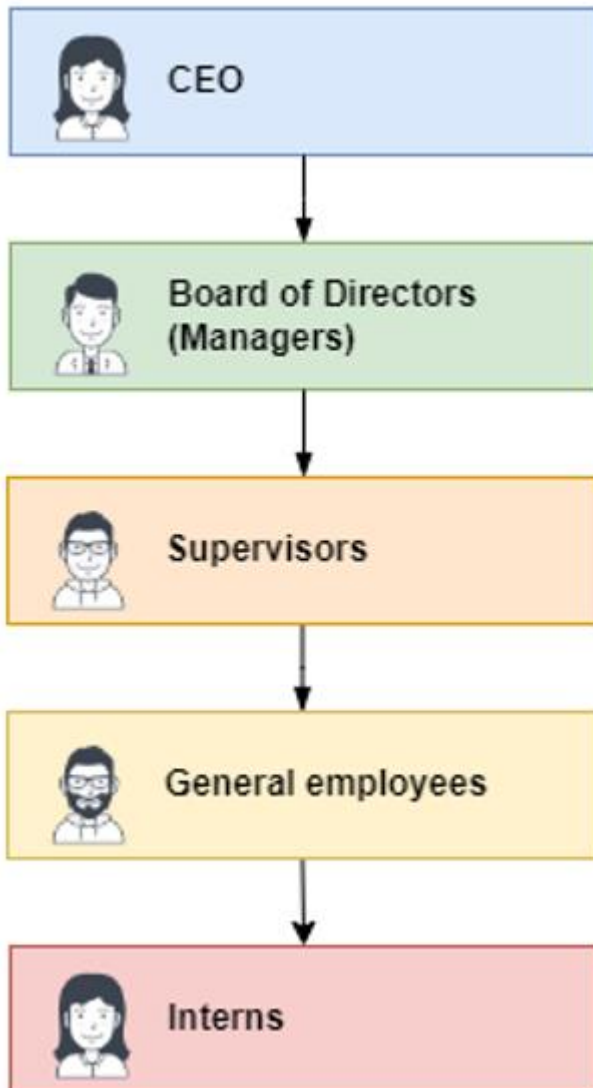
The hierarchical structure is made up of the CEO, board of directors (made up of managers), supervisors, general staff and then interns. Although there is a hierarchical organisational structure in terms of titles and roles of the employees, the company uses the circular organisational structure when it comes to the way they operate. The circular organisational structure makes the company more inclusive to employees, allows employees to communicate and access management staff more easily and allows decisions to be made from the bottom to the top.

The company also uses agile teams, where different disciplines (such as Accounting, Supply Chain, Marketing, Sales and IT) sit together to resolve problems and reach resolutions very quickly. This allows OL to take place and forms part of the culture of the organisation. The company also has an outer circle, where certain functions are outsourced (physical warehousing, logistics and certain IT functions of a speciality level).

Three participants were interviewed from Company B, these are key informants who were involved in the use of social media and OL within the organisation. The key participants were identified as the employees that made key strategic and operational decisions at the company and were likely to reveal useful data for the research. All the participants had some experience using social media and were involved with OL within the organisation. Another new dimension that made the interviews at Company B different from the previous interviews at Company A is that there was an individual interview as well as a focus group interview.

6.3.1   Company B: Results for the scope of learning

The analysis of the data from the interviews revealed the themes and sub-themes presented in Table 6-14 below.

Table 6-14: Themes from the *scope of learning* in Company B

Theme	Sub-themes
The scope of learning	I.Level of OL
	II.Type of OL

The table below shows the raw data extracts, the identified themes and the sub-themes that emerged from the data regarding the *scope of learning* in Company B. Thereafter, Figure 6-9 provides a mind-map as a visual representation of the themes and sub-themes mentioned in Table 6-15.

Table 6-15: Raw data, themes and sub-themes from *scope of learning* in Company B

Raw data	Identified themes	Sub-themes
So, it [OL] happens throughout the organisation, because we started using agile and we form agile teams for the different disciplines, whether it's accounting, supply chain, marketing, sales, and they sit together in agile teams. With agile, problems are resolved through the agile teams. So, the speed of resolution is very quick. So on all levels, with coaching and mentoring, people are taken on an individual basis, agile groups on a group basis. And then the organisation as a whole have been updated by either agile team members or the board or myself. But we've got a completely different way of doing things, decisions get taken at the bottom not at the top. Okay, so we have individual learning that normally takes place either with external training courses that our people participate in. But then also mentoring and coaching, that's also where learning takes place. And in the case of our finance department, we've got an outside consultant that has got huge amount of experience in finance and accounting. He is hand holding one of our interns on an individual basis, he coaches and mentors him to help him to achieve his goals within the organisation, but then also the organisational goals of making profit. (Participant 1) I would say group probably comes first. Then it will go to individual, then organisation last, because group you mean two or more people interacting. Especially our company we believe in teamwork. I mean, you can do whatever alone, you can get somewhere but a team is stronger. So, group learning should be the one that's used the most. So the transferring of skills and knowledge, it happens consistently because the doors are always open for you to approach your manager, your director or your CEO. The manager has the responsibility to always try to teach the new person, whatever the organisation is all about. There's no training of induction, it's onsite training, if we can put it like that. You come here and you start doing the extra job from day one. So that's the first one, onsite training, you start doing and handling projects from day one, or start doing the real work from day one. But you are going to be closely working with your manager or your supervisor. You're not going to be alone; you're going to be working closely with that person. And from there on, you are checked and managed accordingly. And if you	The scope of learning	Level of OL: • Individual level • Collective (group) level • Organisational level

have any issues or challenges, you're free to come and say, "Oh okay, I don't understand XYZ", and whoever you reporting to should be able to help or assist you.

The second one is; the company is now recently helping people with training. So we have an external organisation that trains people in different aspects of life and business as well. So, like last year, they had a training that we send people with regards to how to communicate. So basically, we chose people within the company who still had to improve on their communication and how to manage the emotions as well.

Including the managers as well, some managers they lack that particular skill, maybe communication or whatever it is, then you send them there to learn you know. This year there was one with regards to management. So, managers were advised to go to that training, because they went deep into detail how to manage people, how to manage operations and all of that. So that's the second way. First way is on site and you do the real work. The second one is we send you to training via external organisations. (Participant 2)

So we support a learning organisation, to a point whereby the company offers trainings, how to behave at work. Especially if you're still new at work, obviously, they need to teach how to behave, if you are facing like such challenges, how to overcome them, how to approach them such things.

Just to add about what you have explaining, I think as a company we perceive as it is important, like to grow young, especially the youth. Because OL, it's good to a point whereby you are transferring skills. By transferring skills, you are keeping the company to exist for a long time, because if we're not transferring skills, I'm telling you the company will die. That means there is no future for the company, there is no growth.

So to strengthen within the company, you must transfer your knowledge, as he stated that our company is not restricted, like you have a free role to interact with CEO, with the MD'S, with directors. So it's where you get to find more skills, more knowledge about the company, and they teach you how to implement, you know. So even if like for interns, it's easier for them to learn more about the company to learn more about the business. (Participant 3)

Yeah, they happen simultaneously the whole time. We have to change our business models to fit the market itself, because of the offerings that we put out to our customers are bespoke. But		Type of OL: • Single-loop learning

we're agile and we're small, we're around 30 people. To bring a change in, is rapid, and it's building that culture also that it changes the whole game. (Participant 1)		• Double-loop learning • Triple-loop learning
I mean for WhatsApp it's just minor changes, so it's going to be single-loop. So, for WhatsApp is just minor because WhatsApp we use it as an operational group where it's for whatever happens today. Or maybe someone is out there with the customer and then he wants some information from the office, so he can just go into the group and say: "Guys, please assist me with 'XYZ'" and then the guys will revert back. So, for WhatsApp I'll say we use it for that.		
NetSuite Oracle **[ERP system]** we use it for double-loop which is radical changes and you said triple-loop which is cultural. It's both on NetSuite because radical changes happen all the time. If we've made a decision, this is how we're going to structure our customers. So, you can imagine, the whole layout and how it's structured it must be restructured. If we decide that today 'x y z' items, we don't want to sell them anymore, it can be a radical change because that means we're done doing all of that. So, we need to tell the system that this is what's happening.		
For the last one, where you say triple-loop. That one is, I wouldn't say it's done on NetSuite all the time, but because it's both. Because when you're changing, whatever your services or your products, actually it's a radical change and it's both changing the culture of the company. So of course, that's going to change the culture of the company, because NetSuite has to allow us to do that.		
Because we're going to change things on NetSuite and as well as the communications within the group, the group emails as well, that's where the triple-looping happens as well. Remember NetSuite we just use it most of the time to get information, the more data we build, the more we can know this is worth it or not. Because only data is built within a period of time, right. So, the system is always telling us what is worth it and what's not worth it, if that makes sense. (Participant 2)		

Figure 6-9: Mind-map of themes from *scope of learning* in Company B
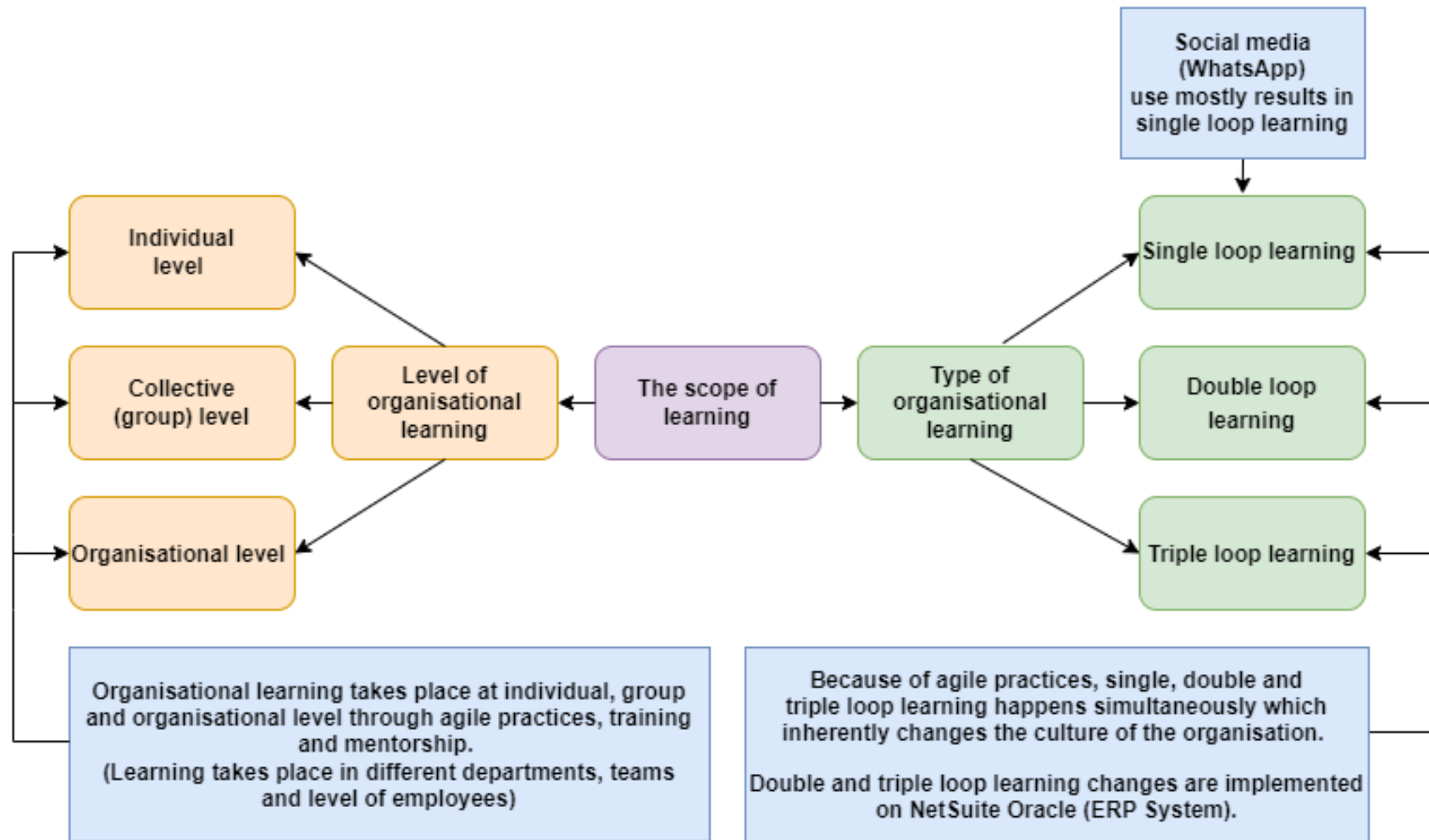
6.3.2   Discussion of results: The scope of learning in Company B

The sub-section below discusses the results of the theme "Scope of learning" in Company B.

- *Level of OL*

Literature reveals that OL happens at three levels, namely individual, collective (group) and organisational levels (Baxter *et al.*, 2009; Petiz *et al.*, 2013). Company B reported that OL happens throughout the organisation, at all tiers of the company and everyone has a chance to access management and general staff. This is mainly because the organisation uses an agile methodology in what they described as a flat platform, which is different from a hierarchical methodology:

So, it [OL] happens throughout the organisation, because we started using agile and we form agile teams for the different disciplines, whether it's accounting, supply chain, marketing, sales, and they sit together in agile teams. With agile, problems are resolved through the agile teams. So, the speed of resolution is very quick.

So on all levels, with coaching and mentoring, people are taken on an individual basis, agile groups on a group basis. And then the organisation as a whole have been updated by either agile team members or the board or myself. But we've got a completely different way of doing things, decisions get taken at the bottom not at the top.

Okay, so we have individual learning that normally takes place either with external training courses that our people participate in. But then also mentoring and coaching, that's also where learning takes place. And in the case of our Finance department, we've got an outside consultant that has got huge amount of experience in finance and accounting. He is hand holding one of our interns on an individual basis, he coaches and mentors him to help him to achieve his goals within the organisation, but then also the organisational goals of making profit. (Participant 1)

Participant 2 further emphasised and added that OL happens at all levels of the organisation, providing insight into which level OL was practised the most:

I would say group probably comes first. Then it will go to individual, then organisational last, because group you mean two or more people interacting. Especially our company we believe in teamwork. I mean, you can do whatever alone, you can get somewhere

but a team is stronger. So, group learning should be the one that's used the most. (Participant 2)

Participant 2 also gave an in-depth and detailed explanation of how OL took place and how the skills and knowledge were transferred or passed on in Company B. Most of the responsibility was left on the shoulders of senior employees to teach the junior employees how the organisation operates. This is what Participant 2 had to reveal:

So the transferring of skills and knowledge, it happens consistently because the doors are always open for you to approach your manager, your director or your CEO. The manager has the responsibility to always try to teach the new person, whatever the organisation is all about. There's no training of induction, its onsite training, if we can put it like that. You come here and you start doing the extra job from day one.

So that's the first one, onsite training, you start doing and handling projects from day one, or start doing the real work from day one. But you are going to be closely working with your manager or your supervisor. You're not going to be alone; you're going to be working closely with that person. And from there on, you are checked and managed accordingly. And if you have any issues or challenges, you're free to come and say, "Oh okay, I don't understand XYZ", and whoever you reporting to should be able to help or assist you. (Participant 2)

Participant 2 also mentioned that another form of OL they practised in Company B had to do with employees receiving outsourced training from an external organisation. The training was based on enhancing the skills that the employees (including managers) lacked or had to improve on. Literature states that training employees involves equipping them with the necessary skills to improve OL (Hasson *et al.*, 2016). The employees that were identified as lacking in certain skills were selected, as stated below:

The second one is; the company is now recently helping people with training. So we have an external organisation that trains people in different aspects of life and business as well. So, like last year, they had a training that we send people with regards to how to communicate. So basically, we chose people within the company who still had to improve on their communication and how to manage the emotions as well.

Including the managers as well, some managers they lack that particular skill, maybe communication or whatever it is, then you send them there to learn you know. This year

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there was one with regards to management. So, managers were advised to go to that training, because they went deep into detail how to manage people, how to manage operations and all of that. So that's the second way. First way is on site and you do the real work. The second one is we send you to training via external organisations. (Participant 2)

Participant 3 further explained how Company B supported OL. Most of the training was focused on new recruits, with an emphasis on transferring skills and knowledge and helping the organisation grow. Literature also mentions that most OL activities are catered to employees acquiring knowledge, information and skills (Huber, 1991; Olafsen & Cetindamar, 2005). This was evident, as Participant 3 stated:

So we support a learning organisation, to a point whereby the company offers trainings, how to behave at work. Especially if you're still new at work, obviously, they need to teach how to behave, if you are facing like such challenges, how to overcome them, how to approach them such things.

Just to add about what you have explaining, I think as a company we perceive as it is important, like to grow young, especially the youth. Because OL, it's good to a point whereby you are transferring skills. By transferring skills, you are keeping the company to exist for a long time, because if we're not transferring skills, I'm telling you the company will die. That means there is no future for the company, there is no growth.

So to strengthen within the company, you must transfer your knowledge, as he stated that our company is not restricted, like you have a free role to interact with CEO, with the MD'S, with directors. So it's where you get to find more skills, more knowledge about the company, and they teach you how to implement, you know. So even like for interns, it's easier for them to learn more about the company to learn more about the business. (Participant 3)

- *Type of OL*

Literature reveals that there are three different types of OL, namely single-loop learning (learning that leads to making minor changes of behaviour and outcomes in an organisation), double-loop learning (learning that leads to making changes to general principles and rules of an organisation) and triple-loop learning (learning that leads to

changes to the governing rules, values and norms of the organisation) (Argyris, 1983; Fiol & Lyles, 1985; Pahl-Wostl, 2009).

Company B stated that single-, double- and triple-loop learning all happen simultaneously through social media and enterprise resource planning (ERP) online system that they use. This was evident in the participants' responses when they were asked which type of learning occurred when they used social media in terms of the changes they make within the organisation:

> *Yeah, they happen simultaneously the whole time. We have to change our business models to fit the market itself, because of the offerings that we put out to our customers are bespoke. But we're agile and we're small, we're around 30 people. To bring a change in, is rapid, and it's building that culture also that it changes the whole game.* (Participant 1)

Participant 2 added where each type of learning occurred, whether it was single-, double- or triple-loop learning and on which online platform each type of learning took place. Single- and triple-loop learning were reported to take place on the WhatsApp group that the employees used for communication in the company, while double- and triple-loop learning were reported to take place on NetSuite Oracle, which is an ERP system used to keep track of business processes. This was evident as Participant 2 reported:

> *I mean for WhatsApp it's just minor changes, so it's going to be single-loop. So, for WhatsApp is just minor because WhatsApp we use it as an operational group where it's for whatever happens today. Or maybe someone is out there with the customer and then he wants some information from the office, so he can just go into the group and say: "Guys, please assist me with 'XYZ'" and then the guys will revert back. So, for WhatsApp I'll say we use it for that.*

> *NetSuite Oracle* **[ERP system]** *we use it for double-loop which is radical changes and you said triple-loop which is cultural. It's both on NetSuite because radical changes happen all the time. If we've made a decision, this is how we're going to structure our customers. So, you can imagine, the whole layout and how it's structured it must be restructured. If we decide that today 'x y z' items, we don't want to sell them anymore, it can be a radical change because that means we're done doing all of that. So, we need to tell the system that this is what's happening.*

Because we're going to change things on NetSuite and as well as the communications within the group, the group emails as well, that's where the triple-looping happens as well. Remember NetSuite we just use it most of the time to get information, the more data we build, the more we can know this is worth it or not. Because only data is built within a period of time, right. So, the system is always telling us what is worth it and what's not worth it, if that makes sense. (Participant 2)

6.3.3   Summary and insights of results of the scope of learning in Company B

The sub-section below summarises the results of the theme "Scope of learning" in Company B.

- *Summary*

The results collected from participants regarding the scope of learning in Company B focused more on the level of OL and the type of OL within the organisation. The participants highlighted that OL happened at all three levels (individual, collective [group] and OL). The participants also emphasised that more of the learning happened at a group level which then led to learning at an organisational level.

Regarding the type of learning that takes place at the organisation, Company B reported that all three types of OL took place (single-, double- and triple-loop learning). Single-loop learning was known to take place when the organisation used social media, while double- and triple-loop learning took place when the organisation used the ERP system.

- *Insights*

It is apparent that OL happens at all levels of the organisation because the organisation practices the agile way of working, which allows constant communication between employees thus problems are resolved quickly. OL in Company B usually happens at the individual level when employees take up an external training course and at a group level,

where coaching and mentoring happen with newly recruited employees and when agile groups interact.

Most of the learning seems to happen at a group level since the company relies on teamwork and group learning. Most of the staff members, whether management or general staff, are usually accessible to everyone which makes group and on-site learning for new employees easy. Some of the group learning and training is done externally to improve employees' life skills, communication skills and management skills. This training is attended by both general and management staff depending on who needs it the most.

6.3.4   Discussion of results: Social media in Company B

Company B revealed that they used social media for interaction among employees in conjunction with an ERP online system to carry out business processes and learning in the organisation. Since Company B is a small company made up of around 30 employees, participants reported that they use WhatsApp groups and Slack (occasionally) as forms of social media for communication. Participants also stated that the reason they preferred using WhatsApp was that it is easy, convenient and effective. This is evident in the participants' responses:

*WhatsApp is one of the easiest and most effective ways of communicating, but then we use Slack **(business communication platform)** from time to time on certain projects, but not everybody uses Slack.*

Employee groups communicate by WhatsApp groups. A lot of our people are outside on the road, they can't always come into the office. So it's been simplified and it's very quick. (Participant 1)

Yeah, we have WhatsApp, I'll explain, we use WhatsApp for communication as well. Yeah, we have a WhatsApp group, as well as when we go to new projects, we create groups as well, because it's easy and quick to communicate. Like with our guys now, the guys who we are outsourcing to, we formed a group as well. So, it is easy to communicate, so we do that as well. (Participant 2)

6.3.5   Summary and insights of results of social media in Company B

The sub-section below summarises the results of the theme "Social media" in Company B.

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- *Summary*

Data collected from the participants revealed the social media that were used at Company B. The participants reported that they used WhatsApp groups all the time, whilst some used Slack software (business communication platform) and only on certain business projects. WhatsApp was the main application used for interaction and communication in the organisation; participants reported that this is because they found WhatsApp to be more convenient, easy and effective to use.

WhatsApp was also reported to be ideal as it allowed employees who worked remotely and were on the road to communicate with other employees on business matters since they did not have to come into the office every day. Participants also reported that they made a WhatsApp group for every new project they worked on, this allowed them to focus on one project at a time and relate with other employees.

- *Insights*

Employees were more inclined to use WhatsApp since they used it in their personal lives; thus relating to the app made it quick and easy to use. Being able to use the app on their cell phones also made it easy for employees to use communicate and conduct business remotely.

6.3.6 Company B: Results for how social media are used for Organisational Learning

The analysis of the data from the interviews revealed the themes and sub-themes presented in Table 6-16 below.

Table 6-16: Themes from *how social media are used for OL* in Company B

Theme	Sub-themes
How social media are used for OL	I.Working as a group
	II.Teaching and learning among employees

The table below shows the raw data extracts, the identified themes and the sub-themes that emerged from the data regarding *how social media are used for OL* in Company B. Thereafter, Figure 6-10 provides a mind-map as a visual representation of the themes and sub-themes mentioned in Table 6-17.

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Table 6-17: Raw data, themes and sub-themes from *how social media are used for OL* in Company B

Raw data	Identified themes	Sub-themes
Especially our company we believe in teamwork. I mean, you can do whatever alone, you can get somewhere but a team is stronger. So, group learning should be the one that's used the most. (Participant 2) Remember, another thing at work you're not working alone. Especially if it's concerned with a learning organisation, it means how can we improve? How can we bring new ideas? How can we transfer skills within the organisation? So, I think it includes a whole group, which is why I think he is saying the most important one is group learning. (Participant 3)	How social media are used for OL	Working as a group
You can ask your colleague questions, because there's always somebody that you can ask through the system. Remember certain people understand certain parts of accounting or supply chain, and if they don't have the answer, they ask somebody else. Not necessarily under the same discipline as them, and that person through logical thinking will say, this is my suggestion. (Participant 1) Unless maybe they introduced a new feature on WhatsApp and some people maybe are still left behind, because like for example, we have an old lady, she's not active on cell phones you know. But maybe if a new feature is introduced maybe there will be some training, even if it's not like a serious training, at the end of the day it's a training, because you are assisting her how to use that feature. (Participant 2)		Teaching and learning among employees

Figure 6-10: Mind-map of themes from *how social media are used* in Company B for OL
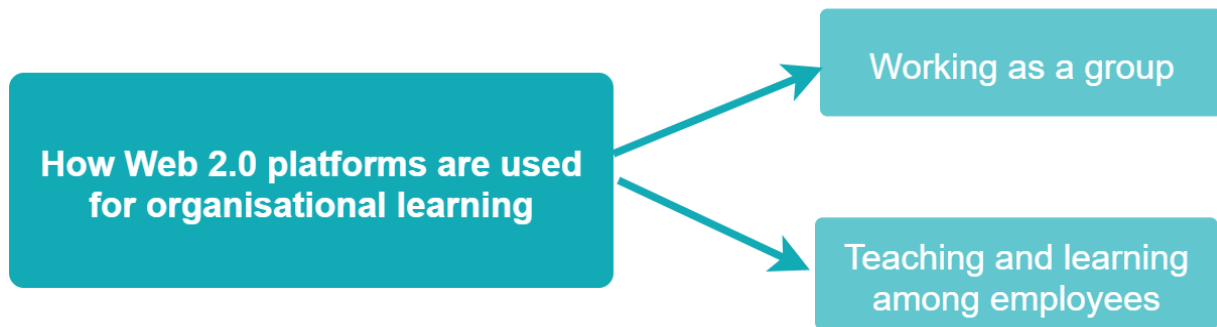
6.3.7 Discussion of results: How social media are used in Company B for Organisational Learning

The sub-section below discusses the results of the theme "How social media are used" in Company B.

- ***Working as a group***

The interviewees from Company B reported that the employees within the company used social media (WhatsApp or Slack) for the sole purpose of interacting, communicating and updating each other. Business processes on certain projects were conducted using WhatsApp groups. Working in a group and learning from each other was considered a strong and important value for Company B. This was evident in Participant 2's response:

Especially our company we believe in teamwork. I mean, you can do whatever alone, you can get somewhere but a team is stronger. So, group learning should be the one that's used the most. (Participant 2)

Participant 3 further added that OL meant employees were learning together whilst transferring skills within the group. Literature states that social media allow employees to interact and communicate in groups, collaborate on projects, and also create and share knowledge in groups (Boateng *et al.*, 2009; Schneckenberg, 2009). This was evident and Participant 3 revealed:

Remember, another thing at work you're not working alone. Especially if it's concerned with a learning organisation, it means how can we improve? How can we bring new ideas? How can we transfer skills within the organisation? So, I think it includes a whole group, which is why I think he is saying the most important one is group learning. (Participant 3)

- *Teaching and learning among employees*

The participants reported that they used social media to share information and update each other. The organisation purposely created, fostered and encouraged an environment that allowed employees to ask questions of other employees which allowed employees to learn from each other. Literature states that the sharing and collaborative nature of using social media in an organisation subsequently enhance the learning and teaching capabilities of the employees (Dinh *et al.*, 2011). This was evident as Participant 3 responded:

> *You can ask your colleague questions, because there's always somebody that you can ask through the system. Remember certain people understand certain parts of accounting or supply chain, and if they don't have the answer, they ask somebody else. Not necessarily under the same discipline as them, and that person through logical thinking will say, this is my suggestion.* (Participant 1)

From the results, it is clear that employees task themselves to teach and learn from each other regarding whatever enhancements have been made on social media. Participant 2 revealed that they used social media to learn from/teach other employees. This paved the way for employees to learn from each other. Literature concurs by stating that employees are responsible for teaching, learning and contributing to the social media hosted in the organisation (Dinh *et al.*, 2011). This was evident as Participant 2 responded:

> *Unless maybe they introduced a new feature on WhatsApp and some people maybe are still left behind, because like for example, we have an old lady, she's not active on cell phones you know. But maybe if a new feature is introduced maybe there will be some training, even if it's not like a serious training, at the end of the day it's a training, because you are assisting her how to use that feature.* (Participant 2)

6.3.8 Summary and insights of results of how social media are used in Company B for Organisational Learning

The sub-section below summarises the results of the theme "How social media are used" in Company B.

- *Summary*

The data that were collected from the interviews revealed how Company B used social media for OL. Company B reported that they used Web 2.0 tools, particularly when they worked in a group on the same business project. The groups that the employees had formed on social media allowed them to interact and communicate with each other and work as a group. The data also reported that the employees used social media to teach each other, as well as learn from other employees whenever important information had to be shared. Employees revealed that they also updated each other whenever there were updates made on social media, this was to ensure that they stayed updated with how social media was working.

- *Insights*

It seems that employees used social media as a basis and a tool for collaboration whenever they conducted business processes. What stood out was that employees were keen to stay updated with social media they were using and made sure that they brought other employees into the fold, thus teaching and learning from one another. This was an advantage to employees since they knew that they could count on other employees to teach them whenever social media was updated with new features.

6.3.9 Company B: Results for how Company B manages Organisational Learning platform content

The analysis of the data from the interviews revealed the themes and sub-themes presented in Table 6-18 below.

Table 6-18: Themes from how Company B *manages OL platform content*

Theme	Sub-themes	
How Company B manages OL platform content	I.	Code of conduct on social media
	II.	Managing inappropriate conduct
	III.	Valid and credible content

The table below shows the raw data extracts, the identified themes and the sub-themes that emerged from the data regarding how Company B *manages OL platform content.* Thereafter, Figure 6-11 provides a mind-map as a visual representation of the themes and sub-themes mentioned in Table 6-19.

Table 6-19: Raw data, themes and sub-themes on how Company B *manages OL platform content*

Raw data	Identified themes	Sub-themes
There are rules already before, that this is what you should share on social media. (Participant 1) You just follow the company culture because imagine someone saying "make jokes but not too much." What does that mean? Can I make a joke or not? You know…So, you just go along with it as it goes, because we try to accommodate everyone at the end of the day, you know. You don't want it rigid. It's not nice I'm telling you when people are just formal, because you feel like, "yeah I must just work and then at 4 o'clock I must just go home, then now I can relax, then I'm going back to that place, I must think like this", no! Be free, be yourself, you know, and understand that being criticised is not a bad thing, it's helping you. So, you learn as you go along, but other things, I mean, you are taught at school or from home. It's just basic stuff. (Participant 2) Another thing that I find good about this group chat that we have for a company. At some point you will find out that maybe our CEO will send something whether it's a motivational message or is a joke. Because let me tell you something, there are employees that think maybe the managers are strict people, they always want straight things. But at some point, I think we also use the group as like, maybe like to show the other side of a person, like this person is not always like these. Yes, it might be work, obvious when you are working, you must produce something of a good quality, but at some point, this is a human being. He can also say such things, you know, so it's sending a message whereby like, "Oh, it's easy to approach this person, if he can say such things, that means I can check him in his office and just ask him questions, you know." So you are able to communicate on an informal platform because that's where creativity comes from. (Participant 3)	How Company B manages OL platform content	Code of conduct on social media
You tell the person immediately on the side. Let's say he said something inappropriate. I'll go to him and tell him: "Yeah man just watch XYZ, don't say it" because for example other people are extremely religious. So, you can't make funny comments, other people are race sensitive,		Managing inappropriate conduct

so you can't make certain comments. Me and you we can find it as a joke but then to him it might not be a joke. So, you see such things that's when you say now "come by the side, you see this, this and this," and then the next thing you will do is as the supervisor is apologise on his behalf. Yeah on the group, just say sorry and apologise on his behalf. That's the proper way of doing it, just apologise, like "guys sorry for this." The apology is a way to know that even me, I wanted to say this but now I know I can't say such things. Because at the end of the day, you're dealing with people from different backgrounds and all of that and different perspectives as well. So you don't want to be inappropriate. (Participant 2) Another thing is those groups are created for work related reasons. It's not for entertainment and fun. If you want to share a joke or anything fun or something, I'm sure you can like send a message directly to me, you know. Yeah, it happens that some people it's obvious will send to the group to try and amuse everyone in the company you know. Which is fine, at some point it's nice, at some point it's too much because some people will complain: "they are just using my data for nothing." You know. Because why? That person did not find anything exciting about that post. Other people are treating those WhatsApp groups, especially company groups, as here we are serious, it's about work. So I think maybe if you want to entertain people, maybe you can entertain them with something relating to our work or something, maybe then they will find it at least amusing. Rather than coming with a joke outside and then share it in the group. You know those long chain "pass it to other people messages," you can't pass that thing to work groups. So, it's linked to the company culture as well, so if your company is full of young people there will be jokes and it will be fun. But it can't be too much." (Participant 2)		
The managers have to monitor that, because if I'm the manager of the sales team, I have to ensure that my team is uploading the right stuff. If I'm the manager of the IT team, I have to make sure my IT guys are uploading the right things. If I'm the manager of the procurement or the buying team, I have to make sure they upload the right price list. So that's why managers are there as well, if you are a manager and you know prices, and then one employee is asking another employee let's say: "How much is a cup of coffee?" And		Valid and credible content

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then the employee says: "a cup of coffee is hundred bucks." And then you look at it as the boss, and you know it's not right then you say: "guys please re check this." So, everyone is aware that they need to be on the outlook as to what's happening in the group.		
The managers, supervisors, they know they have to check what's happening in there. Because ultimately, if something is not solved, it's them who are going to get into some fire. Ultimately, you're in charge of your people. So, you must ensure that your people are doing the right things. You can blame your people but we as directors, when we come to you we're not going to blame your people, we are going to blame you. Why is your ship sinking? You are the captain of the ship. So don't tell me one of your group members was sleeping. It doesn't count. (Participant 2)		

Figure 6-11: Mind-map of themes from how Company B *manages OL platform content*
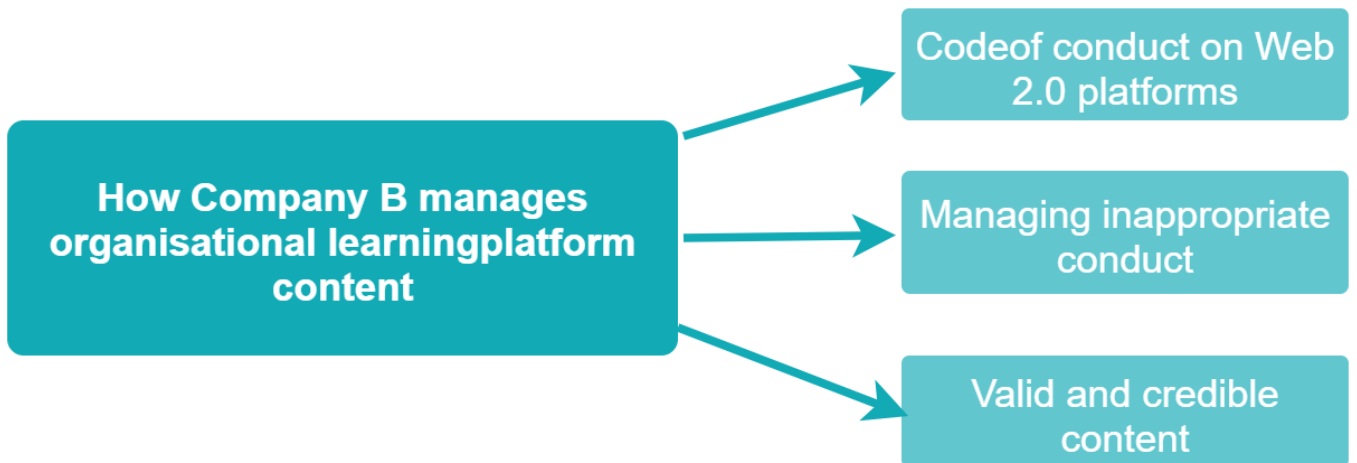
6.3.10 Discussion of results: How Company B manages Organisational Learning platform content

The sub-section below discusses the results of the theme "How the organisation manages OL content" in Company B.

- *Code of conduct on social media*

Company B revealed that they had rules and regulations in place to govern how their employees conducted themselves on social media. This also had an impact on how they managed the data on social media, to ensure that the data shared was in line with the company rules and policies regarding appropriate employee conduct. This was evident as Participant 1 reported:

> *There are rules already before, that this is what you should share on social media.* (Participant 1)

Literature reveals that rules should be put in place for end users to comply with when using social media, to ensure that users control what is posted on the platform (Chui *et al.*, 2009; Chartrand, 2012). Literature also reveals that users should practice digital responsibility by adhering to the rules and policies of using social media (Rahimi, van den Berg & Veen, 2015). Digital responsibility ensures that users behave responsibly, follow the policies and use social media appropriately (Rahimi *et al.,* 2015).

Company B also revealed that employees conducted themselves on social media the same way they conducted themselves at work. However, it was important to them that

they accommodated freedom of expression on social media and did not make it so strict and formal that employees could not express themselves freely. Literature states that one of the features that make social media enticing is that it offers the users the possibility of being more open to talking about their opinions online (Chartrand, 2012). This is what Participant 2 had to say:

You just follow the company culture because imagine someone saying "make jokes but not too much." What does that mean? Can I make a joke or not? You know.

So, you just go along with it as it goes, because we try to accommodate everyone at the end of the day, you know. You don't want it rigid. It's not nice I'm telling you when people are just formal, because you feel like, "yeah I must just work and then at 4 o'clock I must just go home, then now I can relax, then I'm going back to that place, I must think like this", no!

Be free, be yourself, you know, and understand that being criticised is not a bad thing, it's helping you. So, you learn as you go along, but other things, I mean, you are taught at school or from home. It's just basic stuff. (Participant 2)

Participant 3 added that interaction on social media allowed them to see a different side of their fellow employees from a personal and professional perspective. This allowed them to see other employees and executive employees, in particular, in a different light, which made them more relatable and approachable. This paved the way for them to communicate in both formal and informal standings:

Another thing that I find good about this group chat that we have for a company. At some point you will find out that maybe our CEO will send something whether it's a motivational message or is a joke. Because let me tell you something, there are employees that think maybe the managers are strict people, they always want straight things. But at some point, I think we also use the group as like, maybe like to show the other side of a person, like this person is not always like these.

Yes, it might be work, obvious when you are working, you must produce something of a good quality, but at some point, this is a human being. He can also say such things, you know, so it's sending a message whereby like, "Oh, it's easy to approach this person, if he can say such things, that means I can check him in his office and just ask

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him questions, you know." So you are able to communicate on an informal platform because that's where creativity comes from. (Participant 3)

- ***Managing inappropriate conduct***

Company B further revealed how they dealt with and managed inappropriate conduct. This involved following a certain protocol, stating what is (not) appropriate and dealing with the situation as it occurs. Literature reveals that it is helpful to state explicit guidelines on which content is appropriate and inappropriate, and the best possible ways in which users can participate on social media (Matschke *et al.,* 2012). Most of the responsibility was entrusted to the managers and supervisors to deal with the inappropriate conduct perpetrated by the employees. This is what Participant 2 had to say:

You tell the person immediately on the side. Let's say he said something inappropriate. I'll go to him and tell him: "Yeah man just watch XYZ, don't say it" because for example other people are extremely religious. So, you can't make funny comments, other people are race sensitive, so you can't make certain comments. Me and you we can find it as a joke but then to him it might not be a joke.

So, you see such things that's when you say now "come by the side, you see this, this and this," and then the next thing you will do is as the supervisor is apologise on his behalf. Yeah on the group, just say sorry and apologise on his behalf. That's the proper way of doing it, just apologise, like "guys sorry for this."

The apology is a way to know that even me, I wanted to say this but now I know I can't say such things. Because at the end of the day, you're dealing with people from different backgrounds and all of that and different perspectives as well. So you don't want to be inappropriate. (Participant 2)

Participant 3 further added that it is important for the employees to keep in mind that social media is used for work purposes and not for extracurricular purposes. So employees had to be mindful not to send inappropriate content that was not relevant to work or at least try and keep it to a minimum. Literature states that companies need to maintain the right balance of control and freedom of posting content on social media; companies who failed to control inappropriate postings often paid a high price (Chui, *et al.*, 2009).

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Employees also had to be mindful that they were sending messages on social media that would be broadcasted to all employees and they might not all be able to relate to the content posted. Therefore, it was important for employees to consider the audience and ensure that the content posted was appropriate:

Another thing is those groups are created for work related reasons. It's not for entertainment and fun. If you want to share a joke or anything fun or something, I'm sure you can like send a message directly to me, you know. Yeah, it happens that some people it's obvious will send to the group to try and amuse everyone in the company you know. Which is fine, at some point it's nice, at some point it's too much because some people will complain: "they are just using my data for nothing." You know. Because why? That person did not find anything exciting about that post.

Other people are treating those WhatsApp groups, especially company groups, as here we are serious, it's about work. So I think maybe if you want to entertain people, maybe you can entertain them with something relating to our work or something, maybe then they will find it at least amusing. Rather than coming with a joke outside and then share it in the group.

You know those long chain "pass it to other people messages," you can't pass that thing to work groups. So, it's linked to the company culture as well, so if your company is full of young people there will be jokes and it will be fun. But it can't be too much. (Participant 3)

- ***Valid and credible content***

One of the aspects that Company B had to consider was ensuring that the content shared on social media was valid and credible, so that information on the platform was trustworthy. Users turn to social media as a source of information and one of their concerns is the credibility of the information found online (Hajli *et al.*, 2015). Company B revealed that the responsibility was entrusted to the managers to double check if the employees that they managed were uploading credible information.

Literature reveals that the ability of social media to be transparent allows users the opportunity to monitor the spread of invalid data and intervene with credible information (Chou *et al.*, 2013; Hajli *et al.*, 2015). Literature also reveals that people who have more expertise and background knowledge on a certain topic (in this case managers) are more

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likely to see when important information is missing and can rectify the information (Witteman & Zikmund-Fisher, 2012). The literature further recommends that social media should include some auditing functions to track all contributions and their authors (Chui *et al.*, 2009). This was what Participant 2 had to say:

The managers have to monitor that, because if I'm the manager of the sales team, I have to ensure that my team is uploading the right stuff. If I'm the manager of the IT team, I have to make sure my IT guys are uploading the right things. If I'm the manager of the procurement or the buying team, I have to make sure they upload the right price list.

So that's why managers are there as well, if you are a manager and you know prices, and then one employee is asking another employee let's say: "How much is a cup of coffee?" And then the employee says: "a cup of coffee is hundred bucks." And then you look at it as the boss, and you know it's not right then you say: "guys please re check this." So, everyone is aware that they need to be on the outlook as to what's happening in the group.

The managers, supervisors, they know they have to check what's happening in there. Because ultimately, if something is not solved, it's them who are going to get into some fire. Ultimately, you're in charge of your people. So, you must ensure that your people are doing the right things. You can blame your people but we as directors, when we come to you we're not going to blame your people, we are going to blame you. Why is your ship sinking? You are the captain of the ship. So don't tell me one of your group members was sleeping. It doesn't count. (Participant 2)

6.3.11 Summary and insights of results of how Company B manages Organisational Learning platform content

The sub-section below summarises the results of the theme "How the organisation manages OL content" in Company B.

- ***Summary***

The data that were collected regarding how Company B manages the content on social media revealed three main themes. The first mentioned how Company B had certain rules in place on how employees should conduct themselves on social media and how they

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were expected to conduct themselves the same way as they did at work. The second mentioned how the company managed inappropriate content posted by employees on social media and the protocol that they followed to deal with the situations as they occurred. The third mentioned how Company B ensured that the content that was shared on Web 2.0 was valid and credible.

- *Insights*

An aspect that stood out in Company B is that, although the company had rules in place regarding employees' conduct on social media, they still allowed employees to express themselves freely. This was a key advantage to employees as they were allowed to express their ideas and ask questions when they did not understand. This freedom of interaction and expression inevitably creates an environment that is conducive to enhancing OL.

Another highlight was how the organisation resolves inappropriate content postings on social media. The company had a clear-out protocol on how to defuse the situation and prevent it from happening in the future, thus the organisation showed that it was learning from its mistakes so as not to repeat them. In addition, it was refreshing to see that much of the responsibility was entrusted to managers and supervisors to double check the data shared on social media for validity and credibility. This showed that the organisation trusted their employees to self-govern the content they shared on social media.

6.3.12 Company B: Results for benefits of social media

The analysis of the data from the interviews revealed the themes and sub-themes presented in Table 6-20 below.

Table 6-20: Themes from the *benefits of social media* in Company B

Theme	Sub-themes	
Benefits of social media	I.	Top-down and bottom-up hierarchical interaction
	II.	Multimedia sending feature
	III.	Ease of use and access

The table below shows the raw data extracts, the identified themes and the sub-themes that emerged from the data regarding the *benefits of social media* in Company B.

Thereafter, Figure 6-12 provides a mind-map as a visual representation of the themes and sub-themes mentioned in Table 6-21.

Table 6-21: Raw data, themes and sub-themes from Company B regarding the *benefits of social media*

Raw data	Identified themes	Sub-themes
There's no closed doors in our organisation. I'm the CEO, I lead the organisation and I don't have an office. We have an open plan structure. (Participant 1)	Benefits of social media	Top-down and bottom-up hierarchical interaction
I think on WhatsApp the fact that you can send videos, pictures, voice notes and documents, I think those are the great features. Same with emails but it's just that with emails you don't want to send videos or voice notes. (Participant 2)		Multimedia sending feature
And it's easy to access WhatsApp, even maybe you have a supplier and then there's this product, you just want to quickly send it quickly to one of our sales representatives or something, it's easy to send it. Rather than opening a laptop or going to emails. Yeah, I think WhatsApp is much better. It's more user friendly. (Participant 3) It's more user friendly, and it's one of the top used social media communication platforms. With emails you can't send certain videos or documents, you know, because of space. You have to zip before you can send it. So, unlike WhatsApp you just send you know, and it's easier. I find that people find WhatsApp easier to use than using emails, that's for sure. (Participant 2)		Ease of use and access

Figure 6-12: Mind-map of themes from the *benefits of social media* in Company B
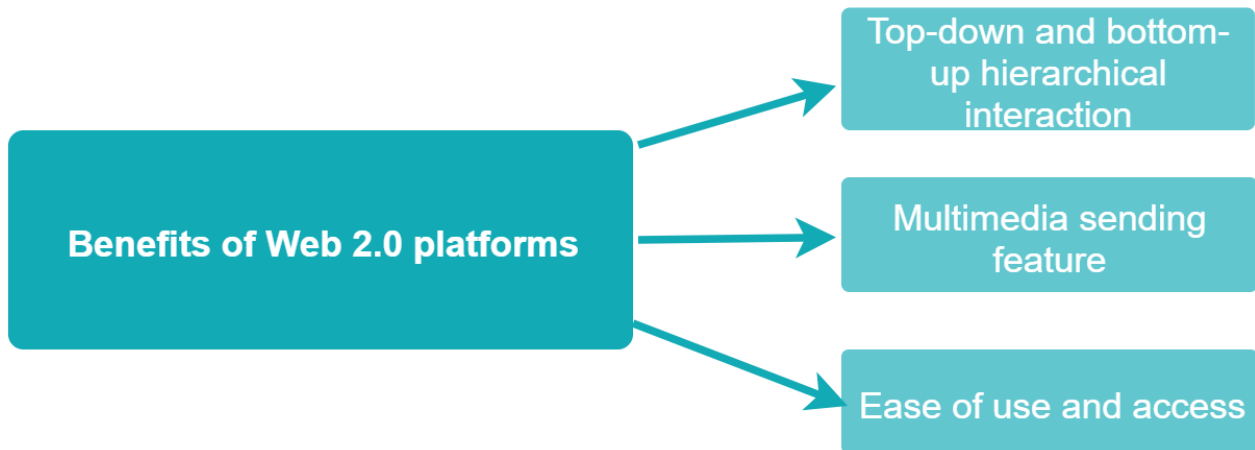
6.3.13 Discussion of results: Benefits of social media

The sub-section below discusses the results of the theme "Benefits of social media" in Company B.

- ***Top-down and bottom-up hierarchical interaction***

Company B revealed that one of the benefits of using social media for interaction and communication at the workplace, was that it allowed the general staff members to interact with the executive staff members of the organisation. Literature states that the successful use of social media in an organisation depends on the bottom-up and top-down culture, the engagement of employees and keeping that balance (Chui *et al.*, 2009). This is an important aspect of the organisation as it facilitated the top-down and bottom-up hierarchical interaction, which inherently promotes OL:

> *There's no closed doors in our organisation. I'm the CEO, I lead the organisation and I don't have an office. We have an open plan structure.* (Participant 1)

- ***Multimedia sending feature***

One of the participants mentioned that a benefit of using social media is that employees could send multimedia content to their colleagues. This allowed employees to communicate and interact effectively, which encouraged and prompted effective OL compared to using emails. Literature concurs that IT features such as multimedia and the storage and retrieval of information help to support OL (Chou, 2003; Chen *et al.*, 2003).

The ability of social media to make use of multimedia and provide rich, highly interactive user interfaces (Huang & Güney, 2012). Literature also adds that the use of text and web-

based multimedia on social media provides an engaging two-way experience for end users, empowers them to produce and consume multimedia content and creates a virtual learning environment (McLoughlin & Lee, 2007; Kazhan *et al.*, 2020). This is what Participant 2 had to say:

> *I think on WhatsApp the fact that you can send videos, pictures, voice notes and documents, I think those are the great features. Same with emails but it's just that with emails you don't want to send videos or voice notes.* (Participant 2)

- *Ease of use and access*

Company B also revealed that another benefit of using social media is that it is easy to use and access when interacting with other employees. This made communication between employees easy and quick, which is key to promoting effective OL. Literature supports this by stating that social media's ease of use paves the way for creating a learning environment for end users (Schneckenberg, Ehlers & Adelsberger, 2011). Literature also adds that social media's ease of use/access allows for seamless adoption, with end users encouraging others to use it as well (Schneckenberg *et al.,* 2011; Toker & Moseley, 2013). This is what Participant 3 had to say:

> *It's easy to access WhatsApp, even maybe you have a supplier and then there's this product, you just want to quickly send it quickly to one of our sales representatives or something, it's easy to send it. Rather than opening a laptop or going to emails. Yeah, I think WhatsApp is much better. It's more user friendly.* (Participant 3)

Participant 2 also added the standout benefit of social media that they used in the organisation was that it was easy to use and user-friendly, compared to using emails. Participant 2 found emails to be limited to a certain extent, while social media provided an avenue of limitless possibilities. Literature states that compared to email, social media are transparent and allow employees to have access to more information (Razmerita *et al.*, 2014). This is what Participant 2 had to say:

> *It's more user friendly, and it's one of the top used social media communication platforms. With emails you can't send certain videos or documents, you know, because of space. You have to zip before you can send it. So, unlike WhatsApp you just send you know, and it's easier. I find that people find WhatsApp easier to use than using emails, that's for sure.* (Participant 2)

6.3.14 Summary and insights of results of benefits of social media

The sub-section below summarises the results of the theme "Benefits of social media" in Company B.

- *Summary*

The data analysis that was carried out regarding the benefits of using social media in Company B revealed three main themes. The first theme mentioned that one of the benefits of social media was that it encouraged and allowed top-down and bottom hierarchical interaction, which meant that employees at either end (executive or lower levels) were able to interact easily. The second theme mentioned that social media allowed the users to send multimedia content to one another, which enhanced effective communication. The third theme mentioned that another benefit of social media was that it was easy to use and access for employees.

- *Insights*

One of the insights is that the top-down and bottom-up hierarchical interaction promotes boundary-less interactions between top-level and low-level employees. This is an advantage as employees are more likely to participate when they know that their input and voices are more likely to be heard by the executive employees. Another insight is how employees preferred to use social media over emails, this was because of the feature that allowed employees to send multimedia content for example videos, pictures, voice notes and documents. Another advantage that social media had over emails is that employees found social media user-friendly, and easy to communicate through, use and access which made OL even more seamless.

6.3.15 Company B: Results for using social media effectively

The analysis of the data from the interviews revealed the themes and sub-themes, presented in the table below:

Table 6-22: Themes of *using social media effectively* in Company B

Theme	Sub-themes	
Using social media effectively	I.	Receive social media updates
	II.	Ready to learn attitude
	III.	Delete feature

	IV. Incorporating chatting feature with ERP system
	V. Training employees

The table below shows the raw data extracts, the identified themes and the sub-themes that emerged from the data regarding *using social media effectively* in Company B. Thereafter, Figure 6-13 provides a mind-map as a visual representation of the themes and sub-themes mentioned in Table 6-23.

Table 6-23: Raw data, themes and sub-themes from *using social media effectively* in Company B

Raw data	Identified themes	Sub-themes
Maybe to improve these things we can have an IT guru, who can keep abreast of the changes that are made every time WhatsApp updates, you see such things. So maybe the best way, my recommendation will be having someone who's keeping on the outlook of what's happening as far as technology is concerned. And who can come in and say: "okay guys this is what's happening, and these are the things we can do now." And most of the time it's the IT guys, those are the guys who who'll know these things most of the time. Because us we don't know, you know, we never know, we just see that it's updated by mistake "Oh, it can do this". (Participant 2)	Using social media effectively	Receive social media updates
I think the trick always lies in the willingness of the person to learn more about whatever platform they are using. It's just determination that it relies on right. The willingness and determination for a person to learn. That's the thing for me, that's what I see. From your own effort you must be willing to check what's happening within these things. You have to learn for yourself, you have to have the determination. I thank what the technology has done. It's going to continue improving, but they've done enough to put certain things there, but people they don't have the determination to dig deep and learn one or two things that is already there. In fact, people will ask you for things that are already in there. You know, you get what I mean? They say "this thing can't do this", but actually it can, you know. (Participant 2)		Ready to learn attitude
Yeah, I think one thing they should improve is the way you can delete a message, because that is the one big problem. Yeah, maybe if they can get rid of that feature, I think if they can improve on that it can help. (Participant 2) But still it's a challenge, because it still shows that the message has been deleted. It still sends the message even though you have deleted the message. Now when it sends I will think out loud that "Why did he or she delete the message?" you know. (Participant 3)		Delete feature

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I think it will be beneficial to integrate because let's say I open a document on the [ERP] system and I want to WhatsApp it you, I think it would be easier just to say send via WhatsApp and then it goes to you. (Participant 2)		Incorporating chatting feature with ERP system
I think training. Yeah, that's just the easiest way. I think training and by training, I mean, if your supervisor knows how to work the system, or contact that or whatever, he needs to know what is happening in there, and then he can tell you that "next time you do this, don't do XYZ", you know, "do that," but him himself, he needs to know how this thing works, you know. So if the supervisor or manager can get training on how to better communicate, because remember, this at the end of the day we can say jokes in the group, but you don't want to bombard them with unnecessary information. You're wasting people's time. Because you don't want to open your emails or WhatsApp group and people are talking about soccer, you know. So when you see that you must be able to say, "Okay, guys, this is used for this it is not used for entertainment, it is used for this". Yeah, you can say jokes there and there but stick to the topic, we're here to work right. So, if you know as a manager, how to communicate, you can train your people that "Guys, when you communicate, first you greet them, and then you say this go straight to the point," you know, you can train your people, but as a manager, you need to be trained as well. Because its sharing content, what you basically saying is someone needs training in communication. So that person has to have some communication skills in them, for him to train his people as well. And his people as well have to be sent to communication training as well, for them to be able to communicate properly. (Participant 2)		Training employees

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Figure 6-13: Mind-map of themes from *using social media effectively* in Company B
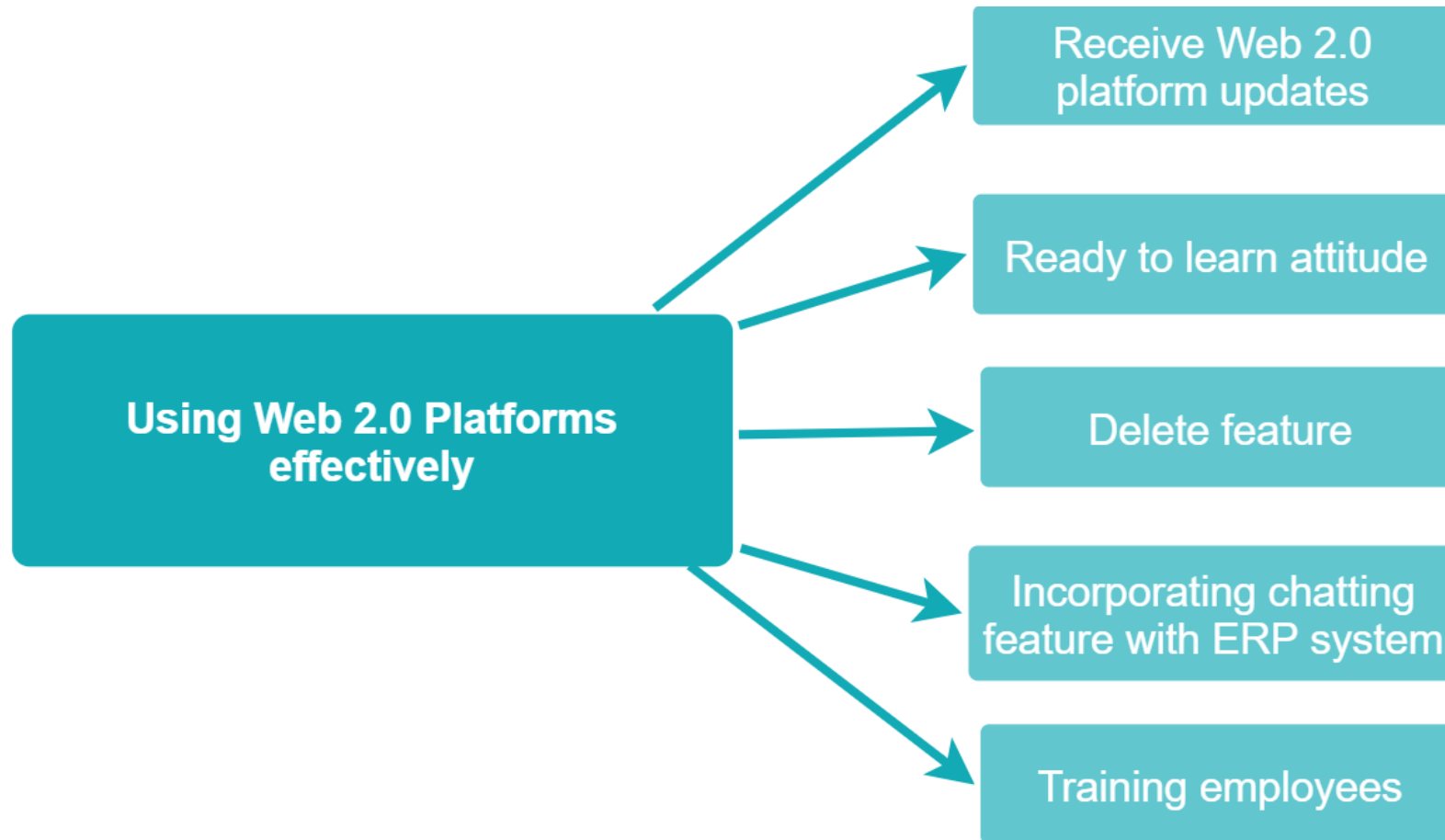
6.3.16 Discussion of results: Using social media effectively

Company B had various recommendations on how social media can be used effectively in an organisation. The recommendations that were put forward were from employees' perspectives on what could be done to improve the use of social media to promote OL. Most of what was recommended came from employees' experiences using social media. These recommendations can be used in any organisation seeking to implement social media in their organisation for OL.

- ***Receive social media updates***

One of the recommendations that Participant 2 stated was that it would be very advantageous to the employees to have the IT department keep them up to date whenever there were updates made to social media being used in the organisation. The IT department would be expected to inform the general staff members on how to use the latest features of the social media that were updated for organisations to use social media effectively. Literature states that the delivery of social media that are continuously updated as they get better usually yields a better user experience at the end of the day, as more people are encouraged to use social media (O'reilly, 2005; Kim *et al.*, 2009). This is what Participant 2 had to say:

> *Maybe to improve these things we can have an IT guru, who can keep abreast of the changes that are made every time WhatsApp updates, you see such things. So maybe the best way, my recommendation will be having someone who's keeping on the outlook of what's happening as far as technology is concerned. And who can come in and say: "okay guys this is what's happening, and these are the things we can do now."*

> *And most of the time it's the IT guys, those are the guys who who'll know these things most of the time. Because us we don't know, you know, we never know, we just see that it's updated by mistake "Oh, it can do this".* (Participant 2)

- ***Ready to learn attitude***

One of the recommendations for ensuring that social media are being used effectively is for employees to adopt a ready-to-learn attitude and take ownership of their learning regarding social media use. Literature reveals that it is important for employees to be involved in the use of Web platforms in organisations, as this shows a sense of ownership

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(Baxter *et al.*, 2010). Employees taking ownership and collaborating to create content has subsequently led to improvements in OL and performance (Razmerita *et al.*, 2014; Reddick *et al.,* 2017). A learning environment that is based on collective ownership, employee interaction and support consequently leads to knowledge sharing and acquisition in the organisation (Smith, 2001).

Participant 2 stressed that much of the responsibility lay on the employees to show determination and a willingness to learn in a personal capacity. Showing determination in learning was seen as moving one step in the right direction to use social media effectively. Literature states that adult learners are responsible for their learning and this is encouraged by social media, which allows users to have a say in the information they seek out and share with other users (Kane *et al.*, 2010). Adult learners or users of social media have a ready-to-learn reputation when they need to perform a certain task or need to know something new (Kane *et al.*, 2010). This is what Participant 2 had to say:

> *I think the trick always lies in the willingness of the person to learn more about whatever platform they are using. It's just determination that it relies on right. The willingness and determination for a person to learn. That's the thing for me, that's what I see. From your own effort you must be willing to check what's happening within these things. You have to learn for yourself, you have to have the determination.*
>
> *I thank what the technology has done. It's going to continue improving, but they've done enough to put certain things there, but people they don't have the determination to dig deep and learn one or two things that is already there. In fact, people will ask you for things that are already in there. You know, you get what I mean? They say "this thing can't do this", but actually it can, you know.* (Participant 2)

- ***Delete feature***

Another recommendation that the participants had, was with regards to a feature that they used on social media that they thought needed to be improved to allow the effective use of the platform. The participants referred to the delete feature on social media (WhatsApp) that they thought needed to be improved. The social media platform still left a notification to notify the members of the group that a message had been deleted, the participants felt that it was unnecessary to leave a notification and simply deleting the whole message would be an improvement for discretion purposes. Literature reveals that a deleting

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feature can be useful in social media as it allows inappropriate information, spam, and outdated and inaccurate data to be removed (Salehe, 2008; Matschke *et al.,* 2012). Participants stated:

> *Yeah, I think one thing they should improve is the way you can delete a message, because that is the one big problem. Yeah, maybe if they can get rid of that feature, I think if they can improve on that it can help.* (Participant 2)

> *But still it's a challenge, because it still shows that the message has been deleted. It still sends the message even though you have deleted the message. Now when it sends I will think out loud that "Why did he or she delete the message?" you know.* (Participant 3)

- *Incorporating chatting feature with ERP system*

Another aspect of Company B is that they used Oracle NetSuite, which is an ERP and CRM eCommerce system. They used the ERP system as a platform and source of information for managing their business finances, operations, stock and customer relations within the organisation.

A disadvantage that the Oracle NetSuite ERP system had was that it had no means of quick and effective interaction between employees (instant massaging feature). The participants felt that it would be beneficial to integrate the WhatsApp chatting feature with the ERP system to enhance interaction between employees and improve the use of social media in their organisation. Literature concurs that online chatting improves social media, as it allows users to be more interactive, and collaborative and allows networking (Vuori, 2012; Ally & Tsinakos, 2014). Another advantage of online chatting in social media is that it enhances communication, allows end users to share information and ideas, and grow as a team by trading resources and work documents (London & Hall, 2011; Ally & Tsinakos, 2014). This is what Participant 2 had to say:

> *I think it will be beneficial to integrate because let's say I open a document on the [ERP] system and I want to WhatsApp it you, I think it would be easier just to say send via WhatsApp and then it goes to you.* (Participant 2)

- *Training employees*

Another recommendation that Participant 2 had, was that it would be beneficial for employees at the organisation to go through training on how to use social media effectively. This was meant to allow employees to make use of social media in an efficient manner to save employees' time. Literature states that training users or employees on using social media is needed, as it allows the organisation to develop a process of capturing and distributing valuable information and learning that occurs on social media (Kane *et al.*, 2010; Vuori, 2012; Zhao & Kemp, 2013).

Organisations are responsible to play a key role in training and educating their staff members by setting up training sessions, to help employees understand how to use social media and air their views (Baxter *et al.*, 2010; Zhao & Kemp, 2013). Training for social media is expected to address the prospects and benefits of employees participating on the platform and should ensure that employees embrace and understand the objectives, values and beliefs of the organisation (Dreher, 2014). As Participant 2 stated:

I think training. Yeah, that's just the easiest way. I think training and by training, I mean, if your supervisor knows how to work the system, or contact that or whatever, he needs to know what is happening in there, and then he can tell you that "next time you do this, don't do XYZ", you know, "do that," but him himself he needs to know how this thing works, you know.

So if the supervisor or manager can get training on how to better communicate, because remember, this at the end of the day we can say jokes in the group, but you don't want to bombard them with unnecessary information. You're wasting people's time. Because you don't want to open your emails or WhatsApp group and people are talking about soccer, you know.

So when you see that you must be able to say, "Okay, guys, this is used for this it is not used for entertainment, it is used for this". Yeah, you can say jokes there and there but stick to the topic, we're here to work right. (Participant 2)

Supervisors and managers were expected to be trained and then keep order and monitor what was happening on social media. Managers and supervisors were also expected to then train their employees on what they had learned from training or send their employees to training on how to effectively communicate on social media. Literature supports this by

stating that organisations need to invest in training programmes and internal learning processes on i) how to use social media and ii) good online practice (Panagiotopoulos *et al.*, 2015). Literature adds that if management in a company wants to reap the rewards of training, they should hire learning specialists who have experience in using social media for OL activities (Toker & Moseley, 2013; Razmerita *et al.*, 2014).

Literature further states that social media training should provide technical know-how about the aim and the purpose of different social media, and also the best practices of communicating appropriately on the platforms (Dreher, 2014). Employee perspectives revealed that organisations should help internal workers and trainers by training them to better use social media to promote self-learning tasks (Petiz *et al.*, 2013). Organisations are encouraged to plan their social media program carefully, by providing ongoing training sessions, training materials and resources, and incentives to their employees who want to embrace social media in the workplace (Dreher, 2014). Participant 2 added:

So, if you know as a manager, how to communicate, you can train your people that "Guys, when you communicate, first you greet them, and then you say this go straight to the point," you know, you can train your people, but as a manager, you need to be trained as well.

Because its sharing content, what you basically saying is someone needs training in communication. So that person has to have some communication skills in them, for him to train his people as well. And his people as well have to be sent to communication training as well, for them to be able to communicate properly. (Participant 2)

6.3.17 Summary and insights of results of using social media effectively

The sub-section below summarises the results of the theme "Using social media effectively" in Company B.

- ***Summary***

The data analysis that was carried out regarding the recommendations that came from Company B on using social media effectively revealed five main themes. The first and second themes mentioned that receiving social media updates, and employees' ready-to-learn attitudes, made the use of social media more effective. The third theme stated that making improvements to the delete feature on the Web platform (WhatsApp) would be

beneficial to employee interaction on social media. The fourth and fifth themes stated that incorporating the chatting feature with the company's ERP system, whilst training employees on how to use Web 2.0, would go a long way toward making the use of social media more effective.

- *Insights*

One of the insights reveals that employees feel strongly about receiving updates from the IT department, as they want to be kept up to date on how to use social media efficiently. There is also an expectation and responsibility for employees to do their research and learn how to effectively use social media willingly. Furthermore, the employees feel that the company is in charge of social media and can therefore make a few tweaks to its features. The delete feature and notifications are thought to need improvements to enhance the interaction and experience of employees on social media. Incorporating the chatting feature of social media (WhatsApp) with the ERP system used by the company is seen as a prospective improvement that will allow employees to interact efficiently within the organisation.

In addition, employees should be provided with training on how to use social media, as equipping managers, supervisors and general staff with the skills to use the platform will ensure effective use of social media. There is also an expectation that employees need to teach and learn from each other to make the use of social media a success in the organisation.

6.4   CASE STUDY: COMPANY C

Company C is a local SME digital business consultancy company that operates in two South African cities, namely Pretoria and Cape Town. The company specialises in providing consulting services, financial services, engineering services, talent solutions and technology solutions to their clients. The company employs over 200 employees who belong to seven different departments; the Business Development, Business Enablement, Delivery Services, Finance, Group Innovation, Hodari Training Academy and Human Resources departments. The figure below outlines the hierarchical organisational structure of Company C.

Figure 6-14: Hierarchical organisational structure of Company C
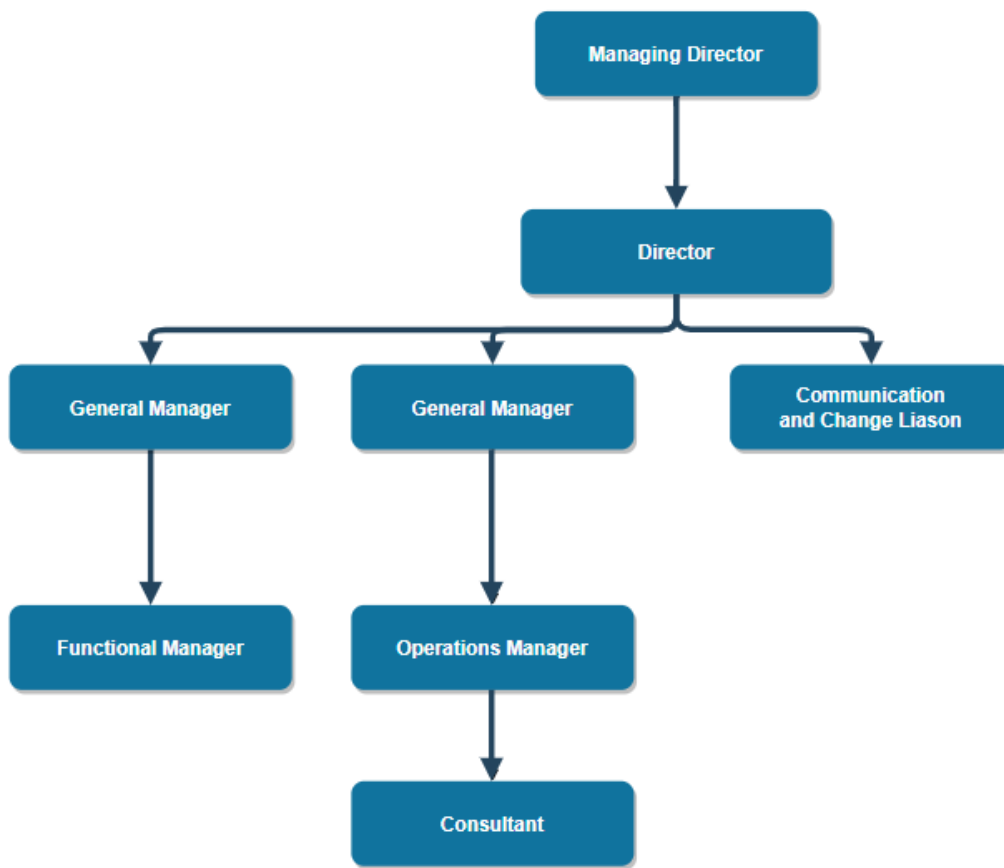
From the top down, the company hierarchy consists of the MD, each director in charge of a delivery service department (Business Development, Business Enablement, Delivery Services, Finance, Group Innovation, Hodari Training Academy and Human Resources departments), the GMs, the operational & functional managers, and then the consultants. In the consultants' area, they have four employee levels, namely graduate, junior, mid-level and senior employees.

Two participants were interviewed from Company C; the participants were key informants and were treated as expert reviewers of the framework as they could give valuable feedback. The expert reviewers were identified as employees that were in charge of the use of social media in the organisation. The first employee was an executive IT manager and the second employee was in charge of the Business Intelligence and Analytics data of the organisation's social media. Since the organisation had just recently adopted the use of social media (after this study commenced and after receiving ethical clearance), it

made the participants ideal informants as they had recent experience and knowledge of implementing and using social media.

6.4.1 Company C: Results for how Company C manages Organisational Learning platform content

The analysis of the data from the interviews revealed the themes and sub-themes presented in Table 6-24 below.

Table 6-24: Themes from how Company C *manages OL platform content*

Theme	Sub-themes	
How Company C manages OL platform content	I.	Ontologies
	II.	Taxonomies
	III.	Data governance structures

The table below shows the raw data extracts, the identified themes and the sub-themes that emerged from the data regarding how Company C *manages OL platform content.* Thereafter, Figure 6-15 provides a mind-map as a visual representation of the themes and sub-themes mentioned in Table 6-25.

Table 6-25: Raw data, themes and sub-themes from how Company C *manages OL platform content*

Raw data	Identified themes	Sub-themes
So I don't see where you have the let's say classification, in terms of ontologies. So I see that ontologies is missing in your framework. The ontology is a way of organising information. (Participant 1)	How Company C manages OL platform content	Ontologies
I don't see where you have classification in terms of taxonomies. So I see that taxonomies is missing in your framework. Taxonomy is the naming of organisation structures. So you can think of it as folders and sub folders where the taxonomy is the physical name of the folder and subfolder. (Participant 1)		Taxonomies
Things like governance structures, I mean, this framework doesn't really talk to what the governance structure is, what the roles, what the responsibilities, and those kind of things are, what you're allowed to do, what you're not allowed to do, what your basic standard principles are, principles in terms of naming conventions, and how you make things available, and how you classify your data or your information, so that it is then opened up for learning for either individuals, or for groups or so forth. Like empowering employees to govern their knowledge and share the knowledge and you know, those kinds of things. But it's literally being able to control the information that comes in, the quality of that information and how that information is then disseminated or made available. (Participant 1) You need to consider what is the governance and controls that actually sit around the communication technologies? Do we need to encrypt the data interlinked if you store that data on the server? You also need to consider who to give the permissions to. But you also don't want to stifle employees because if they want to create their platforms for a particular purpose, then they're going to drive it and take ownership. You also don't want to stifle that. And I think to some extent is how do you govern these tools and technologies? So, it becomes extremely complex. (Participant 2)		Data governance structures

Figure 6-15: Mind-map of themes from how Company C *manages OL platform content*
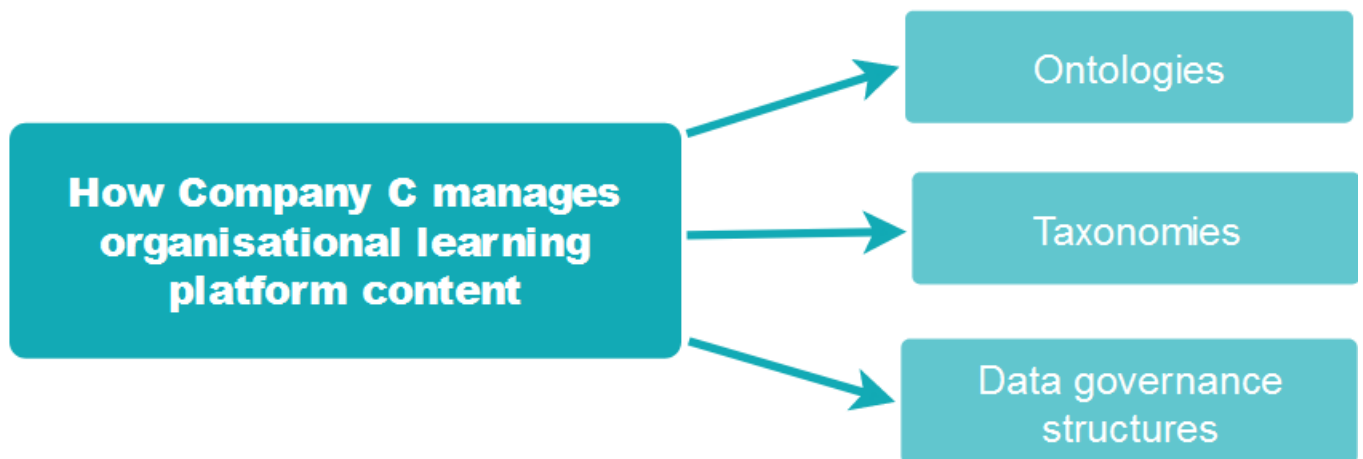
6.4.2 Discussion of results: How Company C manages Organisational Learning platform content

The sub-section below discusses the results of the theme "How the organisation manages OL content" in Company C.

- ***Ontologies***

Company C reported that one of the important features that were missing from the preliminary framework is the classification of data beforehand, in terms of ontologies. Ontology (in the field of information and computer science), refers to the system of defining, naming and representing categories, properties and the relationships between data and its concepts (Erkimbaev *et al.,* 2019; Francu, 2021). Ontologies simply define the relationships between concepts or terms in a specific knowledge domain or subject area and draw up the rules of the relations that exist in the vocabulary (Ballantyne et al., 2017; Su & Peng, 2012). This is what Participant 1 reported:

> *So, I don't see where you have the let's say classification, in terms of ontologies. So I see that ontologies is missing in your framework. The ontology is a way of organising information.* (Participant 1)

Company C also revealed that ontologies are features that help manage the content on social media. Organisations are expected to sort out their content and ontologies before social media implementation because social media can function as an ontology-based

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knowledge support system that enables the end users to share and exchange useful information and ideas (Su & Peng, 2012). According to Su and Peng (2012), ontologies:

- allow people to have a common understanding by providing and specifying the number of terms or entities and the relationships that exist between them;
- make up and define the rules and limitations that allow people to reason within the specific topic area; and
- can be integrated to enrich the social media knowledge base and allow users to learn interactively.

- ***Taxonomies***

Company C also revealed that another important concept that was missing from the preliminary framework is the classification of data in terms of taxonomies. Taxonomies (in the field of information and computer science), refers to a system of classifying and organising data, which deals with naming and grouping terms and concepts and forming a hierarchical structure of a particular subject field (Erkimbaev et al., 2019). In simple terms, taxonomies refer to a method for sorting and arranging data/concepts in a hierarchical order (Ballantyne et al., 2017). Therefore, taxonomies are one of the features that help manage content on social media:

> *I don't see where you have the let's say classification, in terms of taxonomies. So, I see that taxonomies is missing in your framework. Taxonomy is the naming of organisation structures. So you can think of it as folders and sub folders where the taxonomy is the physical name of the folder and subfolder.* (Participant 1)

Taxonomies also function as knowledge organisation systems and help with the classification and representation of knowledge (Ballantyne et al., 2017). Taxonomies usually distribute concepts into categories and classes to form a hierarchical organisation of data and ideas, which helps organisations sort out their taxonomies before data can be stored, retrieved, updated and shared on social media (Ballantyne et al., 2017).

Literature reveals that taxonomies in social media are now identified as tagging or folksonomy (O'reilly, 2005; O'Reilly & Battelle, 2009). Folksonomy allows social media sites to use a collaborative categorisation system for sorting out specific chosen keywords which are known as tags; these allow data to be sorted and associated in several overlapping relations instead of using rigid categories (O'reilly, 2005; O'Reilly & Battelle,

2009). Tagging also allows data or content to be retrieved easily by social media users using specific keywords (O'reilly, 2005; O'Reilly & Battelle, 2009).

- *Data governance structures*

The third concept that Company C recommended for the preliminary framework was the creation of data governance structures, which deal with concepts such as sharing relevant content and providing employees with valid and credible content. Data governance is a strategy that is put in place to oversee the use of data and to conduct data collection, data management (authority and control) and data utilisation (decision making) (Brous, Janssen & Vilminko-Heikkinen, 2016; Aisyah & Ruldeviyani, 2018). The strategy is created by the organisation from the beginning, to foster a culture and a habit of managing data as an asset (Brous *et al.,* 2016; Aisyah & Ruldeviyani, 2018). Data governance also ensures that the data used in the organisation is valuable, of high quality and managed strategically and tactically (Al-Ruithe, Benkhelifa & Hameed, 2016; Aisyah & Ruldeviyani, 2018). Data governance is also needed by organisations to measure the effort that is put into protecting organisational data since data is seen as an important asset for the organisation (Brous *et al.,* 2016; Aisyah & Ruldeviyani, 2018). Participant 1 stated:

> *Things like governance structures, I mean, this framework doesn't really talk to what the governance structure is, what the roles, what the responsibilities, and those kind of things are, what you're allowed to do, what you're not allowed to do, what your basic standard principles are, principles in terms of naming conventions, and how you make things available, and how you classify your data or your information, so that it is then opened up for learning for either individuals, or for groups or so forth.*

> *Like empowering employees to govern their knowledge and share the knowledge and you know, those kinds of things. But it's literally being able to control the information that comes in, the quality of that information and how that information is then disseminated or made available.* (Participant 1)

Participant 2 also revealed that the framework needed to address the governance structure of managing data on social media. This is what Participant 2 had to say:

> *You need to consider what is the governance and controls that actually sit around the communication technologies? Do we need to encrypt the data interlinked if you store that data on the server? You also need to consider who to give the permissions to.*

But you also don't want to stifle employees because if they want to create their platforms for a particular purpose, then they're going to drive it and take ownership. You also don't want to stifle that. And I think to some extent is how do you govern these tools and technologies? So, it becomes extremely complex. (Participant 2)

Literature backs the sentiments of Participants 1 and 2, by stating that organisations are expected to sort out their data governance outline by defining roles, responsibilities and decision areas that meet unique demands, and appoint, train, nurture and integrate specialised people into the organisation (Al-Ruithe *et al.,* 2016; Brous *et al.,* 2016). Data governance needs to ensure that the quality of data shared in the organisation meets certain standards, and ensure that data policies are drawn up, defined, monitored and enforced (internally and externally) throughout the organisation (Brous *et al.,* 2016; Aisyah & Ruldeviyani, 2018). Literature adds that data governance defines the responsibilities of employees, describes the processes and covers activities such as data strategy, data policies, data standards, data procedures, and regulatory compliance (Brous *et al.,* 2016; Aisyah & Ruldeviyani, 2018). Literature also states that data governance allows organisations to provide data and information to the right people at the right time, which ensures that information and data are managed properly (Brous *et al.,* 2016). Data governance enhances business efficiency, ensures data compliance, allows better decision making, increases business effectiveness, and allows better business integration in organisations (Brous *et al.,* 2016). However, organisations need to keep in mind that data governance should be specific and fit into their organisation and be aligned to organisational goals and needs, and should not take a 'one size fits all' approach (Al-Ruithe *et al.,* 2016; Brous *et al.,* 2016).

6.4.3 Summary and insights of results of how Company C manages Organisational Learning platform content

The sub-section below summarises the results of the theme "How the organisation manages OL content" in Company C.

- ***Summary***

The data that were collected regarding how Company C manages the content on social media revealed three main themes that they thought were 'missing components' of the preliminary Web 2.0 framework. The first theme mentioned how Company C used

ontologies to define, name and sort out data into categories on social media. The second theme mentioned how Company C used taxonomies to classify and organise data in a hierarchical format on the platform. The third theme mentioned how Company C used data governance structures (which deal with ensuring that relevant, valid and credible data were shared on the platform), as well as a strategy to manage the data on the platform.

- *Insights*

An aspect that stood out in Company C is how the company used ontologies to manage their data on social media. This indicated that the information on social media was organised and ontologies were used to sort data beforehand. This also suggested that organisations were expected to define the relationships between the concepts of the data regarding implementation of social media. Furthermore, Company C used taxonomies to classify data by naming structures and representing them in a hierarchy. This implies that data were managed in an orderly manner and sorted out in hierarchical order, which inherently makes it easy to store, retrieve and share the data on social media. Finally, Company C used data governance structures, which dealt with ensuring that data that were shared on social media were relevant, valid and credible. It was evident that the organisation paid enough attention to ensuring that a strategy regarding data structure was in place to manage the data efficiently, to certify quality and value.

6.4.4   Company C: Results for benefits of social media

The analysis of the data from the interviews revealed the themes and sub-themes presented in Table 6-26 below.

Table 6-26: Themes from the *benefits of social media* in Company C

Theme	Sub-themes	
Benefits of social media	I.	Knowledge retention
	II.	Cultivate and inculcate a learning organisation
	III.	Enable different types of teaching and learning

The table below shows the raw data extracts, the identified themes and the sub-themes that emerged from the data regarding the *benefits of social media* in Company C. Thereafter, Figure 6-16 provides a mind-map as a visual representation of the themes and sub-themes mentioned in Table 6-27.

Table 6-27: Raw data, themes and sub-themes from Company C regarding the *benefits of social media*

Raw data	Identified themes	Sub-themes
I think if you are serious about this kind of tool [social media] and opportunity, there's a lot of positives for the tool that can be brought into organisations. Number one, retaining your knowledge within your organisation. So that you don't lose that knowledge, or have key man dependencies, I think that's one of the one of the key benefits of having this kind of approach. (Participant 1)	Benefits of social media	Knowledge retention
Another benefit of social media is helping employees to cultivate, and the word is inculcating, a learning organisation where people want to learn, and there's a rich set of content for them to learn, I think it's important for that. (Participant 1)		Cultivate and inculcate a learning organisation
But also, what I found is with the Web 2.0 Technologies you can enable different types of learning quite quickly. So, there is multimedia type platforms, right, you can easily incorporate graphics. So, if you want some sort of visual type learning, auditory type learning, that you can easily incorporated that into the web technologies. Prior to that it was you know, it's difficult to engage with people, now we've got a plethora of tools that you can use to engage people more effectively. You've got interactive quizzes, you've got video content. You've got text-based content, auditory content. So, the different ways that you can engage and convey information is a lot more diverse. So, you've got instructed led teaching. So, you as a teacher would instruct and kind of drive it, so there's passive learning where you'd sit and you'd listen, there's actively when you're in physically engage in an activity, then depends on obviously what you're trying to teach them. Some people need haptic time feedback. So, it's physically playing around with objects, etc. to learn. But with Web 2.0 technologies, you can almost always go back and re-watch. You can always refer back to the content, and asynchronously learn. Because that's what we're doing is a synchronous activity. Both of us need to be paying attention. But afterwards, you kind of go and asynchronously, take your time, step through the learnings and formulate questions, and then make your mental model, your understanding of what was taught, the concepts taught more concrete on your own time. (Participant 2)		Enable different types of teaching and learning

Figure 6-16: Mind-map of themes of the *benefits of social media* in Company C
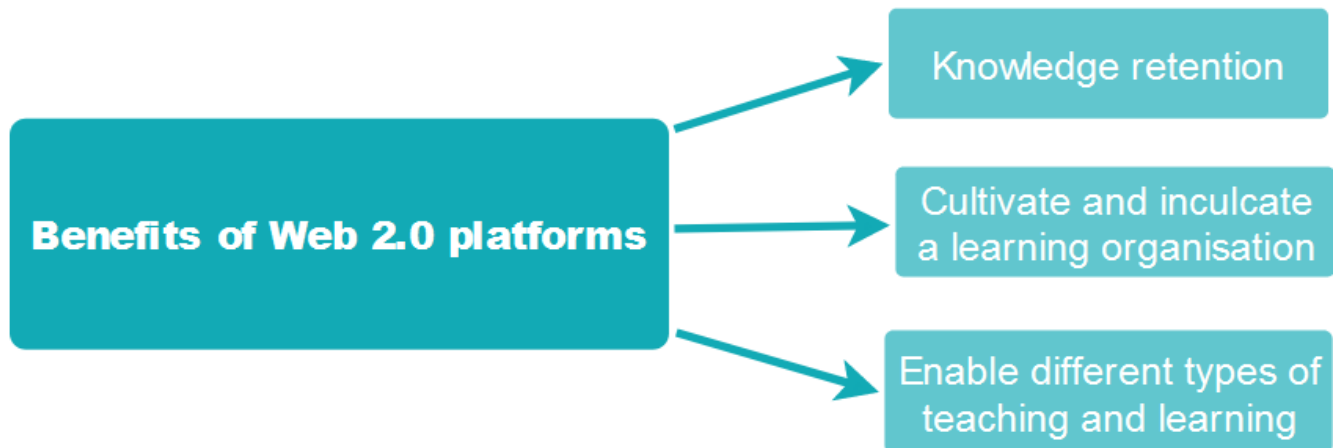
6.4.5 Discussion of results: Benefits of social media

The sub-section below discusses the results of the theme "Benefits of social media" in Company C.

- *Knowledge retention*

Company C revealed that one of the benefits of social media is that it helps manage and retain the knowledge and content of the organisation, to prevent any losses. Participant 1 reported:

> *I think if you are serious about this kind of tool [social media] and opportunity, there are a lot of positives for the tool that can be brought into organisations. Number one, retaining your knowledge within your organisation. So that you don't lose that knowledge, or have key man dependencies, I think that's one of the one of the key benefits of having this kind of approach.* (Participant 1)

Literature reveals that social media can also be used as a knowledge retention, repository or management tool that allows users to share data and prevent a loss of information (Zhao & Kemp, 2013; Breunig, 2016; Ismail, 2018; Can, Gelmez-Burakgazi & Celik, 2019). This was revealed by Participant 2, who stated that social media allowed the organisation to retain the intellectual property they worked on throughout their projects and were able to reuse the knowledge gained:

> *But definitely from a benefits perspective, I've already seen us being able to consolidate some of the artefacts that we create, and make them templates or blueprints. So, at the*

end of the project, say this is everything we have created. So, then you step out in anything else, any IP related stuff, and you feed that back into your normal way of work.

So, if you, as an example, have a data source to target mapping template, then after the project, you take what you produce and said, how did we have to change that template to meet the project requirements? And we need to factor those changes into our template before we initiate a new project. So that's definitely the feedback loops that have been enabled, because typically what will happen is that IP is lost after the project is finalised, right? Because there's no there's no central repository for you to start curating those artefacts. (Participant 2)

Literature also states that employees can incrementally enhance their knowledge retention and staff learning development through the use of social media (Balbay & Erkan, 2018; Emerson & Berge, 2018). Social media allows information to be tailor-made, to be accurate, and focused on a specific audience of employees (Emerson & Berge, 2018). This then permits employees to retain more information and knowledge because together with their supervisors, they decide which information and skills they need to learn, to conduct their jobs efficiently (Emerson & Berge, 2018; Ismail, 2018).

- *Cultivate and inculcate a learning organisation*

Company C also revealed that one of the benefits of social media is that it helps to cultivate and inculcate a culture of learning in an organisation. A learning culture or environment increases users' engagement, improves learning and helps users achieve their learning goals in an organisation (Dalvi-Esfahani *et al.*, 2020). Company C further stated that it is important for an organisation to create both a culture and the content necessary for employees to learn:

Another benefit of social media is helping employees to cultivate, and the word is inculcating, a learning organisation where people want to learn, and there's a rich set of content for them to learn, I think it's important for that. (Participant 1)

Literature concurs with findings from Company C, as it states that social media often create a culture and foster an environment that is ideal for learning (Schneckenberg *et al.,* 2011; Nazem & Mozaiini, 2014). Social media have a positive impact on the organisation by creating and improving the learning culture of the organisation (Baxter & Connolly, 2014; Breunig, 2016). The exciting thing about Web 2.0 technologies is that they create

an interactive environment that is ideal for learning, which allows the users to be engaged and take charge of their learning (Faizi, 2018; Dalvi-Esfahani *et al.*, 2020). Using Web 2.0 technologies keeps the users engaged and allows for more focus, which encourages users to have fun while creating a learning culture in an organisation (Faizi, 2018; Dalvi-Esfahani *et al.*, 2020). The ability of social media to allow users to communicate with each other whenever they please, creates an interactive and easy online learning culture and environment (Peeters, 2018).

- *Enable different types of teaching and learning*

As revealed by Company C, another benefit of social media is that it offered organisations a varied number of ways of teaching and learning. Participant 2 stated that social media allowed teaching through multimedia communication and sharing of information, which encouraged more interaction from employees. Literature concurs by stating that social media that make use of multimedia allow users to be highly interactive and provide the end users with a rich user experience (Huang & Güney, 2012). Participant 2 stated:

But also, what I found is with the Web 2.0 Technologies you can enable different types of learning quite quickly. So, there is multimedia type platforms, right, you can easily incorporate graphics. So, if you want some sort of visual type learning, auditory type learning, that you can easily incorporated that into the web technologies.

Prior to that it was you know, it's difficult to engage with people, now we've got a plethora of tools that you can use to engage people more effectively. You've got interactive quizzes, you've got video content. You've got text-based content, auditory content. So, the different ways that you can engage and convey information is a lot more diverse. (Participant 2)

Participant 2 also revealed that social media enable different types of teaching and learning, which include instructor-led training, passive learning, active learning, asynchronous and synchronous learning:

So, you've got instructed led teaching. So, you as a teacher would instruct and kind of drive it, so there's passive learning where you'd sit and you'd listen, there's actively when you're in physically engage in an activity, then depends on obviously what you're trying to teach them. Some people need haptic time feedback. So, it's physically playing around with objects, etc. to learn.

But with Web 2.0 technologies, you can almost always go back and re-watch. You can always refer back to the content, and asynchronously learn. Because that's what we're doing is a synchronous activity. Both of us need to be paying attention. But afterwards, you kind of go and asynchronously, take your time, step through the learnings and formulate questions, and then make your mental model, your understanding of what was taught, the concepts taught more concrete on your own time. (Participant 2)

Literature concurs by stating that social media and Web 2.0 tools' ability to foster collaboration improve the learning and teaching capabilities of the employees and end users involved (Dinh *et al.*, 2011; Kompen *et al.*, 2019; Kazhan *et al.*, 2020). The integration of Web 2.0 technology into organisations supports innovative teaching and creates a good learning environment with the potential to transform teaching and learning, from individual-focused learning to community-based learning (Wright & Akgunduz, 2018; Muhaimin *et al.*, 2019).

6.4.6   Summary and insights of results of benefits of social media

The sub-section below summarises the results of the theme "Benefits of social media" in Company C.

- *Summary*

The data analysis that was carried out regarding the benefits of using social media in Company C revealed three main themes. The first theme regarded social media enabling knowledge retention, allowing organisations to store important information. The second theme discussed the ability of social media to cultivate and inculcate a learning organisation, as social media can create a learning culture and environment. The third theme revealed that social media enabled different types of teaching and learning methods that could be used by the organisation.

- *Insights*

One of the insights that stood out regarding the benefits of social media is that the organisation was able to keep hold of or hang on to information or knowledge that was internally created by employees. Thus, employees had some sort of repository that they could access whenever they needed to re-access the knowledge that they had already created. This also meant the organisational information was not lost and could be reused,

which is an advantage as it saves time (no need to start from scratch). It was important for the employees to feed information and knowledge back into the organisation to incorporate the information again in future projects.

Another insight that stood out is the ability of the organisation to create and instil a learning environment and culture. It is evident that organisations need to create quality content for employees to encourage them to want to learn. Creating a learning organisation has several benefits, including boosting interaction, employees taking charge of learning and creating a fun learning environment which consequently improves OL, overall.

The final insight is the ability of social media to allow a varied number of teaching and learning methods within the organisation. It is evident that social media were used as gateways for different methods of teaching and learning to be practised. By using social media, different forms of communication were used (such as multimedia), which paved the way for different types of teaching and learning to be used; this included visual (graphics and video), auditory, text-based and interactive sources (such as quizzes). This gave employees a wide scope of options to choose from on how they wanted to teach and learn from each other, within the organisation.

6.4.7 Company C: Results for using social media effectively

The analysis of the data from the interviews revealed the themes and sub-themes presented in Table 6-28 below.

Table 6-28: Themes from *using social media effectively* in Company C

Theme	Sub-themes
Using social media effectively	I. Technology adoption

The table below shows the raw data extracts, the identified themes and the sub-themes that emerged from the data regarding *using social media effectively* in Company C. Thereafter, Figure 6-17 provides a mind-map as a visual representation of the themes and sub-themes mentioned in Table 6-29.

Table 6-29: Raw data, themes and sub-themes from *using social media effectively* in Company C

Raw data	Identified themes	Sub-themes
So, it's coordinating the teams right. So, if you've essentially rolled out all of these technologies now, but how do you get them to essentially start to adopt that into their normal workflow? Because imagine you have listed Yammer and WhatsApp say, and in teams you can also have teams chat. So how do you kind of get people to use a particular channel for a particular purpose? So now you're sending me a message now from Teams and then you get up from your end, then you make a coffee, and then you WhatsApp me your response? And then trying to piece that conversation together is a nightmare. So, how do you kind of get that people problem out the way? And that's a challenge with us is, it's just communication, and getting everybody on board and adoption. So, you socially contract, and it could depend from team to team. But let's say from a project perspective, if we take on a project, in the initiation of a project, we socially contract, first internally with the team, and then the client, to say this is how we're going to be communicating. And then any official type conversation that we kind of keep track of, happens in teams and it's not formal unless it's in teams or over an email. (Participant 2)	Using social media effectively	Technology adoption

Figure 6-17: Mind-map of themes from *using social media effectively* in Company C

6.4.8   Discussion of results: Using social media effectively

The sub-section below discusses the results of the theme "Using social media effectively" in Company C.

- ***Technology adoption***

One of Company C's recommendations was that organisations had to keep technology uptake or adoption of social media in mind. Participant 2 stated that companies needed to ensure that the technology adoption process was done seamlessly for Web 2.0 tools to be used effectively. Participant 2 also added that one of the key elements would be for organisations (and their employees) to choose dedicated social media platforms for employees to communicate and interact on, to make interaction and cooperation between different teams easier and more manageable. This would ensure that there is less confusion in communication and all employees are on the same page:

So, it's coordinating the teams right. So, if you've essentially rolled out all of these technologies now, but how do you get them to essentially start to adopt that into their normal workflow?

Because imagine you have listed Yammer and WhatsApp say, and in teams you can also have teams chat. So how do you kind of get people to use a particular channel for a particular purpose? So now you're sending me a message now from Teams and then you get up from your end, then you make a coffee, and then you WhatsApp me your response? And then trying to piece that conversation together is a nightmare. So, how do you kind of get that people problem out the way? And that's a challenge with us is, it's just communication, and getting everybody on board and adoption.

So, you socially contract, and it could depend from team to team. But let's say from a project perspective, if we take on a project, in the initiation of a project, we socially

contract, first internally with the team, and then the client, to say this is how we're going to be communicating. And then any official type conversation that we kind of keep track of, happens in teams and it's not formal unless it's in teams or over an email. (Participant 2)

Literature echoes Participant 2's sentiments, as it states that organisations should provide clear instructions and support on how to use social media and provide incentives, to encourage the effective adoption and use of social media in organisations (Baxter & Connolly, 2014). One of the factors that proved to be significant towards the adoption of technology in an organisation was how ready an organisation was to employ a particular social media application (Abed, 2020). The adoption of social media needs organisations to strategically plan and carry out a needs assessment to inform decision making on how to effectively use social media in the organisation (Williams, 2020). Literature also backs Participant 2 by stating that organisations are expected to choose the appropriate social media that fits in with the organisation, as well as develop strategies that foster effective interaction and communication among employees to facilitate effective OL (Boateng *et al.*, 2009).

6.4.9   Summary and insights of results of using social media effectively

The sub-section below summarises the results of the theme "Using social media effectively" in Company C.

- ***Summary***

The data analysis that was carried out regarding how Company C used Web 2.0 effectively revealed one important theme. The theme mentioned that one of the ways to ensure that social media were used effectively was to ensure that the uptake and adoption of social media were seamless and not complicated. This also required input from employees regarding which social media they preferred to use in the organisation.

- ***Insights***

The insight that stood out is the suggestion and consideration that companies must keep social media in mind during implementation. Organisations are expected to consider that the technology uptake or adoption of social media in an organisation's daily tasks is carried out in a simple, seamless and effective way. Employees are also expected to

choose which social media they prefer to use to ensure that communication and learning in the organisation are seamless. It is important to use a certain dedicated and formal social media or channel, so that communication is consistent and centralised. It is also important to set and state the rules, regulations and strategies for how the adoption of social media will be implemented. Thus, getting everyone on board and moving in the same direction is important when adopting social media.

6.5   CONCLUSION

Chapter Six presented an analysis and a discussion of the results collected from the interviews with two key participants from Company A, three key participants from Company B (including a focus group interview) and two key experts from Company C who hold executive positions in their respective companies. The company profiles were provided to give a background of the companies, their size and purpose, as well as the departments that exist within the companies, their hierarchy and how they function.

The analysis of the data was based on a thematic analysis that dealt with the main recurring themes from the data collected. The results from the interviews were summarised and grouped according to the themes that occurred. The main themes that emerged from the data focused on the (1) *scope of learning* and the *level at which OL occurred* in the two organisations. (2) The companies further reported on the *type of OL* that happens in the organisations.

(3) The next theme that emerged from the data focused on the *social media used* in Company A and B. (4) The companies also reported on *why and how they used social media.* (5) The companies further revealed how they *manage content* on social media. (6) Company A discussed companies' considerations when implementing social media in organisations. (7) All the companies added the *benefits of using social media* in organisations. Lastly, (8) recommendations were made regarding how they thought *social media can be used effectively* in organisations to promote OL.

Thereafter, Company C's experts evaluated the preliminary framework that was drawn up They were expected to add what they thought was missing, scrutinise and revise the framework. In the next chapter, a theoretical framework is developed to identify factors that will enable the effective use of social media for OL, based on the results of this chapter.

CHAPTER 7. A THEORETICAL FRAMEWORK FOR SOCIAL MEDIA-SUPPORTED ORGANISATIONAL LEARNING

7.1 INTRODUCTION

In this chapter, the researcher aims to propose a social media-supported OL framework that organisations can adopt to improve Web 2.0-enabled learning in organisations. The framework was developed based on the systematic literature review conducted, as well as findings from the data collected from interviews. The framework uses and adapts concepts from the OL theory from Anderson (1994), Argyris and Schon (1996) and Pahl-Wostl (2009) and the IT-supported OL model by Schlagwein and Bjørn-Andersen (2014).

The chapter presents theories and models from literature that were used to build the proposed framework. The step-by-step process to build up the proposed conceptual framework is explained. The factors and influences from the data collected during the interviews to help enhance the proposed framework are presented. The final proposed theoretical framework, informed by data from the organisations and evaluated by experts from organisations, is drawn up. The chapter then concludes with a summary.

7.2 ORGANISATIONAL LEARNING THEORY

The OL theory describes the types of OL that may exist in an organisation, namely single-, double- and triple-loop learning (Anderson, 1994; Argyris & Schon, 1996; Pahl-Wostl, 2009). This theory and its main concepts were adapted to draw up the proposed conceptual social media-supported OL framework for this study.

As discussed in previous chapters, single-loop learning involves making minor repetitive changes to the current organisational behaviour (Argyris & Schon, 1996; Pahl-Wostl, 2009). Changes are made within the current norms of an organisation and the core rules and values remain unchanged (Anderson, 1994). Double-loop learning involves making radical changes to the current organisational rules and values which subsequently change behaviour (Argyris & Schon, 1996; Pahl-Wostl, 2009). The underlying core rules and values of the organisation are evaluated, changed, questioned and challenged (Anderson, 1994). Triple-loop learning involves making changes to the governing rules, values and norms of the organisation (Pahl-Wostl, 2009). Triple-loop learning makes considerations of the fundamental beliefs, values, and worldviews of the organisation, especially if the

worldview assumptions do not apply any longer (Pahl-Wostl, 2009) (cf. Section 4.2). The figure below is a visual representation of OL theory and the types of OL.

Figure 7-1: OL theory
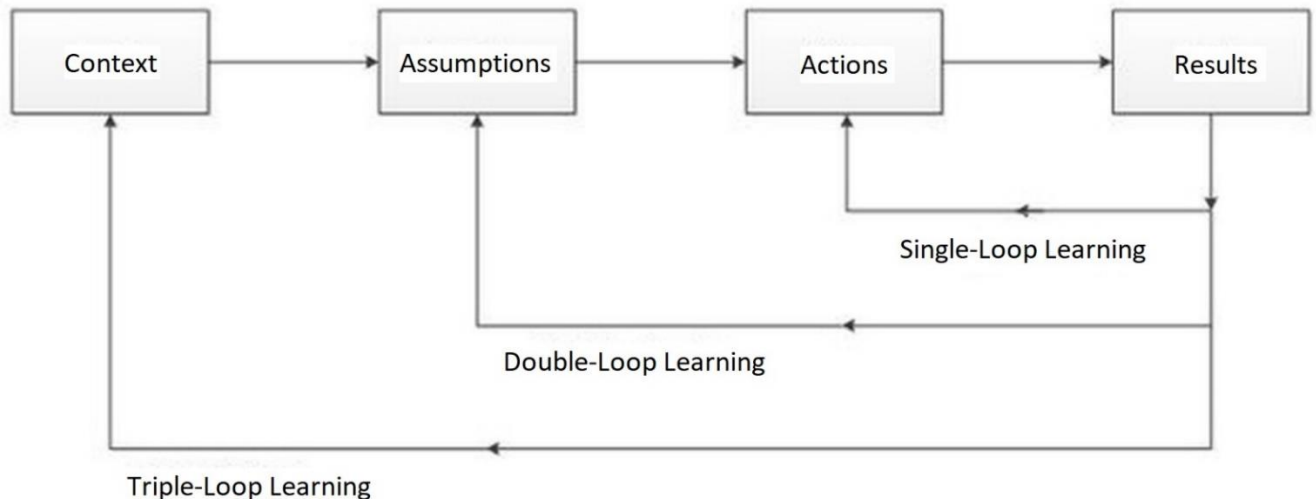
7.3 IT-SUPPORTED ORGANISATIONAL LEARNING MODEL

Literature proposed a framework that introduced the use of IT tools to support OL, including the learning processes and levels that accompany OL (Crossan *et al.*, 1999; Schlagwein & Bjørn-Andersen, 2014). The framework includes the three levels of learning in an organisation, namely individual, group and organisational levels (Schlagwein & Bjørn-Andersen, 2014). These three levels of learning were also adapted to draw up the proposed social media-supported OL framework for this study.

The literature explains that the traditional OL that occurs in an organisation is a result of employees taking part and cooperating in the organisation's learning process (Schlagwein & Bjørn-Andersen, 2014). The learning process in this scenario includes employees sharing information, discussing ideas and collaborating, which are all supported by the use of an IT system which then contributes to OL (Schlagwein & Bjørn-Andersen, 2014). Figure 7-2 below gives a brief overview of the concepts of the IT-supported OL model (cf. Section 4.2.3).

Figure 7-2: IT-supported OL model
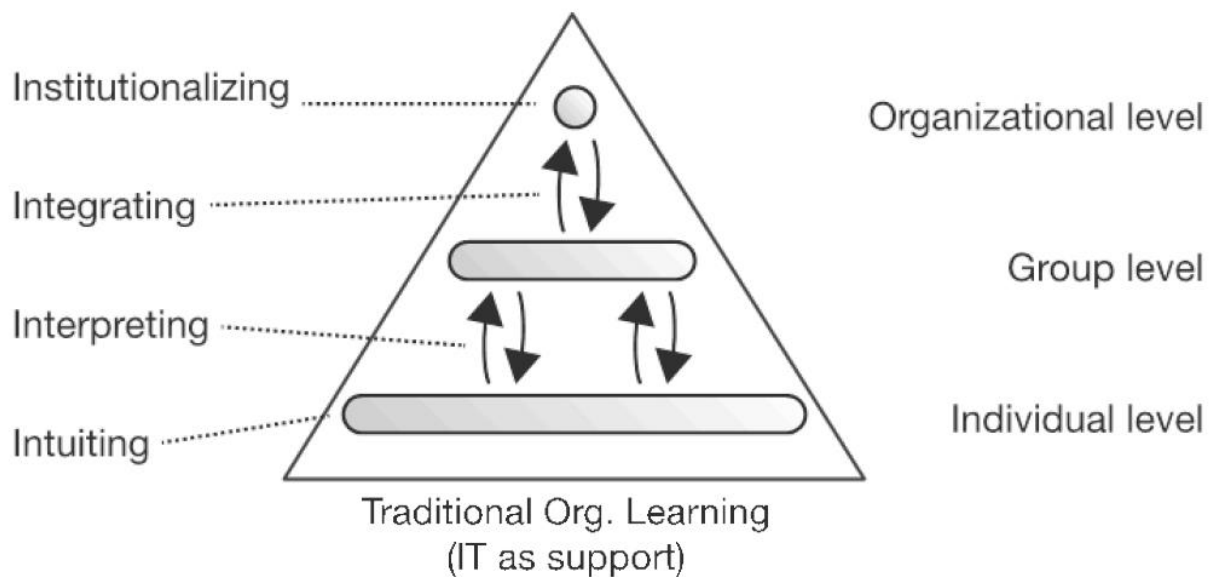
Source: Adapted from Schlagwein and Bjørn-Andersen (2014)

7.4   CONSTRUCTION OF THE THEORETICAL FRAMEWORK

The proposed social media-supported OL framework was constructed and informed by the literature. The framework used the important concepts from the OL theory mentioned in literature by Anderson (1994); Argyris and Schon (1996), Pahl-Wostl (2009) and the concepts from the IT-supported OL model by Schlagwein and Bjørn-Andersen (2014), which will be presented below.

Three main theoretical framework components form part of the proposed social media-supported OL framework. The main concept/component from the OL theory is the **types of OL,** namely single-, double- and triple-loop learning (Anderson, 1994; Argyris & Schon, 1996; Pahl-Wostl, 2009).

The second concept/component from the IT-supported OL model that form part of the conceptual proposed framework are the **OL levels**, namely individual, collective (group) and organisational levels (Schlagwein & Bjørn-Andersen, 2014). The third concept/component from literature is the **social media** used in organisations for OL. The three main key components of the proposed social media-supported OL framework are shown in Figure 7-3 below (cf. Section 4.2.3).

Figure 7-3: Proposed theoretical framework and key components
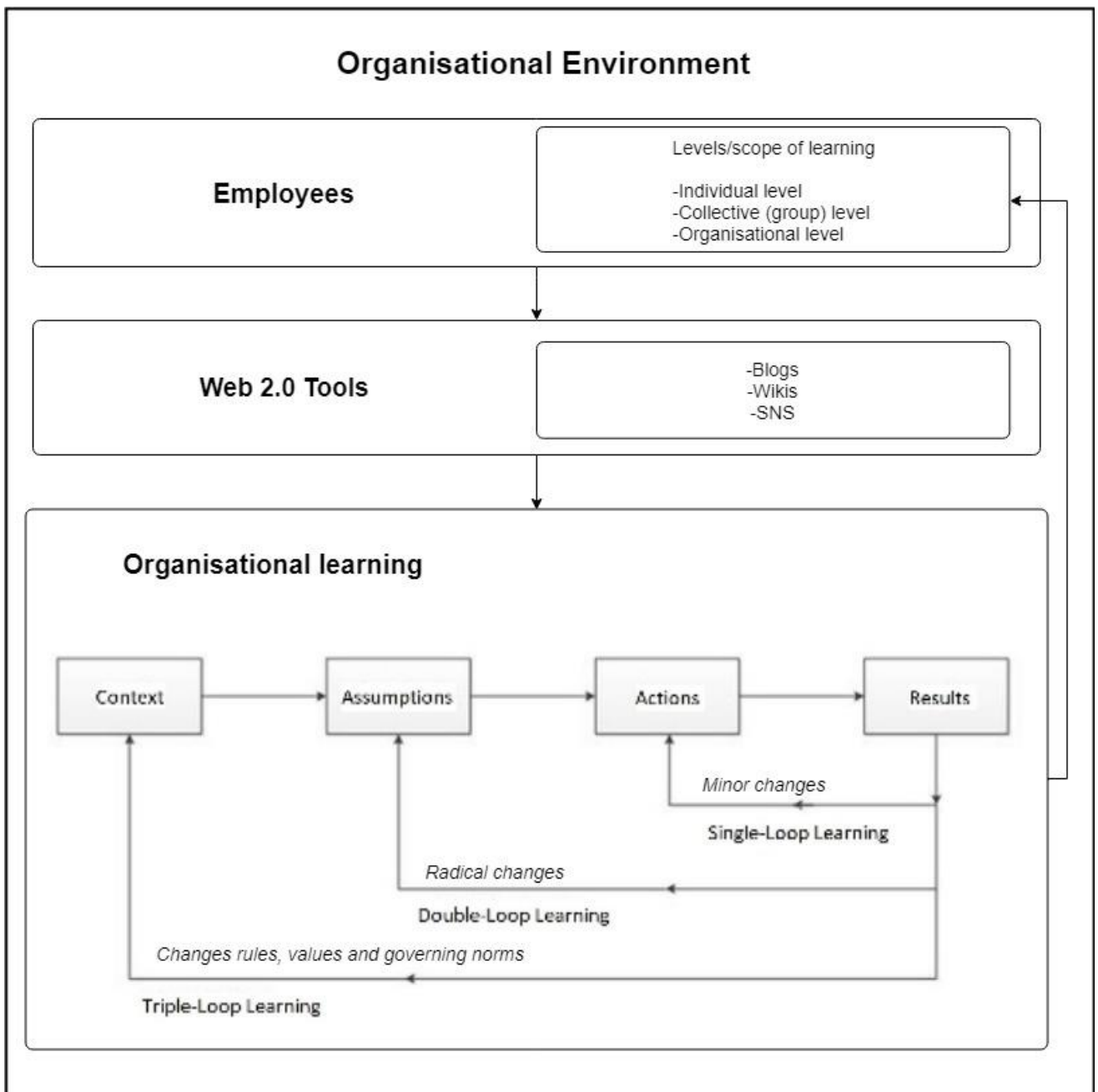
7.5   COMPONENTS ADOPTED FROM INTERVIEWED ORGANISATIONS

The findings from Chapter Six that were collected from interviewing participants from three different organisations revealed new concepts regarding the use of social media and OL. This section presents the new concepts that were revealed from the data collected; the concepts were then added to the theoretical framework as components that are needed in the implementation of social media in organisations.

7.5.1 Web 2.0 tools/platforms used in organisations

The proposed social media-supported OL framework was constructed and informed by the findings from the study. The data from Company A and Company B revealed the social media that the two companies used in the organisations. The results of the study showed that Company A makes use of Yammer, Microsoft SharePoint, Microsoft Teams, WhatsApp groups, an internal learning management system, an internal wiki platform and an internal blogging platform as part of their social media package. Company B reported making use of Slack (occasionally), with WhatsApp groups used most often for communicating within the organisation. Figure 7-4 below shows the social media that were reportedly used by the companies that were interviewed and were added to the initial proposed framework:

Figure 7-4: social media used in organisations
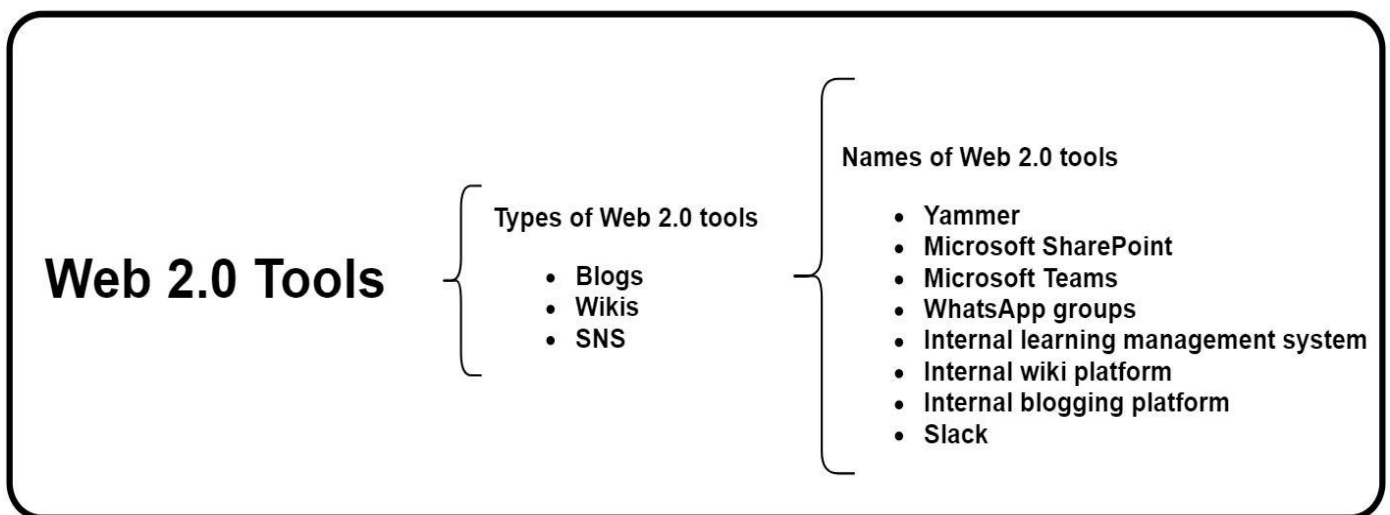
7.5.2 How Web 2.0 tools/platforms are used in organisations

The social media that were used in Company A and B were used for a variety of reasons that contributed to OL. The results of the study showed that Company A used its social media for fast-paced information sharing amongst employees, as a source of quick feedback to improve their technical and behavioural skills, and feelings of empowerment. Company B reported that they used their social media to work as a group, to teach and to learn among employees. Figure 7-5 below shows **how social media were used for OL** by the companies that were interviewed, which was added to the initial proposed framework.

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Figure 7-5: Addition of uses of social media in organisations
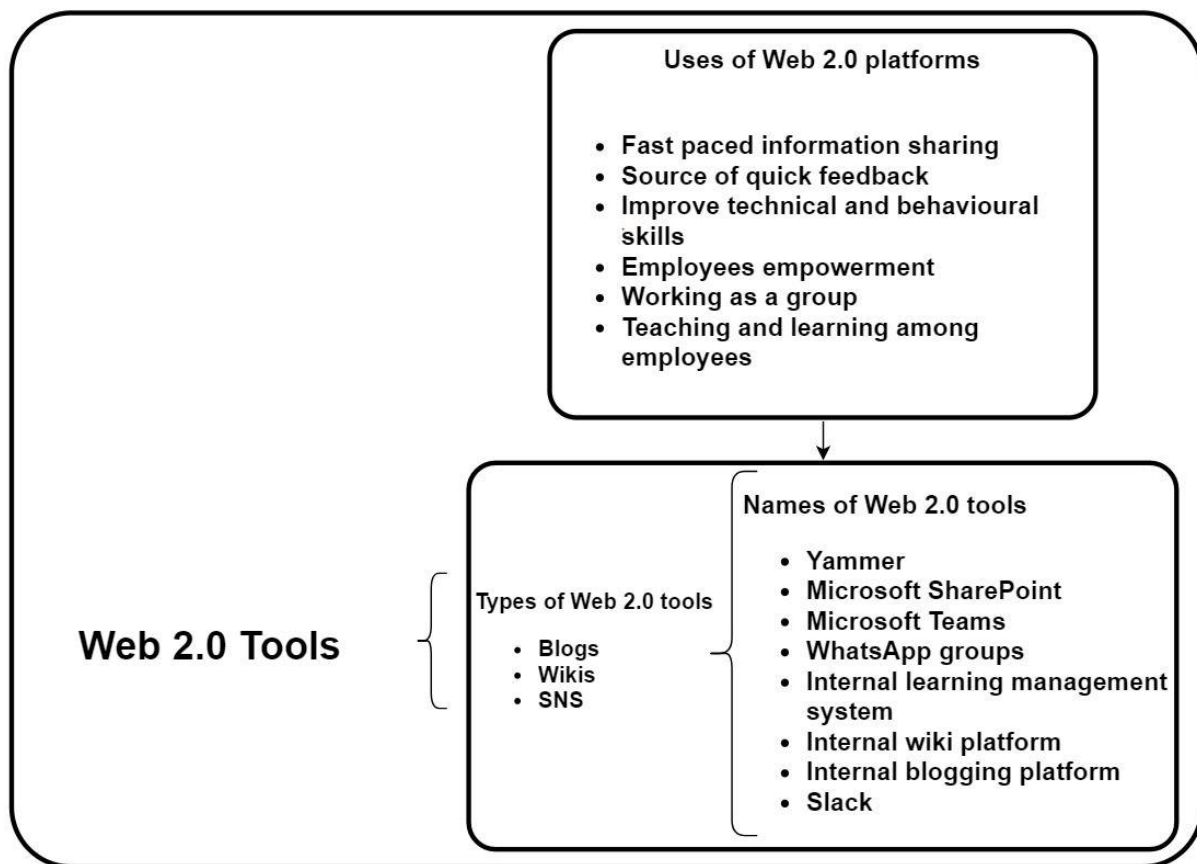
7.5.3 How organisations manage Organisational Learning platform content

The use of social media in Company A and B resulted in content being created, this content was subsequently used for OL. The creation of content meant that companies had several ways of managing the OL platform content on social media. The results of the study showed that Company A and B both managed their OL platform content through a code of conduct on social media, managing inappropriate conduct, curating relevant content, privacy and security, valid and credible content and updating the systems and content. Figure 7-6 below shows **how the organisations managed their OL platform** content on social media, which was added to the initial proposed framework.

Figure 7-6: Addition of how organisations manage OL platform content

Uses of Web 2.0 platforms

- Fast paced information sharing
- Source of quick feedback
- Improve technical and behavioural skills
- Employees empowerment
- Working as a group
- Teaching and learning among employees

Web 2.0 Tools

Types of Web 2.0 tools

- Blogs
- Wikis
- SNS

Names of Web 2.0 tools

- Yammer
- Microsoft SharePoint
- Microsoft Teams
- WhatsApp groups
- Internal learning management system
- Internal wiki platform
- Internal blogging platform
- Slack

Managing organisational learning platform content

- Code of conduct on Web 2.0 platforms
- Managing inappropriate conduct
- Curating relevant content
- Privacy and security
- Valid and credible content
- Updating the systems and content

7.5.4   Benefits of using Web 2.0 tools/platforms

The results of the study showed that Company A and B both had experience in using social media within their organisations and therefore reported on the benefits of using those social media. Company A recounted that the benefits of using social media in the organisation included remote collaboration and ease of use, top-down and bottom-up hierarchical interaction (which allows learning at individual, group and organisational levels) and increases the sharing of information. While Company B added that the benefits of using social media in the organisation included multimedia sending features and ease of use and access. Figure 7-7 below shows the **benefits of social media** in organisations, which was added to the initial proposed framework.

Figure 7-7: Addition of the benefits of social media in organisations

Uses of Web 2.0 platforms

- Fast paced information sharing
- Source of quick feedback
- Improve technical and behavioural skills
- Employees empowerment
- Working as a group
- Teaching and learning among employees

Benefits of Web 2.0 platforms

- Remote collaboration and ease of use
- Top-down and bottom-up hierarchical interaction
- Increases the sharing of information
- Multimedia sending feature
- Ease of use and access

Web 2.0 Tools

Types of Web 2.0 tools

- Blogs
- Wikis
- SNS

Names of Web 2.0 tools

- Yammer
- Microsoft SharePoint
- Microsoft Teams
- WhatsApp groups
- Internal learning management system
- Internal wiki platform
- Internal blogging platform
- Slack

Managing organisational learning platform content

- Code of conduct on Web 2.0 platforms
- Managing inappropriate conduct
- Curating relevant content
- Privacy and security
- Valid and credible content
- Updating the systems and content

7.5.5　Using Web 2.0 tools/platforms effectively

The results of the study showed that Company A and B both had recommendations on how social media could be used effectively in organisations to promote OL. The recommendations were based on how organisations that planned on implementing social media in their organisations could use social media to their advantage.

The recommendations reported by Company A included providing convenient information at the right time, aggregating information and maximising productivity. Company B added recommendations such as receiving social media updates, possessing a ready-to-learn attitude and training employees. Figure 7-8 below shows **how to use social media effectively** in organisations, which was added to the initial proposed framework.

Figure 7-8: Addition of using social media effectively
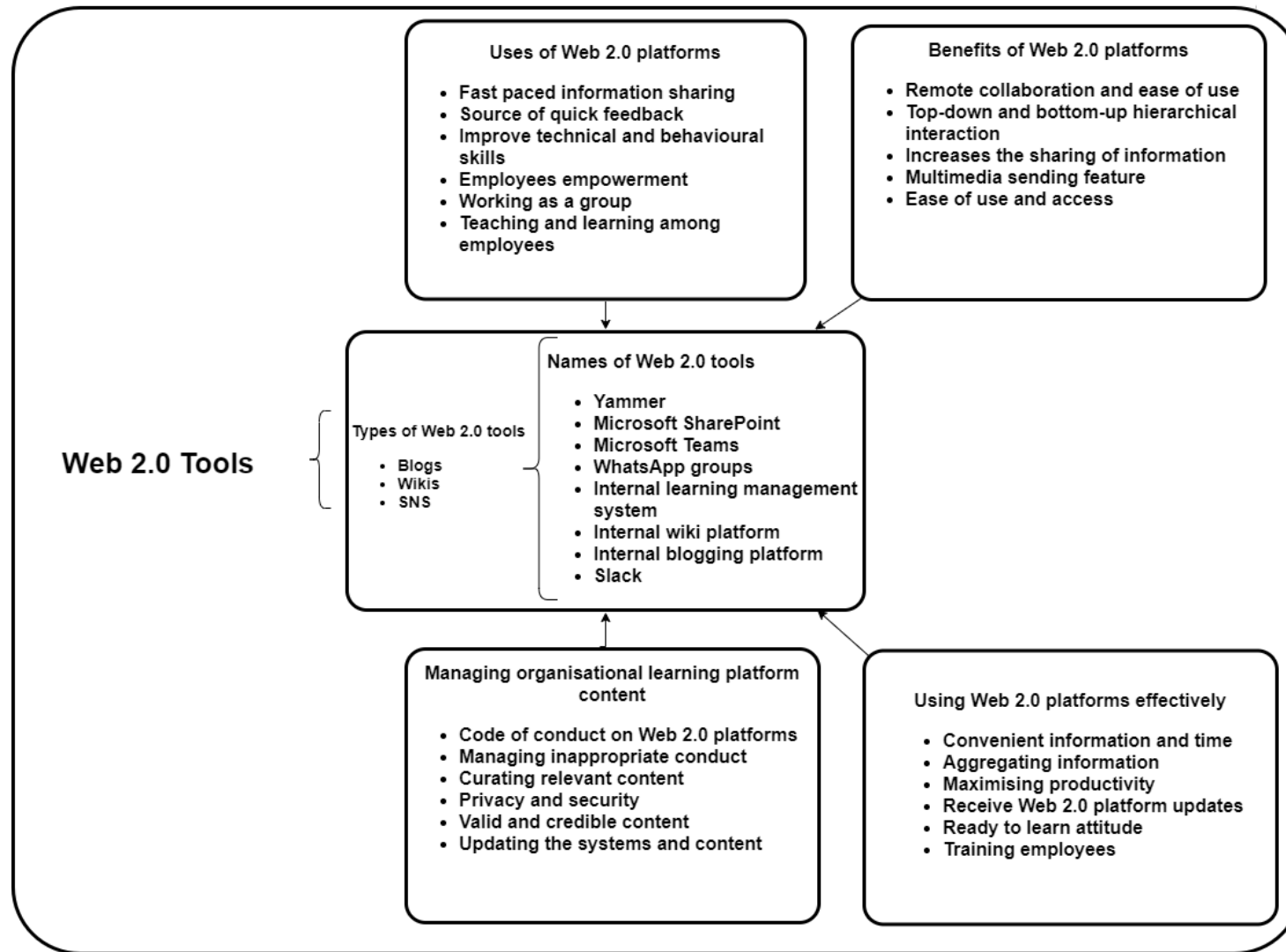
7.5.6   Integration of Organisational Learning levels with names and uses of social media

The results from the study were used to inform and expand on the employees' section of the preliminary proposed framework by describing what happens with employees at each level of learning (individual, group and OL). The employees' section was also expanded by naming the social media that were used at each level of learning. The researcher further placed the social media that were used in the organisations, under each level of learning (individual, group and OL), depending on where the employees suitably used the social media.

The researcher further went on to state and place the uses of the social media mentioned, under each level of learning (individual, group and OL), depending on what the social media were used for by the employees. Figure 7-9 below show how the expansion and integration of OL levels with names and uses of social media were added to the initial proposed framework:

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Figure 7-9: OL levels with names and uses of social media

Employees

Web 2.0 tools used

Uses of Web 2.0 platforms

Individual learning - individual learns new skills or ideas on behalf of the organisation

- Microsoft SharePoint
- Internal learning management system
- Internal wiki platform
- Internal blogging platform

- Improve technical and behavioural skills
- Employees empowerment

Group learning - the group creates collective knowledge, shared by all group members

- Yammer
- Microsoft SharePoint
- Microsoft Teams
- WhatsApp groups
- Internal learning management system
- Internal wiki platform
- Internal blogging platform
- Slack

- Fast paced information sharing
- Source of quick feedback
- Improve technical and behavioural skills
- Employees empowerment
- Working as a group
- Teaching and learning among employees

Organisational learning - the organisation as a whole acquires and develops knowledge

- Yammer
- Microsoft SharePoint
- Microsoft Teams
- WhatsApp groups
- Internal learning management system
- Internal wiki platform
- Internal blogging platform
- Slack

- Fast paced information sharing
- Source of quick feedback
- Improve technical and behavioural skills
- Employees empowerment
- Working as a group
- Teaching and learning among employees

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7.6 PRELIMINARY PROPOSED FRAMEWORK

The data collected from the organisations were added and integrated into the preliminary proposed framework for social media-supported OL. Certain sections or components, such as the employees and Web 2.0 tools sections, were expanded. This resulted in creating an extended version of the original theoretical framework, which included the types of OL.

The extended version of the framework also shows the explanations of the changes that occur in each type of learning within the organisation and shows the concepts that are affected when learning is carried out. The **OL section** (which included the types of learning) was then added to the framework to fit in with the new expanded employees' section and Web 2.0 tools section. Figure 7-10 below shows the extended version of the preliminary proposed framework for social media-supported OL after all the data from Company A and B were considered.

Figure 7-10: Preliminary proposed framework for social media-supported OL
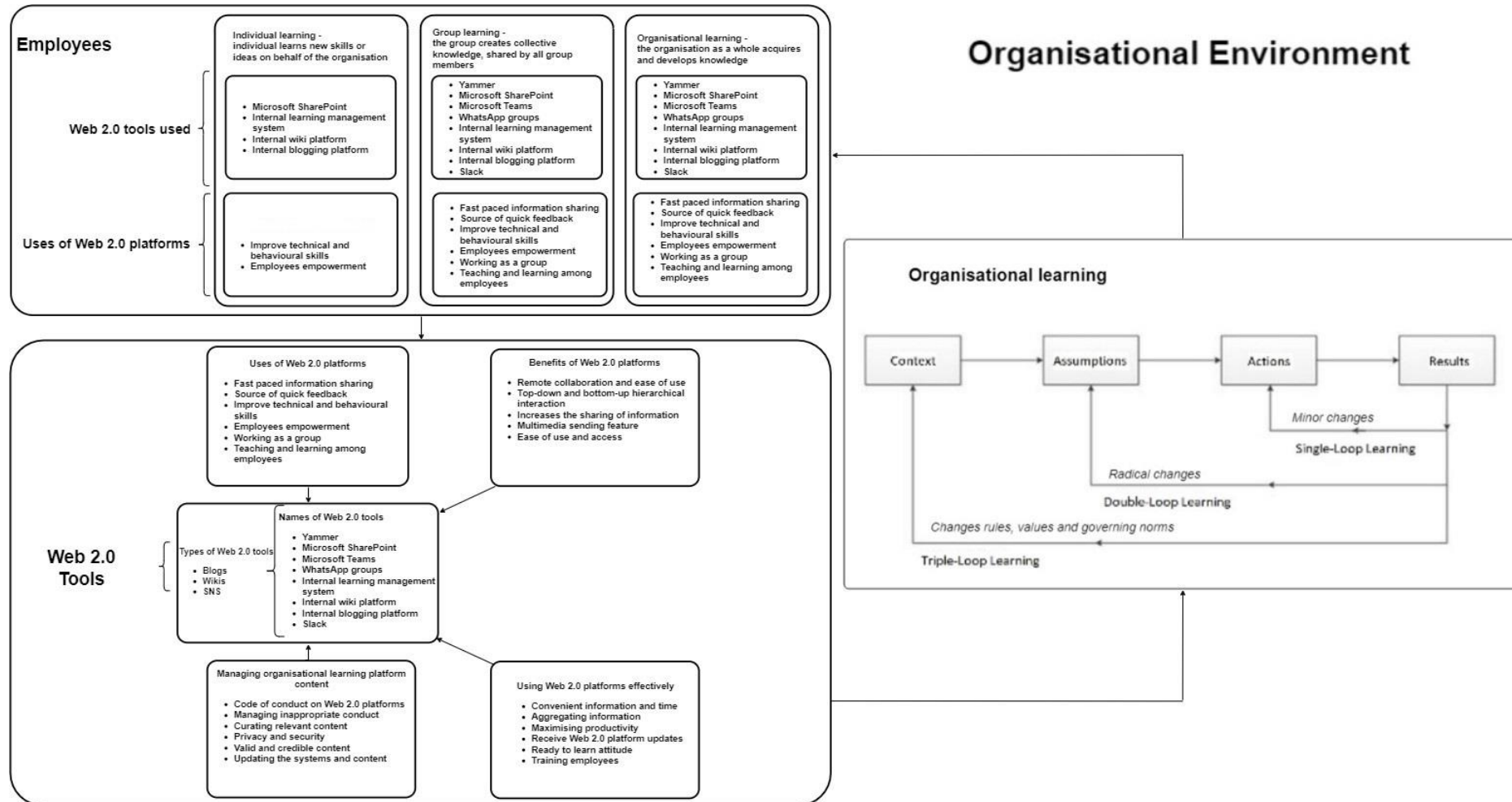
7.7 FINAL PROPOSED FRAMEWORK (EXPERT-REVIEWED)

The data collected from Company C through interviews and data analysis were added to the preliminary proposed social media-supported OL framework. The participants that were interviewed had reviewed the framework and suggested specific components that they felt needed to be added to the preliminary framework. Sections on the framework that were specifically expanded were the **benefits of social media, managing the OL platform content** and **using social media effectively.**

The researcher also reviewed and extended the types of OL section. The researcher mapped each type of OL to each appropriate level of learning, where it takes place. Single-loop learning was found to take place at the individual learning level, single- and double-loop learning both took place at the group learning level; finally, double- and triple-loop learning both took place at the OL level. Figure 7-11 below shows the final proposed version of the preliminary proposed framework for social media-supported OL after the expert reviews from Company C were taken into consideration

Figure 7-11: Final proposed framework for social media-supported OL
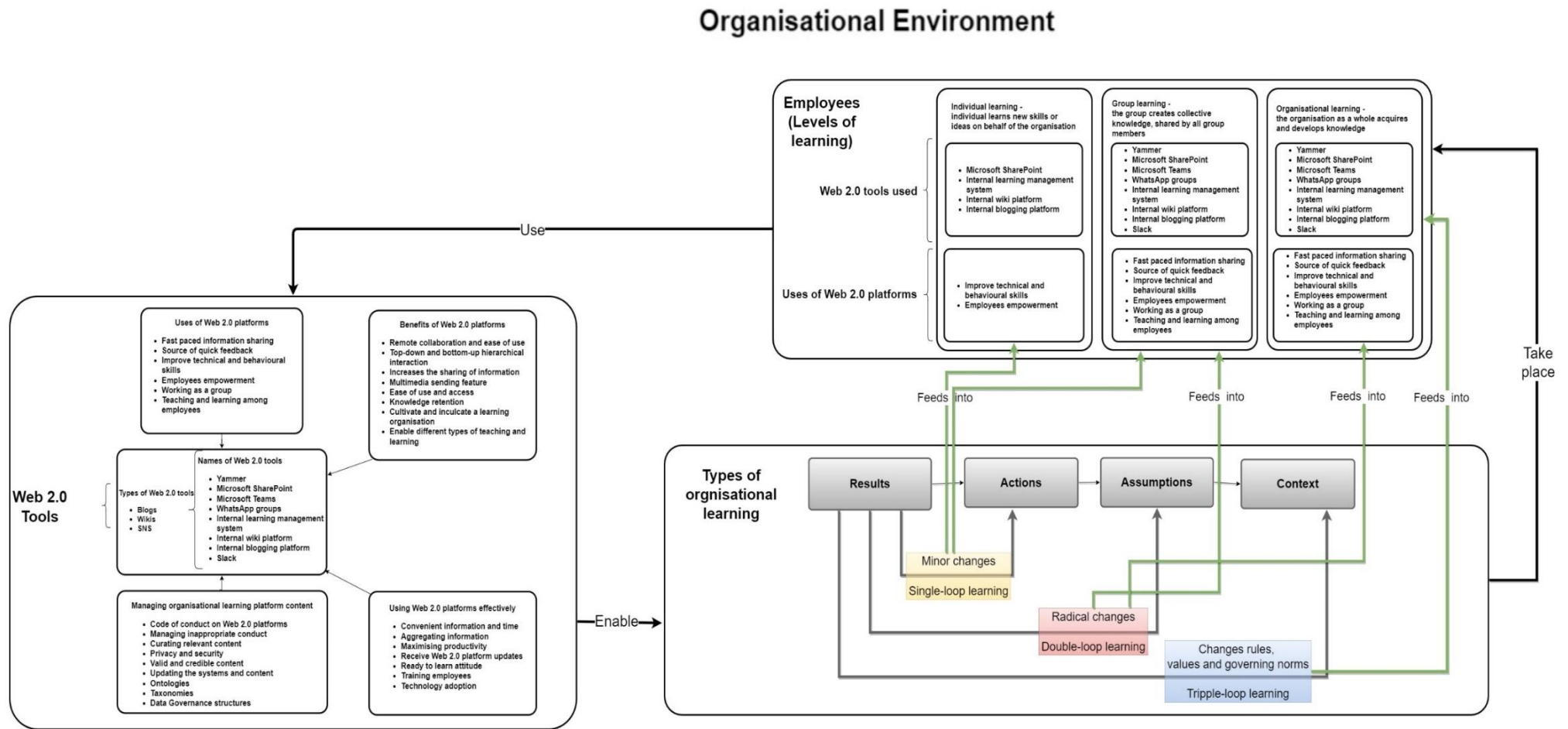
7.8 DISCUSSION OF FRAMEWORK COMPONENTS

The theoretical framework highlights the key components of the use of social media and learning in organisations, which were also mentioned and referenced in the literature. The first key component that is highlighted is **employees (levels of learning)**; this section reveals the levels of learning (individual, group and OL). Individual learning involves an individual learning new skills or ideas on behalf of the organisation. Group learning involves a group creating collective knowledge, shared by all group members. OL involves the organisation as a whole acquiring and developing knowledge. These levels were discussed and backed up in literature in the IT-supported OL model by Schlagwein and Bjørn-Andersen (2014) (cf. Section 4.2.2). Under each learning level, the framework highlights the social media tools that are used and what they are used for.

The second key component that is highlighted in the theoretical framework is **social media/Web 2.0 tools**, this section reveals the types of social media and names of the social media tools that are used in organisations. The framework also reveals the uses of social media tools in organisations, how organisations manage social media content, the benefits of social media and how to use social media effectively in organisations. The framework highlights that the use of social media tools enables the type(s) of OL that takes place in the organisation. These components were discussed and backed up in the literature (cf. Section 4.3).

The third key component that is highlighted in the theoretical framework is the **types of OL** (single-, double- and triple-loop learning). Single-loop learning involves making minor repetitive changes to the current organisational behaviour. Double-loop learning involves making radical changes to the current organisational rules and values which subsequently change behaviour. Triple-loop learning involves making changes to the governing rules, values and norms of the organisation. These levels were discussed and backed up in literature by Anderson (1994), Argyris and Schon (1996) and Pahl-Wostl (2009) (cf. Section 4.2.1). The framework highlights that the different types of learning feed into different levels of learning, which results in different types of social media use, this then affects the organisation's ability to learn. The minor changes that result from single-loop learning usually feed into the individual and group learning level; this is where decisions

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and changes are made by lower-level employees. The radical changes that result from double-loop learning usually feed into the group and OL level; this is where mid-level decision making takes place. The changes to the rules, values and governing norms of the organisation that result from triple-loop learning usually feed into the OL level; this is where major decisions are made by management, which usually has a longer-term effect on the organisation.

7.9 CONCLUSION

Chapter Seven presented the proposal of the theoretical framework for social media-supported OL. The researcher highlighted that the source of the framework was adopted from the theories in the systematic literature review that was conducted, as well as the data collected from the interviews. The theories and models that were used to draw up the initial conceptual framework were presented, which focused on the OL theory. The theory highlighted the three different types of OL that take place in the organisation. These were the concepts used to draw up the framework. The chapter also presented the IT-supported OL model which highlighted the use of IT tools to support OL alongside the three different levels at which OL takes place. These were the additional concepts used to draw up the framework. Another concept that was used to draw up the framework was social media, which was used at three different levels of OL, to enable the three different types of OL. The framework was drawn up in sort of a sequence or loop which started with three Levels of OL → social media → three different types of OL, to complete the loop.

The chapter then presented external components extracted from the data collected from the interviews. The components that were added to the framework included the social media that were used in the organisations, the uses of social media in organisations, the managing of OL platform content, the benefits of using Web 2.0 tools/platforms and the use of Web 2.0 tools/platforms effectively. The chapter presented the incorporation of the learning levels with the names and uses of social media, to explicitly show which social media were used and the uses of the social media at each level in the organisation.

The chapter later described the final proposed framework, which was reviewed by experts from all three organisations; this included the themes that were extracted from the data analysis of Company C. Experts from Company C took part in the final evaluation of the

framework as they probed and analysed the preliminary framework and then found gaps to fill. More components that the experts felt were missing from the preliminary framework were added to the already existing components of the framework. The researcher also reviewed and extended the three different types of learning section by mapping each type of OL to each appropriate level of learning, where it takes place. Guidelines on how to implement the theoretical framework include:

- Making sure that employees have a conducive environment to learn at all levels in the organisation. This means employees should be able to learn at individual, group and OL levels;

- Organisations should make sure that the necessary and appropriate social media with specific capabilities are implemented at each appropriate level of learning. This is to ensure that each level of learning makes appropriate use of each suitable social media and ensures that the positive uses of the social media are maximised;

- The organisation should make sure that employees make the most of social media by ensuring that the content is managed efficiently, by ensuring that the benefits of the social media are maximised and by ensuring that social media are used effectively;

- The organisation should make sure that social media enable the different types of OL (single-, double- and triple-loop learning). This ensures that after the learning has taken place, changes are made and implemented within the organisation; and

- Organisations must guarantee that the changes feed into or are implemented at the appropriate organisational levels.

In the next and final chapter, the researcher concludes the research study. The chapter will highlight the contributions of the study as well as the recommendations for future research.

CHAPTER 8. CONCLUSION AND RECOMMENDATION

8.1 INTRODUCTION

The objective of this research was to fill the gap in the literature that exists in terms of integrating OL with social media (Web 2.0 tools/platforms). This was achieved by creating a social media-supported OL theoretical framework that integrated OL frameworks with social media frameworks. The theoretical framework aimed to guide organisations that would want to implement the use of social media in their organisations for OL. It is envisioned that companies that adopt the proposed theoretical framework will enhance and improve their OL through the use of social media.

To develop the theoretical framework, the OL theory, the OL frameworks and social media frameworks were construed using an interpretive research approach. The OL framework is used by organisations to build on existing knowledge, which leads to learning and problem-solving (Saadat & Saadat, 2016; Reddick *et al.,* 2017). Interviews were conducted at three companies, thus the research consists of three case studies. Data were collected from seven key participants to understand the dynamics of the use of social media and OL in their organisations. The data were collected from the participants using the OL (Argyris & Schon, 1996; Pahl-Wostl, 2009) and social media frameworks (Schlagwein & Bjørn-Andersen, 2014); thereafter, the theoretical framework was drawn up.

The study aimed to answer the research questions that were clearly stated in Chapter One (cf. Section 1.4). The research questions were then used to construct the theoretical framework that was discussed in Chapter Seven. This chapter, therefore, begins by answering the research questions discussed and then divulges the contributions made to the body of knowledge, existing theory and existing literature.

8.2 ANSWERS TO THE RESEARCH QUESTIONS

Several research questions were presented in the construction of the theoretical framework to discover how social media facilitate effective OL. The questions were answered using literature and the findings collected from the case studies. In this section,

the sub-research questions are answered first, whereafter the primary question is answered.

8.2.1 Sub-research Question 1: What is the scope of learning in an organisation?

Literature shows that the scope of learning in organisations happens on three levels (individual, group and OL). The three levels were supported by the research study from the data collected from participants, which revealed that OL happened at all three levels. It emerged from the research study that companies ensured that social media were available at all levels of the organisation and management and general staff had access to them. Social media were used by all departments and teams throughout the entire organisation (cf. Sections 6.2.2 and 6.3.2).

Literature also revealed that there are three different types of OL (single-, double- and triple-loop learning). The three different types of learning were also supported by the research study from the data collected from the participants. It is apparent that from the use of social media, employees were able to carry out the different types of learning which are implemented at the different levels of OL. Using social media meant that the OL was initiated as single-loop learning which ended up feeding into the double-loop learning and then triple-loop learning (cf. Sections 6.2.1 and 6.3.2).

8.2.2 Sub-research Question 2: What social media tools are used by organisations for Organisational Learning?

The research study revealed the social media that were used by organisations for OL. The organisations made sure that their employees were given access to different types of social media for communication purposes. It emerged from the research study that the social media that were used by the interviewed organisations included Yammer, Microsoft SharePoint, Microsoft Teams, WhatsApp groups, Slack, an internal learning management system, an internal wiki platform, and a blogging platform all created by the companies to collaborate and communicate among employees. It was also established from the research study that organisations chose to use social media that were easy and convenient to use and also accessible on different devices and platforms, such as desktops, laptops, mobile phones and tablets (cf. Sections 6.2.4 and 6.3.2).

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8.2.3 Sub-research Question 3: How do organisations use social media tools for Organisational Learning?

The research study reported how organisations made use of social media for OL. It is apparent that organisations made use of social media for a variety of reasons, including fast-paced information sharing, using social media as a source of quick feedback when communicating, improving the technical and behavioural skills of employees, empowering employees to take ownership of their learning, allowing employees to work as a group and allowing teaching and learning among employees (cf. Sections 6.2.7 and 6.3.7).

It emerged from the research study that social media provided a conducive environment for employees to receive and send data at a quick rate which made communication easier. Consequently, this allowed employees to ask quick questions and get quick feedback from each other, which resulted in employees also being able to use social media whenever they needed to upskill their technical and behavioural skills. Furthermore, employees were also given the freedom to choose which social media they wanted to use and create content that they wanted to share. Employees were then able to use the freedom to create groups on social media, to enhance collaboration and interaction among employees in the organisation. The freedom also allowed employees to use Web 2.0 tools as a platform to teach other employees and learn from one another (cf. Sections 6.2.7 and 6.3.7).

It was also established that the use of social media in the organisation resulted in multiple benefits for the organisation. This included allowing remote collaboration and ease of use for employees, allowing the top-down and bottom-up hierarchical interaction between employees, increasing the sharing of information, allowing the multimedia exchange of information, ease of use and access to employees, allowing organisations to retain knowledge, allowing organisations to cultivate and inculcate a learning environment and enabling different types of teaching and learning within the organisation (cf. Sections 6.2.16, 6.3.13 and 6.4.4).

8.2.4 Sub-research Question 4: How do organisations manage the social media-supported Organisational Learning platform content?

The research study revealed how organisations manage their content on social media. It was evident that there were several ways that organisations managed their content or

data on social media, this included creating a code of conduct on social media which involved stipulating rules and regulations for employees. Organisations also had to manage inappropriate conduct which involved dealing with employees' undesirable content shared on social media and handling employees' transgressions (cf. Sections 6.2.10, 6.3.10 and 6.4.3).

Other ways that organisations manage their content or data on social media, included curating relevant content; this involved providing relevant and useful information to employees. Organisations had to ensure that the privacy and security of the content on social media were taken care of, which involved protecting data from external threats. Organisations had to ensure that the content shared on social media was valid and credible by making sure the data were reliable. Organisations had to updated their systems and content on social media to ensure up-to-date relevant data were being shared (cf. Sections 6.2.10, 6.3.10 and 6.4.3).

Furthermore, other ways that organisations used to manage their content or data on social media included sorting content or data into classifications of ontologies, this involved naming, representing and defining the relationships between the concepts of a set of data on the social media. A different way for organisations to manage content was to sort out data into classifications of taxonomies by naming, grouping and arranging data or concepts into a hierarchical structure which allowed data to be retrieved easily on social media. Additionally, a different way for organisations to manage content on social media was to create data governance structures by creating data policies and implementing a strategy to manage data through monitoring its collection and utilisation on social media (cf. Sections 6.2.10, 6.3.10 and 6.4.3).

8.2.5 Primary Research Question: How do social media facilitate effective Organisational Learning?

The main aim and objective of the research study were to answer the main research question *How do social media facilitate effective OL?* To answer the research question and achieve the research objective, the researcher had to draw up a refined theoretical framework (proposed in Chapter Seven) that incorporates social media and OL.

The framework was developed using data collected by interviewing key participants and experts from three different organisations with different experiences using social media. The framework explained and gave a detailed overview of how organisations could use social media to facilitate effective OL and highlighted the main concepts that had to be considered to use social media effectively. The framework was guided by using concepts from OL theory, OL frameworks and social media frameworks.

The study revealed that the use of social media by employees happened at three levels of the organisation (individual, group and OL). The study then identified the social media that were used and the uses of these social media at each learning level. The study further expanded on how the content on social media was managed within the organisation, the benefits that social media offered to organisations and the suggestions on how to use social media effectively.

Suggestions and considerations on how to use social media effectively included providing convenient information at a convenient time to employees, aggregating and curating information to ensure it was relevant to employees, maximising the productivity of social media, and providing social media updates to employees. Further suggestions included employees adopting a ready-to-learn attitude towards social media, developing a delete feature and incorporating chatting features with ERP systems, training employees on how to effectively use social media and ensuring the adoption of social media was seamless in the organisation.

The effective use of social media further enables the types of OL single-, double- and triple-loop learning. The different loops of learning fed into the different OL levels, to complete the cycle of learning and highlight how social media facilitate effective OL. Social media were seen as facilitating tools to enable effective OL.

8.3 CONTRIBUTIONS OF THE STUDY TO THE BODY OF KNOWLEDGE

This section highlights the contribution of the research study to the existing body of IS knowledge. It is hoped that this study will contribute to the field of IS at a theoretical, methodological and practical level by conducting original research that advances and enhances the body of knowledge by developing an extensive body of work in a specific discipline (Larivière, 2012; Eymann *et al.*, 2014). It is perceived that creating and

developing a theoretical framework/model results in making a theoretical contribution to the body of knowledge (Wilkins, Neri & Lean, 2019), which this research study has aimed to do in terms of the body of knowledge in IS.

As mentioned, the study aimed to draw from employees' perceptions of how social media influences OL to develop an overarching framework that integrates OL frameworks with social media frameworks. The objective was to draw up a social media-supported OL framework.

What separates this study from the rest is that the framework was used to analyse at what level and what type of OL occurs when employees use social media in an organisation. This then fills the gap that exists in terms of the integration of OL and social media. The new framework developed (based on literature) was then tested out in various organisations, which would make a significant contribution to help improve IS organisations and advance existing theory.

8.3.1   Theoretical contribution

Making an original contribution to the body of knowledge involves making a theoretical contribution, generating new knowledge from previous original contributions and improving an existing theory (Wilkins et al., 2019). This study used the OL theory described by Argyris and Schon (1996), and Pahl-Wostl (2009), to thoroughly understand how organisations build on existing knowledge and take the necessary actions to provide solutions to problems in organisations, enhance OL and provide a new understanding of OL.

The main aspect of this research which sets it apart from previous research studies is the introduction of the concept of social media and its incorporation with the traditional OL theory, as well as its concepts (OL levels and types of OL). The proposed theoretical framework that explains at what level and what type of OL occurs from the use of social media by employees in an organisation, is what separates this study from previous work; this is the overall contribution to the theoretical body of knowledge. This contribution helps fill the gap that exists in terms of the integration of OL theory and social media.

Another aspect that sets this research study apart from the previous OL theory studies, is its ability to provide relevant information and results that were taken from different perspectives to improve existing theories. The OL theory has been criticised, as it is not a single process and requires researchers to consider different perspectives when adding to the body of knowledge (Robinson, 2001). This research study interviewed different key participants from organisations who gave distinct perspectives and points of view. This was also an attempt to guard against biased OL practices and thus made this study unique from the generic OL theory.

Literature reveals that one of the aspects of OL is to give organisations a competitive advantage over other organisations (Robinson, 2001; O'Keeffe, 2002; Saadat & Saadat, 2016). This was backed up by the research study, as it established that the use of social media gave organisations a competitive advantage over other organisations. The competitive advantage that emerged from the use of social media meant that information in the organisation was processed and managed faster and effectively, which led to the improvement of OL.

An additional contribution that emerged from this research study, which was also backed up by literature, is that OL theory improves the performance of employees and empowers employees. These concepts were all revealed in the research study, as the use of social media resulted in employees taking charge of their learning and their performance improved in the long run; they could use social media to improve their interaction and communication, which consequently improved OL. Overall, the research study can be used as a source of information for studies that wish to conduct further in-depth research on the use of social media and OL.

8.3.2 Methodological contribution

Chapter Three of the research study revealed the methodology that it would be using, namely the interpretive research philosophy or paradigm. The research took an inductive approach that aimed to collect participants' subjective points of view and opinions and carry out an analysis to understand participants' in-depth perceptions and interpretations. In addition, a qualitative research approach was taken, which then was a contribution to the body of interpretive and qualitative research.

The research study also revealed that it would be using multiple case studies as a research strategy. Since the research was based on carrying out interpretive research and providing an interpretive perspective, carrying out case studies was the ideal choice as the method of data collection. Case studies are known validating research results, testing existing theories/frameworks and creating new theories/frameworks. Purposive sampling was used to select several key participants that were likely to provide data that were useful to the study. Multiple case studies were also conducted to mitigate against biased and subjective opinions, carry out triangulation and help formulate more objective perceptions and understanding of the use of social media and OL. The methodological contribution was made through the use of multiple triangulated case studies which were supported by an interpretive philosophical paradigm.

The adoption of interpretive, qualitative and triangulated case study methods was used to create a theoretical framework that aimed to understand the use of social media in the origination and facilitation of effective OL. The framework is seen as a methodological contribution to informing other research in the IS field.

8.3.3   Practical contribution

Drawing up a framework that incorporates OL and social media will inform and guide organisations that wish to implement the use of social media in their organisations. The theoretical framework was intended to guide organisations on how to use social media in a way that would help or facilitate effective OL. Organisations are expected to take insights from the theoretical framework and use those insights to successfully employ the use of social media.

The theoretical framework is meant to be used practically to positively influence the learning cultures and improve skills development policies in organisations through the use of social media. Organisations must ensure the uptake of using social media in organisations to enhance OL is implemented efficiently. The framework can also be used by social media developers, to help inform which features they need to incorporate in the designing and the development of social media to help enhance OL.

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8.4 RECOMMENDATIONS FOR FURTHER RESEARCH

The research study contributes to the body of knowledge that involves the use of social media in organisations and using them to improve OL. The study provides a foundation and a pathway for further studies that wish to do further research in how social media can be used to facilitate effective OL. As a result, the researcher provides recommendations for further research below:

- The study provides insights and experiences of organisations based on case studies in the Gauteng province, South Africa. Therefore, further studies could look to widen the area covered in the study and broaden the case studies by collecting data from organisations in other provinces as well.

- The sample of the study was limited to ethnic groups based on South Africa's population; further studies could look into researching other ethnic groups from different countries. The size of the sample was limited to a few key participants; further research could expand on this by carrying out a longitudinal study with a larger sample to enhance the validity of the findings.

- The research study used English as the medium of instruction to collect data through interviews. Since the participants that were interviewed had different home languages, future research studies could consider using other official South African or international languages which could help yield more accurate results.

- The sample of the study was unintentionally and coincidentally limited to only male participants, since they dominated the management positions. Further studies could look into interviewing a sample of female participants as they may have different experiences and perceptions towards the use of social media and OL. Comparisons can then be made between different gender samples.

- The proposed theoretical framework was tested in the Gauteng province, South Africa. Further research studies could look into testing the theoretical framework in other provinces, as well as other countries.

8.5 CONCLUDING REMARKS

The lack of studies in the literature that have addressed the incorporation of social media and OL has left a big gap in the body of knowledge. Organisations that still use ways that

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are considered 'ancient' to enhance and improve OL without the use of social media, run the risk of being left behind and are bound to lose their competitive edge in their respective industries. The insights and guidelines that emerged and were identified from this research study were used to draw up a theoretical framework which may be used to help organisations implement the use of social media and consequently facilitate effective OL.

To carry out effective OL through the use of social media, the study revealed that certain concepts needed to be considered and put in place first. Organisations need to keep in mind that OL happens at three levels, (individual, group and OL). The study highlighted that learning at the three levels is carried out by employees who make use of social media, and the types and names of the social media that were used were highlighted by the organisations. The study also revealed the uses of these social media and how the organisations managed content for OL.

The study further revealed the benefits that result from the use of social media and also gave recommendations on how social media can be used effectively to enhance OL. The use of social media and the concepts that arise from it enable OL. The OL that takes place results in three types of learning, which are single-loop learning (which involves making minor changes in the organisation), double-loop learning (which involves making radical changes in the organisation) and triple-loop learning (which involves making changes to the rules, values and governing norms of the organisation). This then feeds into the levels of the organisation which completes the loop of learning in an organisation, supported by social media.

In summary, the overall aim and objective of the research were completed by developing a theoretical framework that incorporates social media with OL. The theoretical framework also addressed how social media could facilitate effective OL as discussed throughout Chapter Seven. This provided a better understanding of how social media could be used to enhance and improve OL. It is worth noting that the results from this study cannot be generalised and may not be considered the final word on the subject. Therefore, more research regarding the use of social media and OL will need to be conducted to get more convincing results, especially in a South African and African context.

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APPENDIX A - QUESTIONNAIRE/INTERVIEW GUIDE

a) What is the scope of learning in your organisation?

i) At what level of the organisation does learning take place?

ii) What type of learning takes place in your organisation?

b) What Social media are used by your organisations for organisational learning?

c) How does your organisation use the social media tools for organisational learning?

d) How does your organisation manage the social media-supported organisational learning platform content?

e) Overall, how do Social media facilitate effective organisational learning in your organisation?

APPENDIX B - INFORMANT CONSENT LETTER

Faculty of Economic and

Management Sciences

Dept. of Informatics

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TOWARDS THE DEVELOPMENT OF A SOCIAL MEDIA SUPPORTED ORGANISATIONAL LEARNING FRAMEWORK

Research conducted by:

Mr H.N.M Moongela (17208302)

Cell: 067 026 8516

Dear Participant

You are invited to participate in an academic research study conducted by Harry Moongela, Doctoral student from the Department of Informatics at the University of Pretoria.

The purpose of the study is to find out how Social media facilitate effective organisational learning.

Please note the following:

▪ This is an <u>anonymous</u> study survey as your name will not appear on the questionnaire. The answers you give will be treated as strictly <u>confidential</u> as you cannot be identified in person based on the answers you give.

▪ Your participation in this study is very important to us. You may, however, choose not to participate and you may also stop participating at any time without any negative consequences.

▪ Please answer the questions in the attached questionnaire as completely and honestly as possible. This should not take more than 15 minutes of your time.

▪ The results of the study will be used for academic purposes only and may be published in an academic journal. We will provide you with a summary of our findings on request.

▪ Please contact my study leader, (Dr M.J. Hattingh, Tel: +27 (0)12 4205322, E-mail: marie.hattingh@up.ac.za) if you have any questions or comments regarding the study:

Please sign the form to indicate that:

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- You have read and understand the information provided above.

- You give your consent to participate in the study on a voluntary basis.

© University of Pretoria

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Participant's signature   **Date**