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GUIDELINES TO ANALYSE THE END-TO-END TRANSITION FROM TRADITIONAL LEARNING TO AN E-LEARNING ONLINE SOLUTION: A CORPORATE VIEWPOINT

by

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Submitted in fulfilment of the requirements for the degree
MCom in Informatics

in the

FACULTY OF ECONOMIC AND MANAGEMENT SCIENCES

at the

UNIVERSITY OF PRETORIA

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Date of submission
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GUIDELINE TO ANALYSE THE END-TO-END TRANSITION FROM TRADITIONAL LEARNING TO AN E-LEARNING ONLINE SOLUTION: A CORPORATE VIEWPOINT

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ABSTRACT

In 2021, there is still a race between education and technology. With the new and powerful technology term *digitalisation*, we see how mobile devices, online platforms, artificial intelligence and the internet changes jobs and education. Once again, technology is racing ahead, and the education system is required to keep up. This research study focuses on the development of education in organisations with a focus on transitioning from traditional learning methods to online learning in a corporate environment. The SAP *SuccessFactors* learning management system has been the solution of choice to transition employees to an online learning platform for many organisations around the world. It is an advanced software system that allows organisations to deliver online learning content efficiently to their employees while incorporating analytics and the tracking of employees' progress. The Covid-19 pandemic has resulted in organisations and educational institutions worldwide closing their doors. Globally, more than 1.2 billion learners and employees are no longer making use of physical learning facilities. This has led to organisations' rapid transition to an online platform.

This research study obtained data from the employees of an organisation that had transitioned from traditional learning techniques to online learning with the use of SAP *SuccessFactors*. The transition was analysed to obtain specific results on how it impacted on the organisation and its employees. Although the SAP *SuccessFactors* learning module has been incorporated globally, there is little or no literature to guide organisations and their employees on its adoption. Therefore, this study will develop guidelines that organisations and employees can use in the transition to e-learning. The study makes use of experimental learning cycle (ELC) theory, which is aimed at helping participants reflect on their experiences. It also analyses how their situation and future decisions can be improved by using the knowledge provided to make improvements. The data collected in this qualitative study is based on 15 participants from one organisation. The outcome of this study shows a positive adoption rate from the participants involved and provides organisations with a

guideline when transitioning from traditional learning to e-learning and how it can benefit the wider organisation. The results emphasise that transitioning to an e-learning platform is the most beneficial solution for the growing number of individuals who require access to accommodating learning methods. In addition, the results state that organisations will benefit from the scalability, effectiveness, quick delivery and reduced costs of online learning.

Keywords

Traditional learning, online learning, skills development, learning management system (LMS)

Acknowledgements

I would like to convey my gratitude and thanks to my supervisor, Dr Riana Steyn, for accepting me as a master's student and providing her unwavering support during the period of my study. Dr Steyn has been an important figure for me since I was an undergraduate student, and it has been a pleasure working with her. Dr Steyn has given me and many other students the belief and encouragement needed and was always available to steer me in the right direction.

I would like to thank the organisation and its employees for allowing me to conduct my study on this organisation. Even though they were very busy, each participant was fully committed to assisting with feedback and made a great contribution to the research.

Lastly, I would like to thank my medical doctor, Dr H Gani, and my family for supporting me through my isolation period and medical treatment. During a tough year all around the world, I was unfortunately diagnosed with Covid-19 and suffered severe symptoms. You have each played an important role in keeping me positive, which helped me fight the infection and recover. I thank you all. This accomplishment would not have been possible without these individuals mentioned above.

CHAPTER 1: INTRODUCTION

1.1 BACKGROUND INFORMATION

According to Albert Einstein, “education is not the learning of facts, but the training of the mind to think” (Boston, 1921). What is the single-most important investment decision that one can make in one's life? One can argue that the answer would be education: an investment in oneself could very well become the most useful and important investment of one’s life. If a group of employees were asked if they are currently in the profession for which they studied during their first undergraduate degree, one would find that only half or even fewer would affirm that (Littlejohn, 2017). According to reliable data (from Braun & Clarke, 2014), 43% of people with a bachelor’s qualification do not work in a profession related to their studies. This, in turn, leads to several employees having to reskill, upskill, train and learn about unfamiliar concepts to be productive (Adams, 2015). Questions have been raised about this issue (Muhire, 2014). To assist students trying to adjust to their career path, analysts attempt to predict the future by using data that is available today (Silverman & Hoyos, 2018). Crider (2020) notes that the role of accumulation trends in the financial crisis, as predicted by analysts between 1985 and 2008. During this period, the demand for professions in agriculture decreased by over 20%, but the demand for trade professions increased (Mejorado et al., 2014). In relation to the study, this indicates the need for continuous learning, which will assist employees to adapt to new skill sets. As industries progress in the 20th century, it is vital for the current workforce to improve their profiles through additional training. This helps individuals and organisations adapt to unexpected changes, such as the Covid-19 pandemic.

Table 1: Industries of world economy (Mejorado et al., 2014)

	1985	1995	2008	2030...
AGRICULTURE	23.7%	9.2%	**3%**	?
MANUFACTURING	29.4%	25.7%	15.1%	?
CONSTRUCTION	9.5%	4.6%	10.1%	?
TRADE	4.4%	10.9%	18.5%	?
TRANSPORTATION	9.6%	14.5%	8.1%	?
OTHER	23.4%	35.1%	**44.9%**	?

This indicates that there will always be a need for learning in various professions. As the years progress, one can see that industries and learning institutes are changing how courses and academic content are being presented (Muhire, 2014). Technology has always and continues

to play a major role in the transition of how learning material is presented and used by students and employees. Technology has changed the way people look at learning in terms of space, time and potential because, through technology, individuals and groups of learners can learn at any point (Allen, 2014). Due to the increasing rate of internet access and the ability to browse using multiple devices, employees have access to downloadable learning material 24 hours a day. This has given employees the flexibility to take learning home and return to the organisation to implement what they have learnt (Boezerooij, 2016). In the modern working environment, this becomes useful as it helps the organisation to grow into a learning organisation that encourages its employees to seek personal mastery, and encourages open feedback and problem solving (Mullins, 2016). Organisations who previously employed traditional methods of learning and are incorporating modern-day learning methods to attract and retain talent realise the benefits of e-learning to gain a competitive advantage. Such organisations can reduce the time and money spent on classroom training, and employees can reach their professional goals by learning more rapidly and remotely (Bernard, 2016).

Significance of the topic

The way organisations are run today differs tremendously from the traditional methods of the past. Organisations are trying to keep up with the improvements made in business processes, the ever-changing demands of clients and the vast amount of data that is at one's fingertips (Barrett, 2012). Traditional methods of learning used classrooms and thick textbooks. Today, employees are required to upskill themselves using new methods based on technology. For progression and to improve processes, it is important to analyse and understand how technology has been applied to traditional learning methods and how the entire learning experience has evolved (Barrett, 2012). Traditionally, employees would have to sit through a classroom session with an instructor and run through several chapters in a textbook or view multiple PowerPoint slides. Organisations are now adopting online learning, whereby employees can watch a video and complete an interactive or practical exercise (Noel, 2018). This is considered "active learning" since the employee engages with the material at their own time and pace. E-learning within organisations is seeing employees develop their knowledge and skills at increased rates, which aids in the growth and development of the employee, the organisation and, in turn, the economy (Barrett, 2012).

1.2 PROBLEM STATEMENT

Organisations have been making sizeable efforts to transition from traditional learning to an online platform using modern e-learning methods. The reason behind this transition is mainly because organisations are being forced to upskill and educate their employees with the aim of adapting to dynamic markets to keep up with their advancing competitors (Mullins, 2016). Employees often welcome the transition from traditional learning to e-learning as it brings many benefits, although it is also accompanied by challenges. These challenges include the inability to implement the correct learning systems or company procedures. Any new technology must be integrated with current business processes to enable the utilisation of all its capabilities. This must be done by an experienced implementation partner. Another challenge is that organisations fail to convince their employees to adopt e-learning. Members of the organisation are comfortable working with the current processes and resent change. The benefits of overcoming these challenges include the ability to improve an employee's work processes, which will make them work more efficiently (Allen, 2014). The transition is a significant component of remaining competitive due to other benefits, including increased productivity and an improved return on investment (Littlejohn, 2017).

Organisations face high tuition fees. The increasing prices of academic textbooks and the time-consuming nature of attending an instructor-led class makes traditional learning a challenge for employees (Chen, 2013). Employees are away from their workstations during business hours when they attend classroom training sessions. That time is considered a loss for the organisation's workforce, and organisations either have to find replacement staff or manage the workload while their employees are training (Allen, 2014). Employees are forced to allocate time to their studies after hours if they missed anything during the classroom training session. In addition, traditional textbooks focus on too many learning areas at a time and do not provide a practical learning experience (Groves, 2016). The learning areas presented by the instructor might be explained too quickly or vaguely and, unlike in e-learning, the employee cannot retake the class to cover what they have missed. Employees find themselves having to attend classes they do not require or have no interest in because the organisation has already paid for the training (Barrett, 2012).

In an environment where the e-learning instructors do not meet employees face to face or an environment where there is not even an instructor, employees will never have the opportunity to ask questions or build a relationship with their instructor (Zeeuw et al., 2011).

During in-person training, employees find that they are hesitant to ask questions due to their low self-confidence or because they doubt whether their questions are up to standard. Training session times are limited and are typically held at a fixed location and require employees to commute to the location (Silverman & Hoyos, 2018). When employees attend in-person training, it can affect their productivity as their project deadlines are not pushed backwards. This forces the employee to catch up on work after hours (Boezerooij, 2016).

When an organisation initially adopts e-learning, online courses have lower success rates and higher withdrawal rates than is the case in traditional learning. Employees feel that they cannot deal with the technical issues that come with e-learning due to their lack of computer literacy skills (Noel, 2018). Many employees underestimate the workload and do not understand that online learning requires the learner to stay alert, involved and constantly engaged. Employees need to adapt to the absence of a “physical” trainer or instructor who is present at all times. It is up to them to take the initiative to participate in online discussions and conduct their research (Mullins, 2016).

Although many benefits arise when organisations adopt e-learning, it can take time for the business and its employees to adjust to the change. A wide array of educational technologies can be implemented, but not all of them are appropriate matches for the organisation's needs or the content that they require their employees to study (Silverman & Hoyos, 2018). Another issue faced when transitioning to e-learning is that it can become time-consuming for organisations to develop online course content, particularly when attempting to convert a traditional learning syllabus into an online platform (Hodges, 2014). Organisations are continually seeking assistance in carefully easing their employees into the e-learning environment to prevent them from becoming confused or even overwhelmed when transitioning for the first time (Yaari, 2019).

When adopting e-learning, little or no learning takes place within the classroom environment. This means that organisations must ensure that their employees can interact with one another, complete activities and apply their knowledge to practical scenarios (Barrett, 2012). Issues can arise if the organisation does not take these follow-up actions. Management will not know if the employee has grasped the content or if they understand their e-learning material well enough to apply it to a real-world scenario. In turn, the employees are unsure if they are doing enough on their part to get the best out of the delivered content (Crider, 2020).

The current global pandemic has necessitated a rapidly growing focus on digital technology to assist a wide range of industries. To control the spread of the virus, physical distancing and quarantine periods have become mandatory. This impacts on human behaviour because it changes the way individuals meet, shop, work and learn (Benwell, 2021). The need for the world to shift from offline to online became crucial at the beginning of 2020, creating new opportunities for technology to lead the way. Covid-19 has sped up the adoption of digital technologies by several years, including e-learning platforms (Renu, 2021).

While many employees within an organisation are technologically savvy, others struggle to operate basic programmes. Since employees are often reluctant to adopt change, many of them may find e-learning difficult to undertake without classroom-based training (Boezerooij, 2016). Due to their comfort with traditional methods of study, these employees may find it isolating, unclear and discouraging when the organisation eventually transitions to e-learning. This leads employees to fall behind in their studies. A lack of motivation and interest arises that forces the employee to give up on their learning and development (Boezerooij, 2016). E-learning has its challenges, which require employees to maintain their timetables, make their own decisions when driving their learning and manage their time effectively as there are no set schedules for learning (Zeeuw et al., 2011).

Organisations invest in the growth and development of their employees with the intention of increasing their return on investment and gaining a superior business position compared to their competitors. Education and upskilling the workforce is seen as a strategic approach to set a company apart from its competitors (Groves, 2016).

Upskilling and reskilling the workforce is not only seen as a business strategy, but also as a corporate responsibility. This will train employees in new and existing fields of work, improving both the industry and the economy (Groves, 2016). Today employees are making conscious choices about where they want to work. This decision is often based on whether a prospective organisation is willing to upskill its employees and provide them with new opportunities to grow and advance in their careers. Organisations that invest substantially in their employees' development are considered to have a competitive advantage in the industry because this allows them to recruit more talented individuals and create a positive reflection of the organisation's brand and image (Littlejohn, 2017).

Organisations therefore need to find the most efficient, cost-effective and time-saving way of upskilling their employees, keeping their return on investment in mind. There will be challenges along the way, such as an employee's lack of computer intelligence or even the difficultly of sourcing and supplying their employees with learning material (Mullins, 2016).

When one takes a more detailed look at the issues faced by organisations that use traditional learning methods to upskill their employees, one finds that the costs of printing are becoming increasingly high (Mullins, 2016). Traditional textbooks require employees to be seated under good lighting to ensure good conditions for reading and the books take up large amounts of space, which creates difficulties with portability (Mullins, 2016). Organisations are finding it difficult to find value for money as learning material becomes outdated as soon as the course content is updated. Organisations now see textbooks as outdated and designed to provide an employee with only one source of information. The changes and updates in technology mean that a textbook's content cannot be updated unless it is re-published. (Zeeuw et al., 2011). Beside the cost of textbooks, employees find it difficult to attend regular classes between their busy work schedules. That can lead to employees falling behind in their progress (Noel, 2018).

To aid the transition from traditional learning to e-learning, organisations are now collaborating with e-learning communities, IT specialists and groups where interactive discussions can be held. This collaboration reduces the time it takes for an organisation to develop an online course and ensure that it has the correct structure, format flexibility and ease of use for employees (Adams, 2015). Organisations are now ensuring that educating their employees will drive the use of technology instead of technology driving the employees' education (Silverman & Hoyos, 2018).

As much as the e-learning platform that is being adopted will be used to simplify the learning process, it is still the responsibility of the organisation to evaluate their employees' participation in the course. Organisations should respond promptly to employees' concerns and track their overall development and progress (Boezerooij, 2016). Organisations must be seen to create inviting environments for their employees, encourage their e-learning and ensure a smooth start. This is done in the form of welcome emails providing instructions on online platforms, as well as the outcomes and the organisation's requirements for the employee (Barrett, 2012).

Organisations understand that it is their responsibility to incorporate direct communication with their employees so as to provide constructive feedback on their learning and development. The organisation creates a forum whereby employees can informally introduce themselves and communicate with each other on specific topics relating to the e-learning content (Groves, 2016).

Employees must show that their technology skills are adequate and organisations should ensure that they hire computer literate employees before introducing them to the e-learning content (Silverman & Hoyos, 2018). Employees should seek assistance in understanding and mastering different courses and modules since they too understand that it is their responsibility to drive their learning and development. Employees must create a schedule and keep regular reminders to assist them with time management (Crider, 2020).

In transitioning to an e-learning platform, the organisation must assist its employees to overcome the digital divide by providing them with the prerequisite or computer literacy tasks to complete before starting a course (Barrett, 2012). The organisation should provide the student with the necessary software and hardware needed to complete the e-learning course and incorporate a series of video tutorials to educate the employee. These videos serve to explain how the employee can navigate the new e-learning system, avoid plagiarism and use the e-learning tools provided to them. They can also provide time management tips (Alharbi, 2016).

To assist with this transition, SAP has introduced the SAP *SuccessFactors* learning module (SAPSFL). This module was designed to assist organisations that are trying to improve their employees' skills. To increase an organisation's strength and placement in the market, it needs to create a culture of continuous learning (Alharbi, 2016). The SAPSFL software has been developed to fuel employee growth and develop leaders within the organisation to improve business outcomes. The software can transition employees from traditional learning methods and introduces them to a modern-day e-learning platform. It uses machine learning to provide employees with personalised learning recommendations. Unlike traditional learning methods, the software provides employees with all the tools required for an easy transition. This ensures that they can access the correct learning content in an efficient, convenient and inexpensive way through one platform (Alharbi, 2016). Employees are also provided with learning groups to engage in discussions, upload content and collaborate with colleagues.

When using the module, an organisation can gain access to real-time data analytics that provides details on which learning courses an organisation presents for its employees, the results of these courses and the organisation's future plans for its employees (Ware, 2013). Although organisations have incorporated the SAPSFL module globally, there is little or no literature to guide organisations and their employees in its adoption.

The focus of the research will be to analyse how organisations have transitioned from traditional learning methods to e-learning methods and how organisations are benefiting from e-learning through the use of the SAPSFL module. The study will distinguish how employees have transitioned successfully from traditional learning to e-learning and how it has affected employees' skills, knowledge and productivity. This study will identify what goes into such a transition and the steps organisations are required to take to ensure that e-learning becomes a successful tool in the working environment.

1.3 RESEARCH QUESTIONS

The following research questions will be answered by this study.

The main research question is followed by several sub-questions.

Main research question

What would the guidelines look like when an organisation performs an end-to-end transition from traditional learning to the online SAPSFL solution in a corporate setting?

Sub-questions

- What are the reasons behind an organisation's transition from traditional learning to e-learning methods?
- What organisational and information technology experience should an employee have to assist with the transition from traditional learning to e-learning?
- What are the benefits experienced by both employees and the organisation following the implementation of e-learning?
- What challenges do the organisation face after adopting e-learning methods?
- What does a typical transition from traditional to e-learning within an organisation look like?

The research questions detailed above will be analysed and answered in the course of the study to resolve the sub-questions and, finally, the main research question.

1.4 RESEARCH OBJECTIVES

Constructed around the main problem, the main research questions and the sub-questions, a detailed list of research objectives has been defined.

- To analyse and understand the challenges and benefits employees have faced when using traditional learning methods in the workplace.
- To analyse the organisational and information technology experiences that have assisted with the adoption of an e-learning system.
- To analyse how the transition from traditional learning to e-learning has taken place within the organisation and the steps taken for a successful transition.
- To understand the challenges and benefits employees encounter when using modern e-learning methods in the workplace.
- To determine how the organisation has been impacted on after the transition from traditional learning methods to e-learning.
- To determine how SAPSFL has assisted employees and their organisations through the use of this specific e-learning software.
- To understand what SAPSFL will be implemented in the future to improve e-learning software for an organisation's employees.

Experiential learning theory (ELT) was selected for this research as it shows the learning cycle of adopting a new learning method. A challenge with adopting new technology like an e-learning system is that employees are hesitant to adopt the change. The change may also not be rolled out for the employee base using the most efficient method. The focus of this theory is experience, which is the main driving force in learning because knowledge is constructed through transformative reflection on one's experience (Baker et al., 2012). ELT is divided into two ways of gaining experience: *concrete experience* (apprehension) and *abstract conceptualisation* (comprehension), working together with two further methods of transforming the experience so that learning is achieved: *reflective observation* (intension) and *active experimentation* (extension). When these four methods are used together, they make up a four-stage learning cycle that learners go through during the experiential learning process (Baker et al., 2012).

1.5 ASSUMPTIONS

The section below details the assumptions that are required to be considered by this study when conducting the research.

- All employees of an organisation are unique, and each organisation has its own set of unique requirements for employee development. Each employee possesses knowledge, skills and preferences that are factors in transitioning from traditional learning to e-learning.
- Organisations differ in budget, scope and vendor selection, which are all required to implement and assist in transitioning from traditional to e-learning environments.
- The organisation participating in this dissertation has implemented SAPSFL or a similar and competitive e-learning solution, and has been using the SAP learning solution actively for at least one month.
- Companies comprise different sizes and types of working environments. Organisations can be made up of large corporations or smaller businesses that aim to effectively transition from traditional learning to e-learning.
- Each organisation focuses on growing and maintaining its unique employee base based on the specific role it plays in the industry, together with employees who meet their specific job criteria. This formulates a basis to analyse exactly which SAPSFL features the organisation has implemented or still needs to implement.
- Participants will answer all questions truthfully and honestly based on their personal opinions and experiences.

The abovementioned assumptions will be acknowledged in each step of the study. The next section will outline the chapter overview of this study.

1.6 BRIEF CHAPTER OVERVIEW

This section contains the chapter map and chapter overview. The chapter map provides a visual representation of the study and details the various chapters and subsections included in the research. The chapter overview provides a detailed overview of what will be included in each of the chapters and subsections.

Chapter map

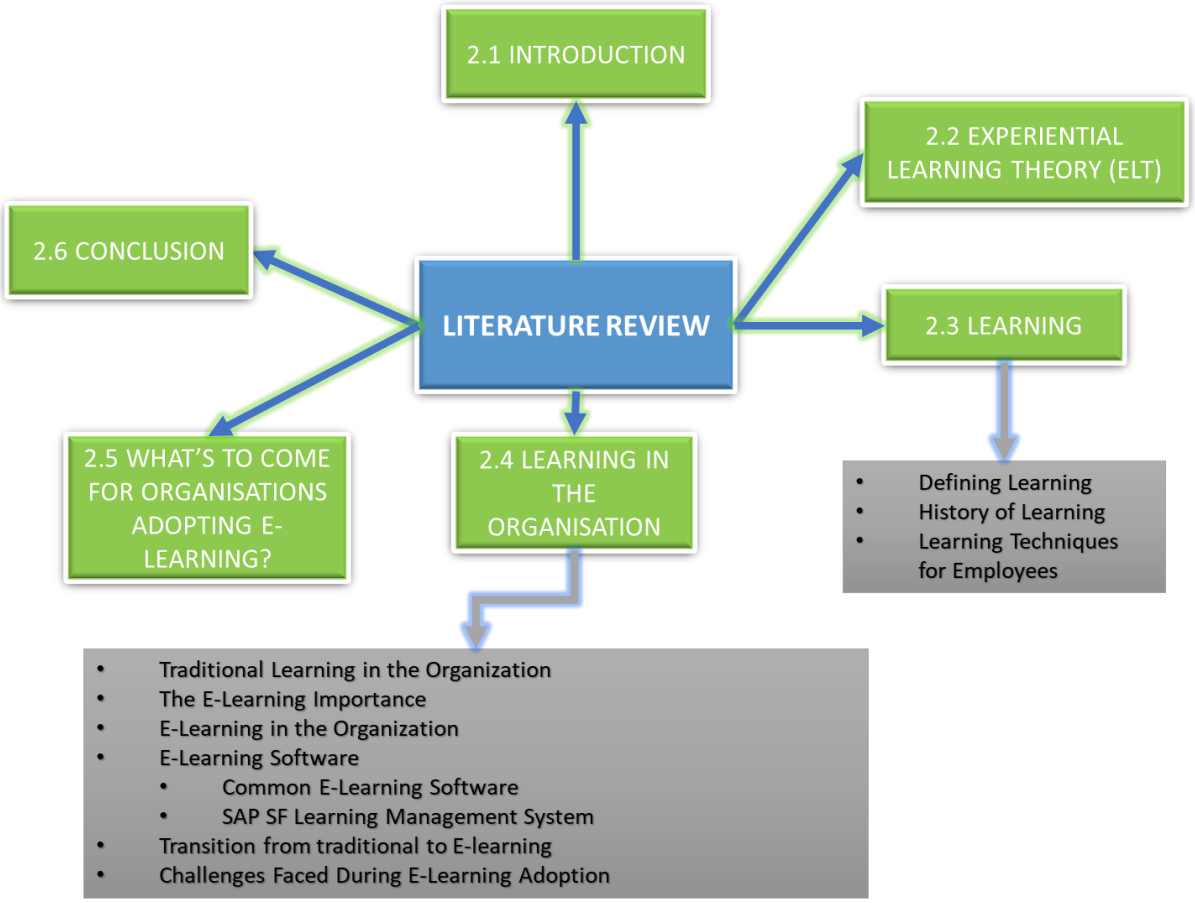

Figure 1: Chapter overview map

Figure 1 represents a summary of the paper's sections and chapters.

Chapter overview

Chapter 1: Introduction

The purpose of this chapter is to expand on the importance and the background of this study. This chapter provides an overall review and broader context of the issue at hand.

Chapter 2: Literature review

The preeminent publications on the subject will be defined in the literature review. The content found in the research of the topic will be revised, detailing and extracting the main concepts and relationships between the literature and the topic. This is done to expand on the understanding of the organisation's transition from traditional learning to e-learning and its influence on employees. The literature review forms the basis of the questions that will be asked during the data-gathering phase.

Chapter 3: Methodology

This chapter will discuss the research methodology that is followed in this study. The methodology chapter details the selected method and processes that the researcher will use to conduct the study. The data collection section will explain the methods and approaches used by the researcher to gather the information. The data analysis will expand on the methods used to analyse the data. Ethical concerns will also be discussed.

Chapter 4: Analysis of findings

The analysis of findings aims to analyse the data collected by the researcher. The interview answers that were obtained during data gathering will be analysed and broken down into categories and themes. The patterns found within the themes will be studied against the main research question and the research sub-questions. The findings from the data collection will be detailed and linked to the literature discussed in Chapter 2. Categories specifying the views and opinions of the employees will be distinguished. The analysed data will aid the quality of the study and will support the research questions defined in the introduction.

Chapter 5: Conclusion

To conclude this research study, this chapter will answer all the research questions, ensuring the objectives are met. Contributions and recommendations will then be discussed.

1.7 CONCLUDING SUMMARY

Throughout this chapter, it is evident that there is a gap in the current literature. Although the SAPSFL module has been incorporated by several organisations globally, there is little or no literature to guide organisations and employees in its adoption. Thus, this study will develop guidelines that organisations and employees can use during the transition to e-learning. This chapter introduced the research questions and the objectives that this study aims to address. It provides a guideline as to how this study proposes to solve these questions and what the expected results will be based on the research approach. The rest of the research study examines the research approach and literature in-depth taking the SAPSFL system into consideration with the main focus areas having been identified. The research study will then focus on the research and data in the form of the interviews with 15 participants and findings resulting from the interviews. Lastly, the experiential learning theory will be introduced into the literature and data findings.

CHAPTER 2: LITERATURE REVIEW

2.1 INTRODUCTION

This section discusses literature defining general learning, learning within the organisation, e-learning software, the organisation's transition to e-learning, and the benefits and drawbacks of adopting an online learning solution. The first section of the literature review will provide a brief history of learning and the current learning techniques used. The following section will detail how organisations are adopting different learning methods and the effectiveness of each technique. The research will then define how software has made its mark in the corporate industry and what the future holds for organisations adopting e-learning in the modern age.

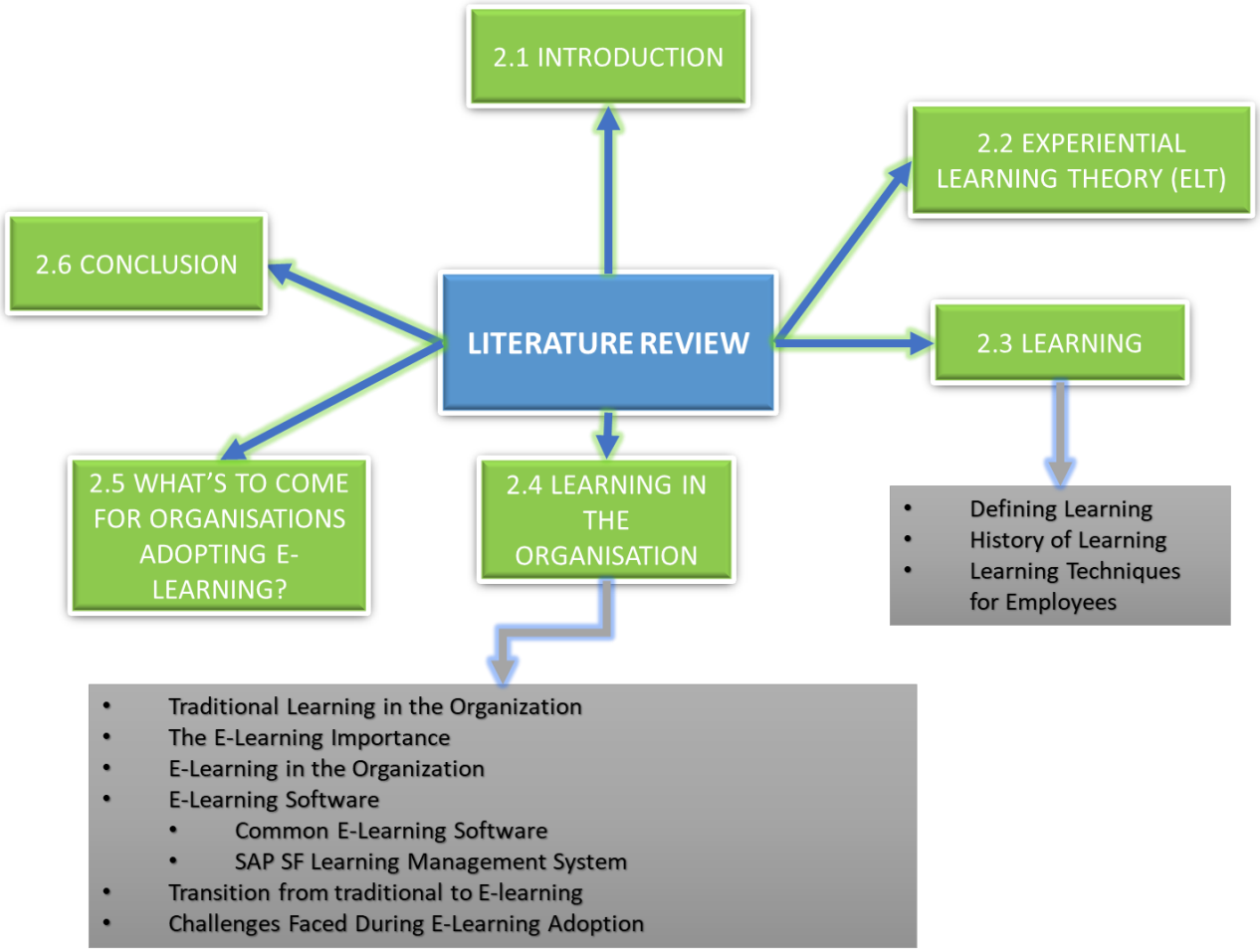

Figure 2.1: Broad overview map

Figure 2.1 outlines the sections and subsections of Chapter 2.

2.2 LEARNING

The human brain weighs an estimated 1.3 kg and is the organ that accounts for roughly 20% of the body's oxygen, energy and blood usage. The human brain holds billions of neurons with each neuron holding anywhere between 1 000 and 20 000 synapses or networks to deeper neurons. Each thought, action and memory are collected and deposited in these neuron paths, meaning that each individual's brain is organised and unique (Adams, 2015). Historically, schools and corporations have educated their learners and employees as if they had identical brains in the drive to ensure standardised accountability (Clark, 2012).

The current foundational education takes place in institutes and organisations. This can have an impact on a learner's motivation and creativity. Learners are engaging with new learning methods less frequently and are not developing habits to retain or develop a stronger memory (Darling-Hammond et al., 2020). The question is how are organisations designing curriculums to facilitate the goal of creating a stronger, more sustainable memory? (Luismang, 2006). This study analyses the issue by identifying an organisation that has adopted a new medium of learning for its employees in the form of online learning.

A learner's brain can either be provided with a painful or a pleasurable experience. The more dominant of the two experiences is the painful experience. An instructor can prepare a very engaging lesson for the learner, but if the learner is experiencing social, emotional or physical pain, this will occupy their attention (Allen, 2014). To prevent this, the learner must be placed in a safe, risk-free environment. Since every brain and every learner is unique, when new information is introduced, instructors must offer multiple learners' various entry or access points to the learning (Chipato, 2016). This refers to relating a learner's prior knowledge, interests or past experiences with different resolution paths in order to connect questions to answers. The brain must find a way to reconcile new information with prior learning when it is introduced. This process is called cognitive conflict (Chipato, 2016). Employees often find themselves juggling multiple tasks as they have external responsibilities and busy personal lives. This leads to talent management and upskilling taking a back seat in the corporate environment. To prevent training and upskill neglect, organisations are finding new and innovative ways to upskill their staff. As mentioned by Chipato (2016), it is important to ensure that the employee's learning experience is pleasant. If the employee is interested in the topic and finds the course user-friendly enough to complete, the learning will unfold autonomously (Katkalo, 2019).

Instructors often try to protect their learners from the frustrating process of cognitive conflict. To guarantee that the information is grasped, the learner must struggle and attempt to resolve their cognitive conflict by themselves (Yaari, 2019). The question is how to motivate learners to tolerate this struggle with cognitive conflict. According to Allen (2014), there are three key ingredients for intrinsic motivation: autonomy, connection and progression.

Autonomy gives learners the opportunity to make their own decisions in the process of learning. This provides them with a sense of authority and power. Connection entails collaboratively connecting to the world. This comprises two concepts to satisfy a need in the brain that will benefit and motivate the learner. Progression entails the search for information to progress towards mastering a topic. This requires a balance between challenge and ability. If the learner's challenge (the difficulty of the work) is low, but their ability is high, the brain will become bored (Katkalo, 2019).

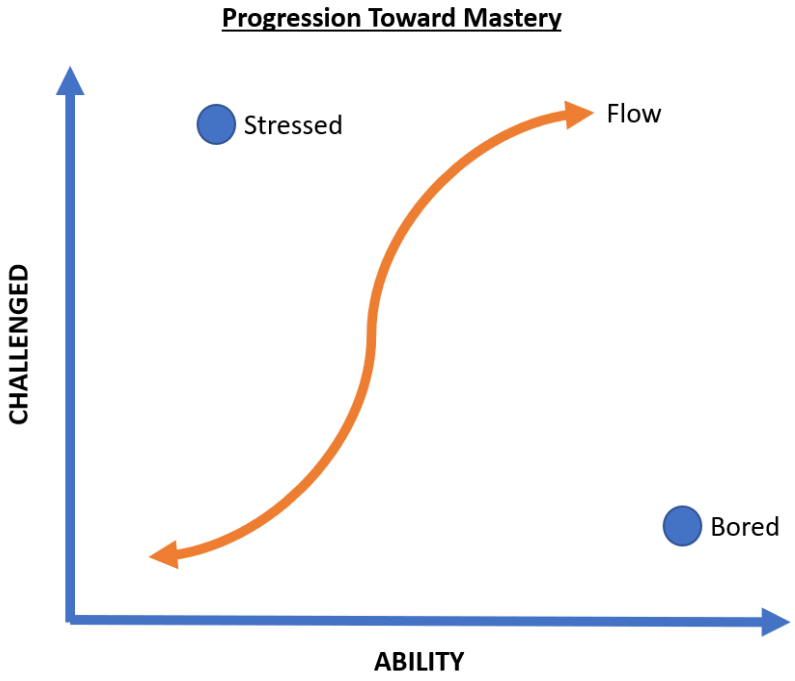

Figure 2.2: Progression towards mastery and flow (Silverman & Hoyos, 2018)

Figure 2.2 shows that if a challenge is too easy and the ability to complete that challenge is high, a learner will become bored. If the challenge is too difficult and the ability to complete the challenge is too low, the learner becomes stressed (Silverman & Hoyos, 2018). A balance is needed between the challenge and the learner's ability to complete the challenge. When the brain finds a challenge that is perfectly balanced with ability, the result is a "flow".

This is an intense enjoyment of learning experienced by the brain and the learner. In e-learning, it is easier to adopt different mediums of learning while alternating the level of difficulty through which an individual learns new concepts. Corporations use video learning, quizzes, multiple choice questions, games, timed assessments, audio learning, portals, virtual classrooms, chats and discussion threads to include new ways of challenging a learner's ability and unlocking new learning experiences (Hodges, 2014).

Once the ingredients of autonomy, progression and connection are stored in a learner's brain, the outcome will be a change in motivation. However, the learner's brain needs to overcome cognitive conflict by pushing itself past the point of struggle to achieve long-term memory, which has two key aspects (McCullough, 2016). This entails two aspects. The first is an activity, because if the learner's brain encounters new knowledge in a passive condition, the result will be passive learning, which will have only a slight chance of being encoded in the learner's permanent memory. By using activity and allowing it to activate the user's senses through multi-sensory experiences and movements, the learner begins to practice active learning. This has a more effective and longer-lasting result. The second aspect is self-reflection. This is necessary for the learner to push through cognitive conflict and achieve long-term memory (Dodds, 2019). Self-reflection is often seen in online learning through the use of post-chapter tests. A learner cannot to proceed to the next chapter without obtaining the prerequisite mark in the current chapter's assessment (McCullough, 2016).

These are important brain-compatible strategies. When applied every day and during each learning session, results will be exponential. As each year passes, the learner will recall more previous knowledge from their long-term memory (McCullough, 2016).

2.2.1 DEFINITION OF LEARNING

Neuroscience has described humans as being born with masses of neural networks in their brains that will be engaged and strengthened depending on the learning and development they go through as they age (Allen, 2014).

The human brain stores neural pathways if the individual makes consistent use of them. Additionally, the brain can build fresh pathways by starting new behaviour and repeating it regularly (O'Driscoll, 2016). The more frequently a person uses their neurological pathways, the more definition is built and the better they can recall information or repeat a specific

behaviour. This explains why humans cannot perform tasks well if they have not spent much time practicing them or gaining experience in those areas (Dodds, 2019). By adopting online learning, organisations can ensure that their employees remain upskilled and that new neural pathways created, maintained and even strengthened.

Jean Piaget and Lev Vygotsky are recognised for their significant contributions to the theory of constructivism (Muhire, 2014). Constructivism states that, from birth, children acquire knowledge and begin to construct schemas that form structures and pathways that help build their knowledge. To ensure that the schemas continue to develop, the needs to build on their existing experiences and knowledge (Chipato, 2016). This is where Vygotsky developed the idea of the Proximal Development Zone that looks at how one's family, school and community contribute to the way development occurs. In practice, this theory relies on a teacher or mentor figure directing and enabling a learning and development experience in a method that constructs new ideas and thoughts on top of its existing ones (Bernard & Bernard, 2016).

John Favell established metacognition in the late 1970s. Metacognition is a theory that can be described as an executive control process. This process decides what thought processes need to be used, when they should be used, and why and how they should be used. Metacognition symbolises the brain's ability to manage, organise and monitor mental activities (Hodges, 2014). This theory was devised to educate learners on how to process new information to build the ability to learn effectively on their own. Within the corporate environment, traditional learning is becoming redundant at a rapid pace. As technology advances, employees are required to upskill, self-learn and solve problems faster than before. The ability to conduct effective research and the availability of learning material at the touch of a button is vital to keep an organisation ahead in a competitive market (Hodges, 2014).

Learners of all ages and in all environments learn better if they are taught how. Canadian psychologist Albert Bandura led a social experiment referred to as the "Bobo Doll" study. In this study, an adult acted violently towards a Bobo doll (a big plastic doll), while a group of children watched. When placed in a room alone with the doll, they mimicked the same violent actions they had witnessed. This demonstrated that children learnt behaviour and habits from their environments and the people around them. Today, social and emotional learning is known as the process whereby one can effectively apply knowledge and develop the attitudes and skills required to comprehend, manage and understand emotions (Clark, 2012).

A poor learning environment with a lack of resources and facilities, and with poor trainers will result in poor employee performance. The costs required to sustain continuous and high-quality employee education can be never-ending and is something not all businesses can afford. This is a valid reason for organisations to adopt an e-learning system that will ensure a high standard of training and a continuously updated training syllabus for their employees (Stavan, 2017).

One of the most recent theories to emerge from research considers the role of technology and learning in the 21st century. George Siemens generated the term connectivism to describe how learning and development can take place through methods of human interaction such as communication and information technology (Mungania, 2014). This includes the internet, computers, interactive whiteboards and tablets. Connectivism links to Vygotsky's Zone of Proximal Development by using technology. It allows learners to step into a range of skills and the opportunity for growth. Ideas are also borrowed from constructivism by linking to prior learning, but learning is not based entirely on it. Technology is incredibly relevant in modern society and educators must provide opportunities for learners to use it responsibly and meaningfully in their learning. If the use of technology is clearly understood within the academic environment, it can become a powerful tool for development (Thujudeen, 2017).

Since the current and new generations of employees are raised with traditional learning methods such as physical classroom attendance and textbooks, it is the responsibility of both the employee and employer to actively involve themselves in a transition from traditional learning to online learning. Enterprises do not always prioritise this change, but when it is included in the organisation’s plans and budget, the return on investment outweighs any initial doubts held by the company’s stakeholders (Romi et al., 2017).

2.2.2 HISTORY OF LEARNING

Before the 1950s, society attempted to understand how learning takes place. The core method used was behaviourism. This is a systematic approach that assumes that all behaviours are reactions formed by a response to specific stimuli in the environment (Allen, 2014). Behaviourism focuses on one specific view of learning that modifies external behaviour by using repetition and reinforcement. The anticipated behaviour is rewarded while the unanticipated behaviour is penalised. This teaching approach focuses mainly on rote learning (Katkalo, 2019).

In the 1960s, a learning method called cognitivism was developed. Cognitivism relates to the mental process of obtaining understanding and knowledge through experience, senses and thought (Ellis, 2014). It is a psychology of learning that emphasises how people think, gain knowledge, solve problems and memorise new knowledge.

In the late 1960s, the constructivist philosophy of learning was born. It was founded on the assumption that, by reflecting on experiences, individuals will develop their understanding and generate mental philosophies. Once developed, the individual's learning will adjust to these philosophies to make room for new experiences (Dodds, 2019). The main principle in constructivism is that learning, and knowledge are constructed and not transmitted. An individual's past knowledge may impact on the learning process, and developing new knowledge may require effort and meaningful activities. It is about constructing knowledge that can differ from one person to another, even if the learning context is the same (Rome, 2011).

For generations, reading, writing and learning were considered a privilege of the wealthy. In the late 1700s, the Prussians decided that all people deserved an education and introduced an education model inspired by the Industrial Revolution (Mullins, 2016). In this model, children were grouped according to age and taught certain material each year. They had a fixed amount of time or roughly one year to absorb a certain amount of information. As the years went by, it became clear who was academically gifted and who was academically challenged (Littlejohn, 2017).

In 1840, Horace Mann decided to introduce this model to the United States of America, and by 1870, public education became a commonplace as it was offered and accessed by all within the country. One disadvantage was that the education system was not uniform. Different states had different standards, different periods for academic pursuits and were teaching different subjects; universities and tertiary institutes had no idea what knowledge their new students or staff would bring with them (Silverman & Hoyos, 2018).

Eventually, the universities decided that this state of affairs needed to change. In 1892, a committee of 10, led by the president of Harvard University, was formed to standardise the process (Romi et al., 2017). The committee decided that compulsory education should last for 12 years, that decisions about when to introduce specific subjects such as algebra and physics must be made and that there should be primary and secondary schools with different formats.

This education system has remained mostly unchanged for almost 130 years, despite the fact that personal computers and the internet have granted civilisation a fairly cost-effective way to completely revolutionise the current model of education (Mungania, 2014).

This concept can be found in organisational learning as well. With the use of traditional learning methods like textbooks and classroom attendance, a group of employees will gain access to specific learning material and will attend classes with a unique trainer, whereas a different group of employees may receive a different trainer who uses a slightly different, but similar teaching method and learning material. Hence there is a risk that the learning content may not be uniform for all employees, and one group of employees may develop faster than the others (Crider, 2020).

The most recent and most praised learning theory is social constructivism. Swiss psychologist Jean Piaget rejected the idea that learning was the passive combination of given knowledge. Instead, Piaget suggested learning is a process in which individuals dynamically construct their knowledge by creating their own, unique theories (Sutton, 2018). Thus, it was defined that social constructivism covers the learning theory of constructivism by analysing the role of learning interactions.

Since the end of the last century, the socio-constructivist learning model has been considered the dominant theory for understanding learning processes, emphasising the importance of contextualisation and social interactions (Mohammed, 2017). Studies on an increase in the use of learner discussion in the classroom are supported by social constructivism. Participating in pair or group discussions allows a student to confront their understanding and build a strong foundation based on their knowledge. Implementing social constructivism in teaching and learning increases student motivation, collaborative skills and socio-emotional learning, which are considered essential in learning today (Bernard & Bernard, 2016). Through the use of e-learning, it is possible for learners to create test examples and scenarios within demo systems. This gives an employee the freedom to explore content and set up their own exercises. The concept of “trial-and-error” is used and is advantageous as it allows experimenting with various methods of completing a task until the individual finds the most successful option (Thujudeen, 2017).

2.2.3 LEARNING TECHNIQUES FOR EMPLOYEES

Many facilitators believe that they must be specialists in their field, be ready with answers to all their students' questions and in control of all content and the full syllabus (Muhire, 2014). This view of teaching may not apply to adult students or employees of the modern world (Groves, 2016). Facilitators for employees are not seen as teachers, but rather as guides who will assist learners in achieving better outcomes It is the responsibility of the organisation and the trainer to create settings that inspire and engage individuals to think, learn constructively and look at the world in a different way that will motivate employees to learn new content (Thujudeen, 2017). The transition of employees to an online learning platform will allow the employee to solve problems constructively. The employee will not always be in the presence of a facilitator and will be required to research concepts, investigate ideas and provide their own solutions when completing online tasks. The employee is not merely there to attend the lecture, but to actively take part and apply their knowledge in practical scenarios provided by the e-learning system (Crider, 2020).

Currently, organisations are turning their top employees into facilitators (Payne, 2016). Many employees have fallen into their position or career due to their industry experience. They would begin their career in a chosen field and strive towards becoming an expert in their industry. Gradually, they will move up the ranks and be asked to demonstrate and teach others so that new learners can achieve the same success as the top employee had (Littlejohn, 2017).

This is a good way for companies to share knowledge between employees and for the top performer to experience new and exciting growth opportunities. The difficulty with this is that these employees are still experimenting with their facilitation style (Crider, 2020). Facilitators should reflect on their individual experiences as learners to design their exercises and learning programmes. Regrettably, many trainers draw on their experiences at school. This method causes learners in an organisation to feel tired and uninspired. Many employees know the workplace policies, but have difficulty applying the policies in everyday life (Thujudeen, 2017). The practical experience gained from on-the-job training, workshops and shadowing project work is invaluable for new and aspiring employees. E-learning systems can bridge the gap between course material and practical work experience by placing the employee in work-related scenarios. Virtual e-learning experiences and demo software systems are often used to provide learners with real-world problems that can test their problem-solving skills. Software

tools such as Microsoft Teams, Skype and Zoom have been vital in assisting with employee communication, teamwork and interpersonal skills (Crider, 2020).

Adult learners share characteristics when it comes to learning. They have a wider range of life experiences than high school or university students. Adults are found to be generally very self-conscious and anxious in learning situations. Adults are goal orientated. They have fluctuating reaction times and prefer to collaborate and socialise while learning (Cole & Foster, 2017). Employees have many family, life, personal and work experiences that they bring with them to their training. This experience allows employees to compare new experiences with old ones and to build on skills and knowledge that they have already developed. Facilitators are required to acknowledge this need and acknowledge the knowledge adults already have to prevent adults from losing interest in what is being taught (Ware, 2013).

The benefit of employee learning is the self-teaching capabilities that most adults have. Rolling out an e-learning system for experienced employees is easier than for younger students. The experience that employees bring naturally assists them in their learning capabilities. Employees require less supervision and are more dedicated to their learning goals (Noel, 2018).

Nonetheless, it is human nature for people to become embarrassed when they make errors in front of others as they become older. Because of this, employees tend to create a “safe zone” where they feel confident in what they already understand and where they do not feel any pressure. Such a comfortable zone will not allow the individual to develop because they are not prepared to take any risks (Alqahtani, 2016).

If employees want to expand their knowledge, they need to move out of their comfort zones and into development and learning zones. The learning zone is where employees experience some anxiety and stress, but of a sufficient amount to benefit and push employees to learn something new. During a training class, most employees prefer to remain in their comfort zones. It is then the job of the facilitator to pull employees into their learning zone (Hopkins, 2011). Another zone is the panic zone where employees experience intense stress and become so focused on their fears that they cannot concentrate on what needs to be learnt. Employees often find themselves in the panic zone during a new learning programme because they are pushed to learn content and activities that may induce fear. It

is the facilitator's responsibility to recognise when someone is moving into this zone and pull the individual back into the learning zone (Romi et al., 2017).

2.2.3.1 Andragogy

Andragogy was popularised in America by Malcolm Knowles, who made assumptions about adult learners that have been written into the way society often identifies adult learning (Renée, 2015). Table 2.1 describes the five principles that Malcolm Knowles described specifically for adult education:

Table 2.1: Knowles's five principles of andragogy (Yaari, 2019)

No.	Description
1.	Adult learners need to know why their learning is important: "Adults need to know why they need to know something before undertaking it/investing their time in undertaking the task". When alone, an individual spends a lot of time and energy trying to understand the value of the new content, the benefit to be gained from learning material and the consequences of not understanding it. The adult learner should be told or be led to discover why specific knowledge is worth understanding (Ware, 2013). The current generation is becoming more aware of the benefits of learning and career progress. The ease of accessibility of e-learning content has made it easier for individuals to learn at any time of day, while travelling or being away from the office environment (Noel, 2018).
2.	Adults already have a self-concept (Ware, 2013). "Adults have a self-concept of being responsible for their own decisions, for their own lives. They need to be seen and treated by others as being capable of self-direction" (Yaari, 2019:86).
3.	Adult learners come to the classroom with experience: "Adults come into an educational activity with both a greater volume and a different quality of experience from youth. This has several consequences for adult education" (Yaari, 2019:86).
4.	Adult learners are present because they want to educate themselves: "Adults become ready to learn those things they need to know, or be able to do, to cope effectively with their real-life situations" (Ware, 2013:112). In relation to e-learning, freedom is given to employees through self-learning. Individuals are given the freedom to obtain additional training and certification as needed. The employee can control the speed of their learning as they wish (Noel, 2018).
5.	Adults are task- or problem-focused within their orientation to learning. While adults may respond to external motivators, the internal priorities are more important. "Adult learners are typically focused on relative information that will aid in solving an immediate problem" (Ware, 2013:112).

When applying these principles to employee learning, it was discovered that employees must participate in the evaluation and planning of the instruction as the individual's experience (including mistakes) must provide the foundation for learning. Employees are most concerned about learning content that will have relevance to or an impact on their jobs or personal lives. Employee development should be problem-focused instead of content-oriented (Allen, 2014).

2.3 LEARNING IN THE ORGANISATION

Organisations must take the correct measures to retain, attract and motivate their staff. Training and development are not considered a bonus, but rather a need if organisations want to prosper in a competitive business environment (Strother, 2012). Training and development will teach individuals to use new skills, allow them to gain knowledge, and provide abilities to help improve their organisation's values, vision and mission. The basis of employee development is the fundamental goal of learning; learning refers to employees acquiring competencies, knowledge and skills, and practicing new behaviour or attitudes (Hodges, 2014). The learning methods instilled must prove how they will add to the organisation's competitive gain by supporting the strategy, improve an individual's performance and contribute to the business outcomes. What the employee learns will contribute to the development of intangible assets in human capital from an organisational perspective.

Learning within an organisation can occur in numerous ways (Chipato, 2016). Training refers to strategic efforts by the organisation to facilitate the learning of job-related skills, knowledge, competencies and behaviour by their staff. The aim of the training is for employees to learn and master skills they can apply in their day-to-day tasks. Training is similar to development, except that development is seen as more future-focused. Development refers to the employees' training, as well as their job experience, formal education, relationship growth, personality assessments and the ability to help individuals prepare for future positions as they grow (Katkalo, 2019). Formal learning refers to training programmes, events and courses that are developed and planned by the organisation. Employees are required to attend and complete programmes that may include face-to-face

training (like instructor-led courses) and online programmes. Informal learning is significant for enabling the growth of human capital.

Any learning that is learner-initiated and involves action in doing is known as informal learning (Chipato, 2016). It is driven by an effort to develop and will not be found in a formal learning environment. Informal learning takes place without the presence of a facilitator, and its breadth, timing and depth are controlled by the learner (Collin, 2016).

As part of the learning experience, organisations need to implement a good system of managing their knowledge base. Knowledge management is how an organisation enhances its performance by implementing and designing processes, tools, structures, cultures and systems to enhance the sharing, creation and use of their knowledge (Silverman & Hoyos, 2018).

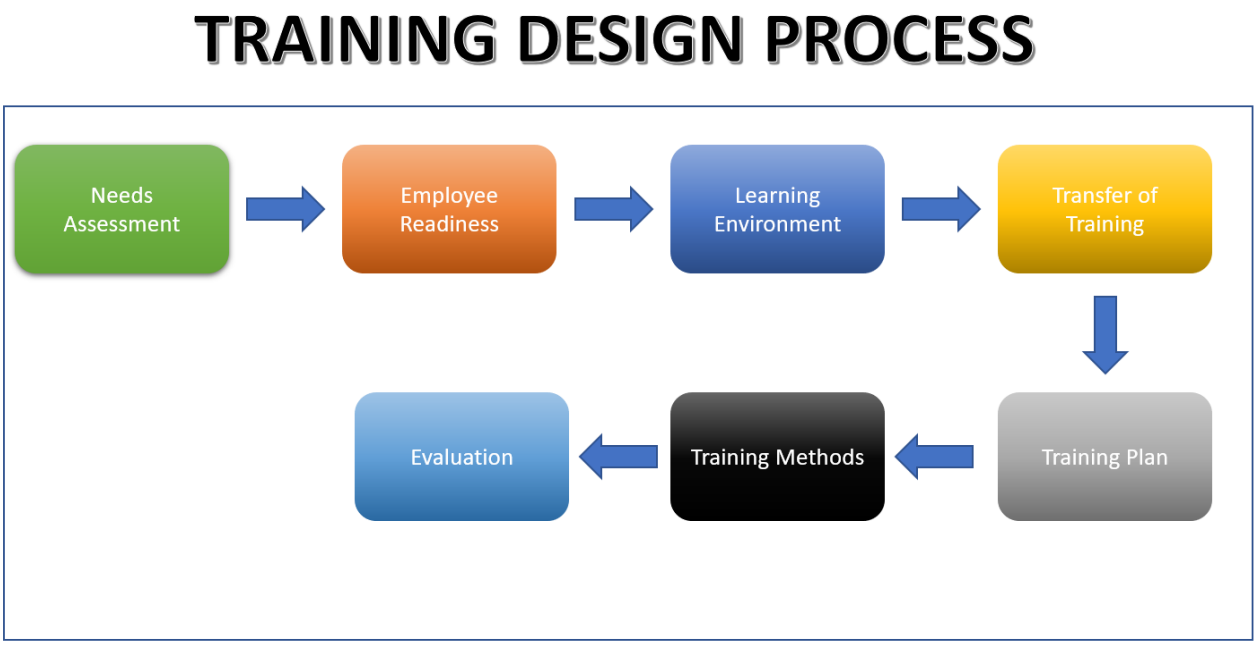

Figure 2.3: The training design process (Thujudeen, 2017)

Figure 2.3 describes the training design process that refers to an organised approach for building training programmes. This figure presents a seven-step process. The steps shown above are built from instructional system design (ISD). This process is followed in traditional learning environments, as well as in e-learning environments.

2.3.1 TRADITIONAL LEARNING IN THE ORGANISATION

Traditionally, organisations have relied on formally training their employees using a course or a training event to educate them and improve the skills, knowledge and behaviour required to successfully perform day-to-day work activities (Stavan, 2017).

Face-to-face interactions are required between trainees and instructors when using traditional training methods. As much as employees have motivated their preference for online learning, many organisations are unable to fund an online learning platform and are forced to deliver training traditionally (Alharbi, 2016). These interactions can be defined in three broad categories: hands-on interactions, group-building methods and presentation interactions. Organisations use several training methods to present learning material within the learning environment. These training methods assist the employee in developing their own unique learning process.

2.3.1.1 Lectures

During a lecture, the facilitator will communicate the course material to the employees through verbal conversation. The message is primarily directed in one direction, from the facilitator to the employees. Facilitator-led presentations are popular even with new technologies emerging (Alharbi, 2016). A classroom-style lecture is seen by an organisation as one of the less expensive, but more time-consuming methods to effectively present large amounts of information. The lecture setup is beneficial because it is easily adopted with larger groups of employees. In addition to being the main medium of communication of large amounts of information, lectures are used to support additional development, such as behavioural modelling or other technology-driven teaching methods (Chen, 2013). The use of physical lectures has declined dramatically as the Covid-19 pandemic forced limited human interaction between organisations and their employees. To prevent the spread of the Coronavirus, organisations had to adopt online lecture styles using tools like Microsoft Teams, Skype and Zoom. Since many organisations had not planned for a pandemic, extra strain was placed on organisations regarding how to continue with sustainable learning and development for their employees. This caused an increase in the demand for software solutions such as SAP, Oracle and Microsoft Dynamics to lead the way in an organisation’s aim to upskill its employee base (Kang, 2021).

2.3.1.2 Audio-visual methods

These methods include overhead slides and videos. Using video footage is a popular and instructional learning method that can be used to improve employee interviewing communication and customer-service skills. Audio-visual methods are used together with

lectures to demonstrate real-life examples (Alqahtani, 2016). Audio-visual lectures increased in early 2020 because the majority of employees were working from home due to the Covid-19 pandemic. Employees used their time at home to upskill themselves in new areas, and the audio-visual learning method played a major role in facilitating self-learning (Kang, 2021).

2.3.1.3 Hands-on learning methods

Several hands-on learning methods require an employee to be conscientiously and physically involved in learning. Hands-on methods include simulations, business games, case studies, role-playing and behavioural modelling. Hands-on methods are perfect for developing certain skills and attributes and to understand how those attributes can be transferred to the workplace. They are used to experience all aspects of completing a task and to deal with relational issues that may arise in an area of work (O' Driscoll, 2016).

2.3.1.4 On-the-job training

This method emphasises the employee's ability to learn by observing their managers or colleagues while in the working environment. On-the-job training is one of the most used and oldest techniques of informal training. This technique is considered informal training since it does not occur as part of a formal training programme and because the employee's colleagues, mentors and managers serve as their teachers (Allen, 2014). When on-the-job training is less formal, employees' learning is less frequent. This method is regarded as a useful method of training newly appointed staff, upskilling experienced employees and cross-training individuals within a division or a department (Sutton, 2018). On-the-job training declined in early 2020 since employees were not able to work together physically. Job shadowing became increasingly difficult as employees were left in their own "silos", working from home. This is another factor, caused by the Covid-19 pandemic, that increased the pressure for organisations to transition from traditional learning to an online, e-learning solution (Benwell, 2021).

2.3.1.5 Self-directed learning

This type of learning allows the employee to take responsibility for all aspects of their learning. Learners are equipped with predetermined training content and can learn on their

own and at their own pace without a trainer present (Alharbi, 2016). Trainers may stand in as facilitators, but are mainly present to evaluate learning and assist with clarification and/or questions. It is not the responsibility of the trainer to disseminate information. Learning is managed by the learner and may include the organisation as it can provide employees with information such as courses, databases or seminars while still holding the employee responsible for driving their learning initiatives. The effectiveness of the self-directed learning method is based on an individual's motivation to learn through self-management and their ability to adapt to the environment (Flick, 2015). If an organisation were to transition to an e-learning platform, self-directed learning will become a big part of the business. As important as it is for the learner to attend and complete online lectures, it is equally important for them to be able to conduct their learning with the materials provided. The difference is that the e-learning platform allows the learner easier access to learning material from any location, on multiple devices and at any time. Self-directed learning has increased dramatically as a learning style since the start of the Covid-19 pandemic (Kang 2021).

2.3.1.6 Simulation

This training technique represents a real-life scenario with the employee's decision-making resulting in consequences that reflect what would occur in the actual working environment. A great illustration of this is the use of flight simulators for pilots, allowing the learner to understand the impact of their choices in a risk-free training environment. It helps in teaching process skills, as well as the management of interpersonal skills (Allen, 2014).

2.3.1.7 Case study

This describes how employees and/or the company have dealt with a problematic situation. The employee is required to investigate and assess the actions taken, indicating suitable steps and expressing what they should have done differently (Alharbi, 2016). A case study is suitable for developing intellectual attributes and logical skills like evaluation, analysis and synthesis. These attributes are generally requirements for employees, but are seen more frequently in managers. Case studies assist learners to develop the inclination to take risks, given specific outcomes based on a learner's analysis of the environment. To use case studies successfully, the environment must allow employees to prepare, formulate and communicate their case analyses (Noel, 2018).

2.3.1.8 Behavioural modelling

This presents employees with a model to replicate and demonstrate key behaviours. Behavioural modelling is founded on the values of social learning, which emphasise that learning occurs first by observation of the behaviour of a "model", and thereafter by receiving reinforcement for making use of specific actions after analysing the model. This method is preferable for training skills and behaviour rather than training in factual information or knowledge (Govindasamy, 2018).

2.3.1.9 Group-building techniques

These are methods used for team training and are designed to improve group effectiveness. In a working environment, a team is two or more employees with certain functions or roles who work together with a common obligation to achieve a goal or complete tasks within the organisation. By using the group-building method, employees can share their ideas and experiences with their team, build group identity and understand the dynamics of developing interpersonal relationships. The employee becomes aware of their strengths and weaknesses, as well as the attributes of their colleagues (Renée, 2015).

Group-building techniques focus on assisting a group to increase the quality of effective teamwork. It is a type of training that is designed to improve group effectiveness, where individuals work together in a sequence of understanding goals, engaging in interactions and taking the correct steps required to achieve their goals. This sequence will be repeated as the team's goals are reached and activities are completed. Successful group performance will depend on the attitude, behaviour and knowledge of its members (Silverman & Hoyos, 2018). The group-building method is an effective traditional learning method and will continue to be used in e-learning platforms. Breakout rooms are a common feature of online learning platforms, which allow learners to group themselves into teams to complete a portion of the work together. Breakout rooms are an effective online solution that do not require participants to be geographically located together (Dodds, 2019).

2.3.1.10 Action learning

This presents a group with a real problem and then expects them to find a solution. Once completed, the group will communicate the solution through an action plan and then hold their team responsible for executing that plan.

Organisations use this method of learning to solve critical real-life problems, develop their employees, build high-performing teams and transform the working environment (Payne, 2016).

2.3.2 THE IMPORTANCE OF E-LEARNING

Attending a good university can open up a world of opportunity for a young person. These opportunities can lead to the growth and development of an economy (Mungania, 2014). Many people are not fortunate enough to be granted these opportunities. In countries like South Africa, a good education is not easily available and there are insufficient places for the majority of students who need a good-quality education (Renée, 2015).

In many countries, the general inflation of consumer items, petrol and medical care is making it difficult for households to afford basic consumer commodities. This, in turn, is increasing the pressure on individuals to upskill themselves through quality education or to further their current education to meet the increasing cost of living (Groves, 2016). Employees of many organisations have a strong desire to progress within their organisation's hierarchy. These individuals aim for promotions each year in the hope that their salaries and other forms of compensation will improve. Employees require ample opportunities to learn and upskill to achieve these goals.

The demand for high-quality education is becoming possible in an e-learning, online environment (Katkalo, 2019), and the Covid-19 pandemic forced learning institutions of all sizes to upskill individuals from home (Benwell, 2021). Within small- to large-scale enterprises, employees from all industries and educational facilities are able to make use of online learning opportunities (Renu, 2021).

Employee training that once took place as face-to-face, physical training in a classroom environment is now being completed online. A time of crisis therefore provided a test for humanity to move their potential for learning and skills development online. The pandemic has also highlighted the limitations of online learning, i.e. the prerequisite of individuals with digital skills, computer hardware and a connection to a secure internet line (Benwell, 2021).

2.3.3 E-LEARNING IN THE ORGANISATION

Connectivity, computer hardware and the internet are now an everyday part of society. So is online learning. In today's world, employees increasingly expect to be able to access their training and knowledge content in their own time (Chen, 2013). The main objective for implementing an e-learning solution is for the organisation to deliver content frequently and easily, and to enhance its quality of learning and training through online tools. This is done by meeting the learning style and needs of individuals, improving the effectiveness and efficiency of learning processes, improving user accessibility, and time and location flexibility to engage employees in the learning process (Yaari, 2019). If organisations have not yet implemented e-learning or have attempted, but failed, they need to try alternative approaches to taking their knowledge, skills and training within the organisation and implementing it in a way in which employees across the organisation will have access to the information to help both themselves and the organisation to grow (Crider, 2020).

Using the right technology for the correct content is important for making technology-based training worthwhile. A good training plan and understanding learning perceptions are significant in capitalising on the use of technology in training. E-learning refers to using software solutions and/or other means of technology to present any form of classroom training online. Online learning is seen more frequently in the corporate environment as it offers a wide range of access to material, is easier to access and saves on costs (Alharbi, 2016). Training, knowledge transfer and education are likely to continue to increase with the adoption of some form of technology. The Association for Talent Development (ATD) has stated that nearly 30% of learning hours are entirely technology-based. This is favoured by employees under 30 years of age (Crider, 2020). Online training is seen as a way to overcome problems such as low usage rates and the disadvantages of traditional learning methods. In general, if learners believe that training will be useful and simple to use, they are more likely to enrol and complete online courses (Ellis, 2014). E-learning has become particularly useful for organisations. What is known as the flipped classroom is a new model where employees meet facilitators for a one-on-one question session only after completing their e-learning module. The time spent on the face-to-face session is then devoted to hands-on activities, questions, answers and project work (Renée, 2015).

Employees are encouraged to enrol for specific courses offered via massive open online courses (MOOCs), which are the most recent versions of an e-learning platform offered by educational institutes. Hundreds of facilitators use different types of content to make their learning material accessible to learners across the globe (Silverman & Hoyos, 2018). In addition to this, many large employers are using interactive television to present classroom sessions. This medium enables a facilitator in one location to view and respond to an audience in various locations. With a completely configured and readily available system, employees will be able to enrol for courses from anywhere in the world. Online learning is generally defined as the use of internet and computer technologies that deliver an extensive array of explanations and solutions to allow learning and improve the learner's overall growth and performance (Yaari, 2019). Organisations can nurture the skills of their employees by transitioning to online learning.

Attributes and skills that are developed when organisations transition to e-learning include the following:

- Cognitive attributes that involve comprehension and knowledge, and the ability to follow instructions and apply methods to various scenarios to resolve problems.
- Interpersonal attributes that are involved in presenting, active listening and negotiating.
- Psychomotor attributes that involve the acquisition of movement and physical perception (Silverman & Hoyos, 2018).
- Time management skills, which are developed as the employee is required to effectively manage assignments, classroom sessions, deadlines and corporate meetings.
- Confidence in technical abilities, which is improved with hands-on experience in numerous types of technology.
- Self-motivation and personal drive, which are improved as employees are required to schedule their own time to study (Renu, 2021).

Online learning is generally adopted by organisations when there is a large amount of learning material that must be delivered to a big group of individuals who are located at various locations or who have restricted mobility (Luismang, 2016). E-learning adopts three forms of online learning methods: synchronous e-learning (a real-time method that includes mediums like chat/IM, video/audio conferences or live webcasting), asynchronous e-learning (a time-dependent method that includes online courses, emails, discussion forums and blogs) and blended e-learning (a mixture of both synchronous and asynchronous methods (O'Driscoll, 2016).

The quality of an e-learning course delivered by an organisation is generally enhanced by creating good learner-centred content through the use of interactive portals, animated user interfaces and engaging game-based technologies (which all add to the learning experience). Companies often create recorded lectures, upload PowerPoint slides or provide their employees with electronic copies of PDF textbooks to read. Organisations can benefit from the granularity and proper segmentation of e-learning courses (Mullins, 2016).

One's attention span lasts anywhere from 30 to 45 minutes before one starts to lose focus and become prone to distraction. With e-learning, instead of having to be present in a physical office for long periods of time, employees can attend online training sessions for shorter segments of time from any location. Segments are broken up into 15-minute video lectures and multiple assignments (which are short in duration). These keep the user focused and intrigued. However, this depends on an individual's experience.

Individuals with more work experience show stronger signs of focus and can adapt to technological changes at a faster rate (Mullins, 2016). A five-hour e-learning course can be divided into separate modules that are convenient for both the organisation and its employees. Organisations that adopt e-learning have the liberty of enabling their employees to learn 30 minutes of content that can be successfully processed and then allow them to engage in interactive activities for practice before continuing to another segment. The interactivity a learner experiences through e-learning assists in understanding information and allows them to rewatch any courses or retake any assignments to continuously improve their understanding. The learner is required to use their keyboard and mouse to select the correct answers or perform practical tutorials on the material learnt. As the employee is engaging with both the computer and the learning material, they are able process the information in a practical sense (Olds, 2018).

Corporate online learning differs from academic online learning. In academic online learning – and mainly pre-Covid-19 – students were taken through a structured and knowledge-driven approach to learning. In corporate environments, a large part of e-learning involves training and practical scenarios so that the employee can apply the knowledge to the problems they face daily. Corporate training is assigned to the employee with the intent of them being able to deploy the skills immediately within the business environment (Sheth et al., 2015).

Due to this, the organisation adopts a learning framework that allows the company to adhere to training and design steps.

A common learning design framework used by organisations and learning institutions is the ADDIE model of instructional design. This entails the five stages of analysis, design, development, implementation and evaluation (ADDIE) (Sutton, 2018).

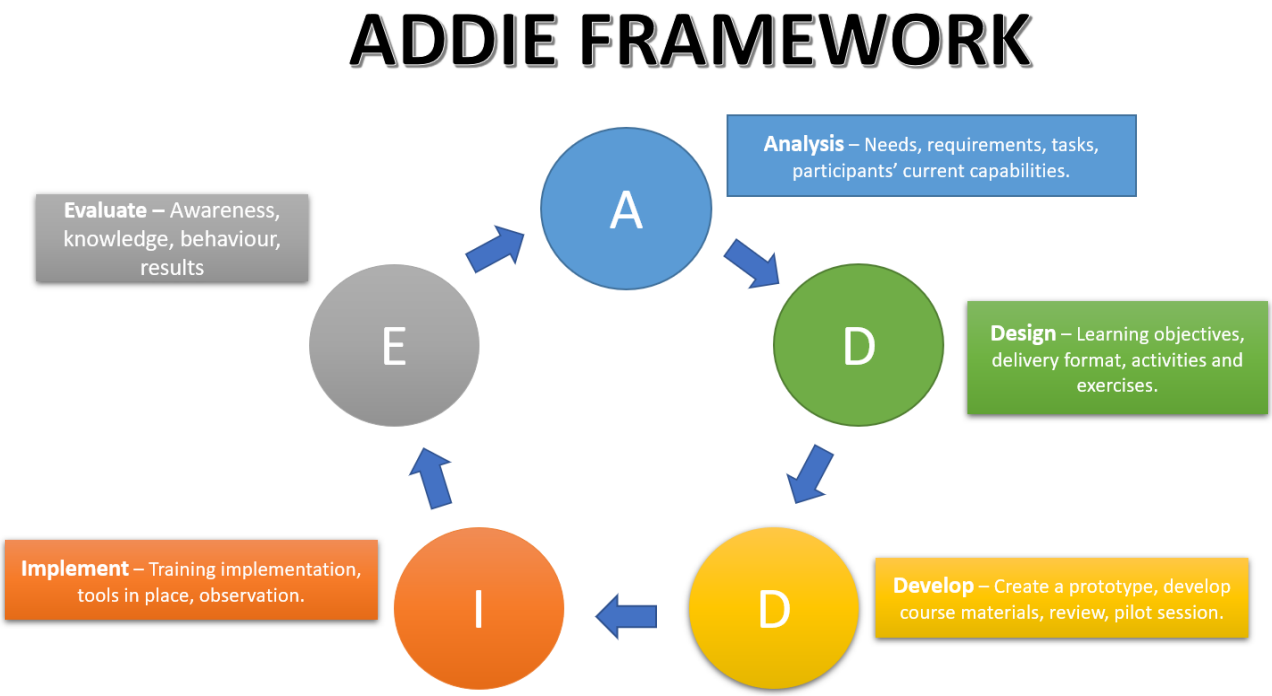

Figure 2.4: The ADDIE Framework (Sutton, 2018)

Figure 2.4 depicts the ADDIE model. This training model has been used for many years and has been used to structure the correct content for developing an organisation. Throughout the study, we will determine how the selected organisation has adhered to the use of the ADDIE model.

The first phase of the ADDIE model (analysis) states that a training analysis must be performed at the beginning of any development to determine what the training would be required for. Is the training required to fill a void in the area of knowledge and skills and would online learning be the resolution for delivering this training? The second phase (design) formulates the set of learning objectives and defines the order in which the objectives would need to be reached (Ellis, 2014). The outcome of the design phase defines the strategies and choice of instructional material in a design document that can be used as reference when building the material and course.

The next phase (development) is where the e-learning content is put together by using three development stages. Content development involves collecting the required knowledge and listing newly identified details (Mullins, 2016). Storyboard development involves combining the media elements with the structural elements by creating a storyboard. This is a file that describes the various pieces of the final product, including text, images, assessment tests, videos and interactions. Courseware development involves creating the interactive components, formats and media to cater to web delivery, CD-ROM and other platforms that learners can access (Chipato, 2016). The fourth stage (implementation) is where the courseware is uploaded to the cloud, installed on a server or written to a USB/disk for learners to access. The final phase (evaluation) is where the outcomes of the teaching are evaluated. The learner's reactions, awareness, skills, achievements and impact on projects are evaluated to assess the impact of the training (Sutton, 2018). The ADDIE Framework will be tied to the study to distinguish if the organisation has utilised this model or any of the phases of the model. Since the framework is a common training tool, it is likely that the same or similar principles were established in the organisation’s employee training.

Organisations can make e-learning an engaging and transformational experience by multiplying the different types of media to transmit the organisation's knowledge and information to its employee base. One of the main ways that organisations are doing this is by creating "talking-head" videos that provide e-learning with the classroom feeling that most people are used to. In talking-head videos, the trainer or facilitator stands in front of a camera and presents the training material, creating the human contact that keeps employees engaged (Adams, 2015). Several other common e-learning methods used by organisations include demo videos, voice-over slides, screen casting, discussions areas, online quizzes and examinations, polls/surveys and gamification (Clark, 2017). These are just a few ways in which software vendors are continuously innovating the way education and knowledge can be transferred from the source to the learner.

E-learning or online learning innovations are recommended for organisations that want to remain competitive in the business industry and on a global scale. E-learning training methods provide consistency as they give organisations the confidence that their employee base is receiving the same, standardised level of training on a global scale (O’Driscoll, 2016). Organisations that adopt e-learning can train new hires faster, which reduces the resources required to coordinate training sessions.

New employees are welcomed into the organisation and are automatically assigned a set number of video recordings, courses and assessments to complete, based on their new job role. Automatically assigning learning content to employees allows the business and its stakeholders to free up their time, enabling them to focus on other tasks that require their attention. Furthermore, the e-learning platform allows employees the ability to increase their performance through the learning assessments, badges and rewards provided. The employees are motivated to earn more badges, complete more courses and certify themselves in more modules, which ultimately leads to a return on investment for both the individual and the organisation (Dodds, 2019).

The accessibility that e-learning brings to users is beneficial to organisations. Organisations often have an employee base that is spread between departments, cities and countries. Ensuring that employees can access the same learning content across all locations can be challenging (Katkalo, 2019). E-learning removes the limitation of facilitators having to be present in specific locations. It removes the risk of not having enough employees available at the physical training session to make it a worthwhile investment, and it cuts out the waiting time that employees face when registering for a course (Romi et al., 2017). By having e-learning set up on a cloud-based platform, the organisation can ensure that, from the day a new employee starts, they will be able to access all the training they require from multiple devices. Employees from any geographical location will be able to access the training in either an asynchronous (self-directed time by the employee) or synchronous manner. Specific starting dates can be set for specific employees, job roles or departments, or the entire organisation can take the same training programme at the same time, regardless of how many users are present (Katkalo, 2019). Compared to traditional learning, this is seen as an important way of cutting costs, while providing continuous development to the entire employee base (Romi et al., 2017).

From a compliance perspective, e-learning provides organisations with many benefits. Where employees must go through a specific induction, safety or licensed-based training that requires them to have prerequisite training, accreditations or a specific number of hours completed, not only can the organisation ensure that the employee follows the correct path for their development, but also that the employees are monitored (Yaari, 2019). Automated reminders, approvals and automatic access to training will allow management to keep track and monitor their employees' development progress and deadlines.

Management can determine whether their employees have logged in for the training session, whether they have completed the training session, what answers the employees provided and that set timelines are in place as to when and how their training must be completed (Luismang, 2016).

E-learning offers organisations standardisation since it ensures that employees across the organisation are accessing the same learning material and training. This ensures that all new employees going into the business have been given the same starting point with the same foundational knowledge and are granted the same level of expertise all round (Shim et al., 2014). It is often found that some employees fall behind in their performance and face issues that arise during their everyday business practice. By recording the training programme and ensuring that all the training material is in place, the organisation can ensure that learners are not affected by human error, bias, moods and other environmental factors. Organisations that have adopted e-learning are ensuring that everyone who is part of their employee base receives the same accessibility, has equal access and benefits from the same experience. This, in turn, is better for overall business and learner development (Noel, 2018).

The transition to e-learning offers organisations the phenomenon of lifelong learning. For many employees, it can be a challenge to grow or move up in the ranks of the company. This can be due to a low number of appraisals, limited positions, lack of confidence to progress into higher roles or the fact that they have not built relationships within the organisation to see their desires and aspirations be acknowledged. E-learning plays a role in this as it can take each job role and construct a career progression pathway for each of those job roles, which will involve compulsory and refresher training, but also "desire" training (Yen, 2017). Desire training is assembled to help employees advance to higher positions and assist them with specialised pathways as their careers progress. These pathways can be made automatic; for example, when employees complete the first training path, they will automatically be directed to the next training path. This eliminates the waiting period between appraisals and the human error that can cause barriers to an employee's advancement. It serves as a great opportunity for employees to grow and develop, which is one of the things that employees expect from their employer, yet is a limitation of traditional learning methods in organisations (Mohammed, 2017).

Transitioning to e-learning requires management to ensure that continuous development is in place for the design of an e-learning system. The stakeholders involved need to break up and allocate different learning materials, perform the curriculum design, and film and upload the content onto an online platform. Once this has been done properly, these tasks seldom need to be performed again (Mungania, 2014). Depending on the learning solution implemented and its regular maintenance, this confirms that online learning is a fairly cost-effective learning method that will maximise an organisation's return on investment. It cuts out the expenses incurred with traditional learning such as hiring a trainer, securing a venue and any other relate expenses such as accommodation and transportation (Noel, 2018).

Organisations can bring together different learning methods to complement one another and can have different mediums of delivery, all within one hub, for the succession of knowledge (Rome, 2016). This creates a learning culture within an organisation, which creates a business environment that encourages the sharing of knowledge. Organisations generally face the issue of their most talented members resigning, taking their knowledge and skills with them. By using technology to create a sharing environment, a company will ensure that the knowledge is passed on throughout the organisation at all levels (Ware, 2013). This is central to this study since it evaluates the transition to e-learning and whether the time and investment made had a satisfactory impact on the organisation’s employees.

2.3.4 E-LEARNING SOFTWARE

2.3.4.1 Common e-learning software

There are two types of e-learning software: authoring software and learning management systems (LMSs). These two types of software are both used in specific ways to assist learners with online learning (Strother, 2017).

Authoring e-learning software

Authoring e-learning software (the e-learning authoring tool) is a software program that enables users to create e-learning content. The software is generally slide-based and caters for inserting text and media like videos, audio and graphics (Olds, 2018).

Organisations can choose between different standards of e-learning. These include the industry accepted SCORM or Tin Can application programming interface (API) formats. SCORM is an old and simple standard that works well. However, the industry has seen the Tin Can standard deliver more reliable courses on a wider range of devices and browsers, obtain richer data and future-proof course content (Stavan, 2017). Both standards allow learners to launch courses, bookmark, complete and track progress. Authoring software can be further divided into standalone desktop applications and web applications. The standalone software is installed onto a computer and is ideal for building complex e-learning courses and projects using nonlinear (branched) navigation. The web application authoring software is hosted on a server and is accessed through the internet, which offers easy-to-share content and the ability to collaborate with colleagues (Thujudeen, 2017).

Learning management systems

A learning management system is a learning application for the documentation, tracking, administration, delivery and reporting of educational programmes and corporate e-learning courses. A leaning management system is used mostly in regulated industries such as financial services, recruitment, medical, engineering, manufacturing and educational services (Alqahtani, 2016). Educational institutions adopt learning management systems to support and enhance classroom training by providing online courses to a large group of students. The role of a well-designed learning management system is to automate and centralise administration, use self-guided and self-service functionalities, gather material and present content, combine training activities on an online platform, support transferability and portability, customise the learning content, and enable the reuse of knowledge (O'Driscoll, 2016). Hosting e-learning on an on-premise server will result in a limitation to the speed, capacity and volume of visits to the platform, whereas with cloud-based e-learning, there is no limit to how many users can log into the platform simultaneously without affecting the speed or the learning experience (Romi et al., 2017).

Edmodo is a cloud-based learning management system that allows for learning through content sharing, collaboration, classroom management and communication tools. Facilitators can produce content and deploy tests, assignments and quizzes to improve and consolidate their classroom learning environments (Mungania, 2014).

The modular object-oriented dynamic learning environment (Moodle) is an online learning management system (developed by Martin Dougniamas) that provides trainers with a free open-source platform for online learning that is customisable, secure and scalable with a large number of available activities. Moodle suits organisations that do not wish to spend large amounts of money on learning management systems, but still want a system that offers role flexibility, comprehensive report generation, internet hosting and regular updates (Renée, 2015).

Blackboard is a virtual student hub that contains free services that provide access to grades, online course materials, organisations and accounts (Chen, 2013).

Skillport is a cloud-based, modern learning management system that provides an advanced learning experience by connecting collaborative learning with informal and formal training. It is a flexible, low maintenance and low-cost LMS (McCullough, 2016).

Among these LMS options, 38% of organisations that use an LMS are still considering a system change. Adopting incorrect or less than optimal software can cause more problems than solutions for the organisation. In addition, changing an LMS is expensive, cumbersome and requires the organisation to recreate all the courses and learner records (Adams, 2019). Choosing the correct LMS is important for preventing extra expenditure for the organisation. Management must identify the key factors of LMS solutions and obtain the assistance of consulting firms to ensure that they make the best decision for their organisation. They must look for an LMS that enables easy, online course creation, where courses can be customised based on their employee base. For example, a course could be customised for the sales department, whereas another course could be customised for the medical team. Another key feature that management should identify is seamless integration with the organisation's most-used systems and tools. If an LMS can integrate into important systems such as SAP, Salesforce, Microsoft applications or any other tool, it can simplify many of the business processes in the workplace (McCullough, 2016). An organisation must consider how much control the LMS offers it over settings, reminders, alerts, assignments and deadlines. Learning material and learners should be managed together in a centralised classroom where both facilitators and employees can access the content with ease – anytime, anywhere (Alqahtani, 2016).

2.3.4.2 The SAP *SuccessFactors* LMS

Every organisation wants to develop employee skills and leaders who will improve their organisational strength. However, many organisations are struggling to create a culture of ongoing learning to aid this. The SAP *SuccessFactors* LMS is an online solution that assists in transitioning organisations with this and more. With SAPSFL, organisations can fuel employee growth, reduce risk and develop a pipeline of leaders to improve business outcomes (Alqahtani, 2016). The SAPSFL module is ranked as one of the leading cloud human capital management (HCM) solutions built for large corporations. SAP has created a modern, personal and measurable development system to help employees enhance their careers, focus on weaknesses and to give the company a new culture of learning. Learning becomes continuous for employees as the system provides personalised learning recommendations for each user, uses machine learning to surface relevant content and empowers employees to find new ways to further their on-the-job learning (Katkalo, 2019). The SAPSFL provides an open content network where management has the flexibility to acquire the right external content for the organisation in an inexpensive, convenient and easy-to-scale manner. When learning groups are associated with courses, it gives learners the ability to find course content, engage in discussions, upload content and collaborate effectively (Alqahtani, 2016).

Integration allows the system to leverage with other SAP and *SuccessFactors* systems, giving employees instant access to learning content, goal plans and the ability to search for training that supports specific development goals. The communication between the SAP learning solution and external training providers is realised using SAP Process Integration (SAP PI) (Katkalo, 2019). The analytics and reporting functionality will help an organisation understand how, where and to whom the training is delivered. Beyond developing employees, the organisation can reduce its risk with compliance-related training, which includes automated learning assignments and validated learning environments for new employees through all industries. Organisations adopting SAP Learning are developing a culture of continuous learning across the business and beyond, while closing skill gaps and increasing employee engagement (Ellis, 2014).

SAP *SuccessFactors* offers organisations many capabilities, such as managing user data, passwords and notifications. The system provides an advanced level of security where user

permissions and privileges are assigned specifically to the employee. Additional features include user assignments, scheduling, enrolment, resource management, access to online content, online training and evaluation, training record-keeping, cost tracking, revenue management and SAP Jam (an enterprise collaboration tool that focuses on analysing data, planning meetings and social media content) (Allen, 2014). The SAP *SuccessFactors* LMS aims to manage the entire learning life cycle of an employee as they progress through their career. The system allows users to search for learning material in a library to self-assign. The supervisor of the system can assign learning courses for the employee to complete as part of their learning plan, and the employee's learning history will be recorded as they progress by completing their learning courses (O'Driscoll, 2016).

SAPSFL offers organisations a built-in content management system (CMS) called Open Content Network (OCN). This allows organisations to offer employees the ability to access learning material and content through MOOCs (Renée, 2015). The OCN partners with Coursera, Lynda.com, Open Sesame, Udacity, edX, Harvard Manage Mentor and OpenHPI to provide employees with the highest level of learning material. In addition to CMS, the system offers a knowledge portal that delivers an outline of the available course options, tailored and personalised to the learners' roles (Mungania, 2014).

The features of the *SuccessFactors* LMS include the creation of courses since the web-based courses and content will support an employee's performance goals, career and succession plans, compliance objectives and organisational development. The system's employee progress tracker will allow for the creation and assignment of examinations, assessments and certifications at each stage of the learning process (Adams, 2010). Organisations will be able to gain insights with the analytics tool for comprehensive metrics to measure the effectiveness and value of the user's training and then make improved decisions based on those metrics. Management will be able to identify which courses can assist users in their development plans and once completed, will be able to provide the user with course ratings and feedback (Adams, 2015).

Figure 2.5: SAP *SuccessFactors* learning capabilities (Adams, 2015)

Figure 2.5 lists the SAPSFL learning capabilities. These useful features and functionalities are made available to employees after the organisation has fully implemented the e-learning solution.

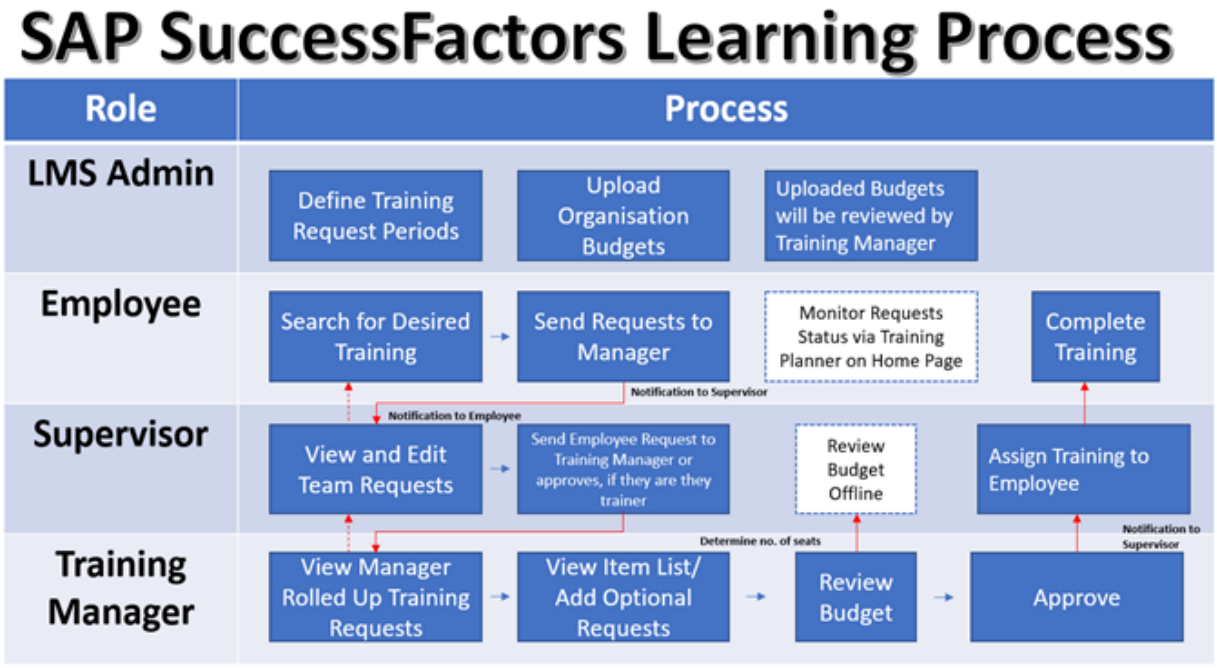

Figure 2.6: SAP *SuccessFactors Learning* training process (Chen, 2016)

Figure 2.6 describes the process of SAPSFL training. This process assists organisations to forecast their training dates, plan the costs, involved as well as assign specific training or material to employees. The training process is comprehensive and provides organisations with the capability to manage their training budgets. The solution ensures the involvement of all key members or roles in the full learning process.

2.3.5 AN ORGANISATION'S TYPICAL TRANSITION FROM TRADITIONAL LEARNING TO E-LEARNING

One will often hear the phrase "our staff is our biggest asset". Unfortunately, many CEOs believe that their greatest resource is capital and financial gain. This statement might have been true in the early 1990s, but the definition of an asset has changed over time. This money-focused mindset has been the downfall of many large enterprises, such as Toys R Us, Nokia and Kodak. Kodak had high value in assets, but was unsuccessful in adapting to the changes in technology, which essentially caused a decrease in its market share (Dodds, 2019). What is learnt from this is that employers must be adaptable and must seek new and innovative ways to stay ahead of their competitors. This starts with investing in their people. As stated in a study by Bersin of Deloitte, "organisations who embrace the development of their people as a culture will significantly outperform their competition".

The creator of the global brand Virgin, Richard Branson, said: "If you take care of your employees, they will take care of your business". Development is an area that organisations often neglect. According to a study by the University of Virginia in 2015, 70% of employees have not been provided with any training by their company for four years (Mohammed, 2017). When organisations invest in their employees, they create a learning environment, and attract and retain the best talent. The main obstacles that organisations fear when adopting a learning environment include budget, decentralisation, manual compliance that leads to risk, excessive administration tasks and a lack of talent development (Muhire, 2014).

There are many reasons why organisations would want their employees to transition from traditional learning methods to e-learning. Some of these are that organisations intend to minimise the instructor's role and have their employees guide themselves around their course material (Hopkins, 2013). Instead of having employees meet at specific times for training sessions, they want their employees to connect to their material at any time and location via the internet, which will, in turn, allow them to upskill themselves faster and reach deadlines on time (Sutton, 2018). Organisations also want the effectiveness of their training to increase. In general, where learners could get away with not contributing to classroom-like sessions, an e-learning course will force each employee to contribute and apply their acquired knowledge before they can proceed to the next level. It is difficult for facilitators to answer questions in large training sessions as they do not have the time to reach each learner, whereas with e-learning, the user can access open forums and blogs that allow employees to find answers to their questions. Feedback sessions may also be limited in a classroom, whereas with e-learning feedback is focused on each individual employee, based on recorded performance and analytics reports (Thujudeen, 2017). There are several ways employees will be required to adapt to online learning techniques. They will have to communicate with their instructor if they are unfamiliar with the e-learning environment and they will need to ensure that they have the necessary tools, equipment and internet connectivity for a smooth online connection (Mohammed, 2017). Most importantly, employees will have to manage their time wisely and will be responsible for their own development and the management of their progress (Noel, 2018).

For an organisation to transition from traditional learning to e-learning, it has to look at the major stages of getting their training online and into an e-learning format (Alharbi, 2016). Organisations might think that training starts with the training needs analysis, but it needs to

start at a higher level since the organisation must ensure that all training delivered to its employees is aligned with the organisation's strategic objectives. The organisation cannot only look at the skills their employees need, but also at the skills required for their employees to help the entire company grow and reach its objectives (Kang, 2021). A workforce analysis must be conducted to make the company's e-learning and development team, learning department and staff understand where the business is heading and what goals it is trying to reach within the next one to five years. This will include the products and services the organisation wants to deliver, what market share it wants, what feedback it expects from clients and what financial targets it is trying to achieve. This will provide a clearer indication of what job roles the organisation requires and the type of skills that would have to be put in place and used (O'Driscoll, 2016).

The organisation then moves into the training and needs analysis phase, where it looks at what training is compulsory for its employees, and what training is required for each job role specifically. From there, the organisation can begin gathering and creating content for its training programmes, identifying gaps in the process (Renée, 2015). The training analysis will define which skills, knowledge and sets of competencies are readily available in the organisation and which are required to enable its people to do their best work and advance in the organisation (Renu, 2021).

The organisation must then evaluate its existing content and break that down into smaller segments. The approach with e-learning is to keep one key point per video or session. That key point should preferably be delivered within a five- to ten-minute slot as the learner needs to be able to process the information before they are distracted or become disinterested in the content (Noel, 2018).

Once the content has been broken down, the e-learning department must begin contextualising it and eliminating duplication. The principles of adult learning require organisations to ensure that the training is being made as relevant as possible to each of the individual job roles (Allen, 2014). The more the organisation can customise the learning experience to each employee, the more likely they will be to engage with that learning topic (Rome, 2015).

The organisation must identify its different types of employees (learners) and the different types of mediums or content that can be added (Alqahtani, 2016). It must also consider

adding interactive, simulated, practical and on-the-job types of training that involve several interactive elements in transitioning to e-learning. The organisation must then consider assessing, tracking and monitoring their employee's development (McCullough, 2016). The organisation must ensure that it can analyse whether its newly implemented online learning system is effective and if it needs to be improved or changed in any way. This is important to gauge if its employees are increasing their competence to a level where they can operate autonomously within the organisation (Olds, 2018).

There is often a level of pushback when one tries to transition to anything new in a corporate setting. Some employees will be attached to the older processes that have always been used. Therefore, it is important to have a support structure in place to act as an advocate for the e-learning system when it is introduced. This will help employees influence others and increase employee engagement. Once key people are comfortable with the transition, the number of followers who adopt the e-learning system will increase (Alqahtani, 2016).

Once the organisation is satisfied with the learning curriculum that it set up, professional film teams and content creators can do the filming, content creation and editing where needed. Once this has been done, the learning department will create or choose an online learning platform that suits its organisation's needs, unless one already exists (Crider, 2020), and upload the content onto the learning platform.

Automated reminders will be configured into the system to remind employees to log in to their training and the relevant training material will automatically be assigned to new joiners. The reminders and reporting capabilities will make sure that completion rates are kept high and will ensure that employees are continuously engaging with the LMS (Stavan, 2017).

One of the most important aspects of an organisation’s transition from traditional learning to e-learning is the implementation of the e-learning system itself (Stagars, 2016). There should be discussions between the organisation’s stakeholders and the implementation team to outline the role players required for the system implementation. The discussions will establish the implementation plan, the project methodology to be followed, budget, timelines and deadlines. The duration of the SAPSFL implementation varies depending on the size of the organisation, and the number of user accounts and third-party software programs that the organisation intends to integrate with.

Once the implementation commences, it will consist of several requirements-gathering sessions before the implementation team can begin its configuration and build of the LMS (Benwell, 2021). Once testing and playbacks to the organisation's business have been completed, the data migration will take place, which will transfer all the learning courses, learning data and employee data to the new SAPSFL system. A trial run of the SAPSFL system is performed to test its functionality with a group of the organisation's users. Any issues from this process are documented and rectified in the live solution. The organisation's employee base is now ready to move to the new e-learning system (Allen, 2014).

2.3.6 CHALLENGES ORGANISATIONS FACE WHEN ADOPTING E-LEARNING

Despite its many benefits, e-learning is not always received with a warm welcome by an organisation's employees. Organisations must keep up with ever-changing technologies to stay up to date with their competitors, and may be forced to venture into new product lines or explore new markets (Mohammed, 2017). Many organisations have stated that online learning may not be an effective learning solution because online feedback is limited. These organisations argue that a learner is unable to solve any issues they face during dedicated office hours and the lack of feedback can decrease their motivation. They also argue that online learning requires self-motivation and time management skills, and that a lack of motivation among employees is the primary reason why e-learning fails to ensure a positive return on investment (Benwell, 2021).

Employees' knowledge and skills are important in achieving a positive return on investment and e-learning has been helping keep employees up to date with the skills they need to push the organisation forward. Yet, there are still barriers to the adoption of e-learning.

The abilities of the LMS are often not understood by employees, which may lead to doubt and a resistance to engage with the learning content. If organisations understand where these challenges come from, it will be easier for them to overcome them (Olds, 2016). Change is often difficult to accept, and changing an organisation's learning methods does not alter this. Individuals are often not aware of the benefits of online learning (Noel, 2018). Employees are not used to the self-initiated technique of learning and are reliant on a traditional classroom setting, whereby a facilitator will initiate the learning process. It is therefore better to produce an example or prototype of the LMS and have end-users access it before the course is introduced to the organisation (Chen, 2013).

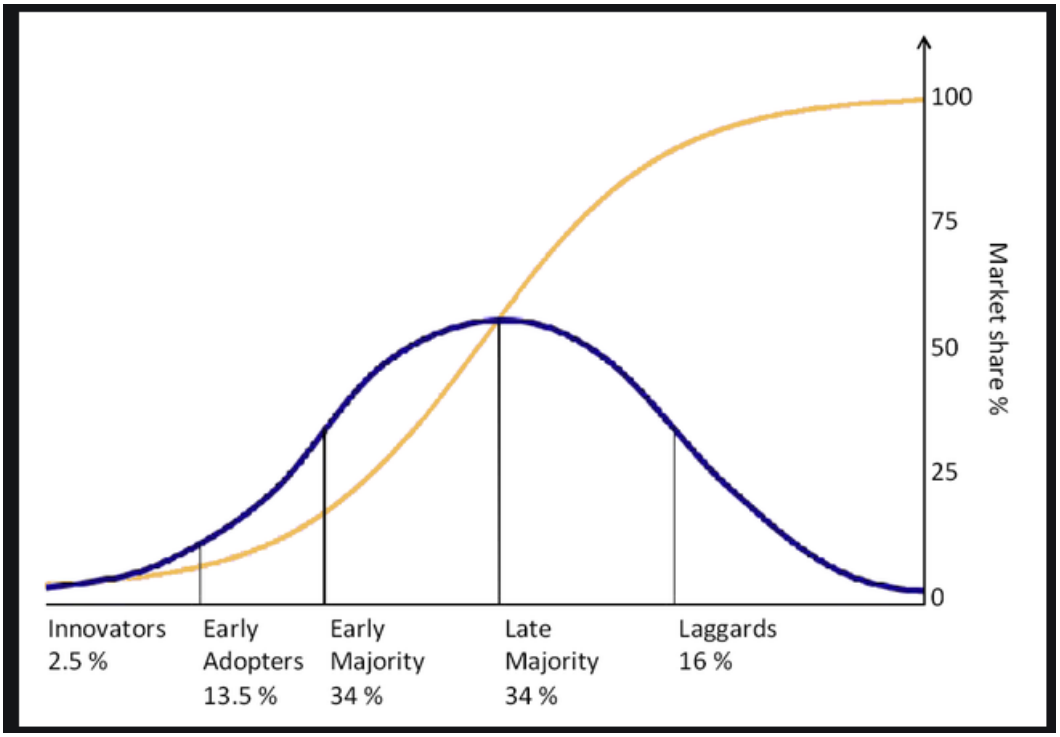

Figure 2.7: The adoption of e-learning (Rogers, 2016)

Figure 2.7 depicts a graph by Rogers (2016) analysing the adoption of e-learning. Individuals adopt newly introduced technologies at different rates. The speed of adoption can be planned as a normal distribution with the main factor being the adoptee's psychological attitude to adopting new concepts. As seen in Figure 2.7, innovators make up only 2.5% of people. They are seen as the risk-takers and are generally the youngest of the group (Rogers, 2016). These individuals are interested in trying new ideas, even if there is a possibility of failure. The early adopters make up 13.5% of people and are found to be selective with regard to the technologies they adopt. They are also the ones who reduce other uncertainties about innovations once using the technology (McCullough, 2016). The early majority makes up 34% of the population and is more cautious before adopting new technologies. They are prepared to use new technology if they are shown how, it will benefit their lives. The late majority, who make up 34% of the population, adopt technology through peer pressure, emerging norms or economic necessity (McCullough, 2016). The late majority believes that most of the uncertainty and doubt around the new introduction must be fixed before they will accept it. Laggards make up 16% of the population and prefer to use traditional methods by choosing their adoption largely based on previous experience. Laggards are not likely to take risks on new designs or ideas (Allen, 2014).

As seen most in the hospitality industry, the face-to-face culture is an element of human interaction. For example, when booking family holidays many people prefer to talk to a person rather than performing this task online (Chipato, 2016). Similarly, in manufacturing organisations, most of the employees are blue-collar workers who learn a lot of their skills on the job instead of seated in front of a computer (Alqahtani, 2016).

If the learning material or courses do not influence the employees' jobs or careers, it is unlikely that they will take the course. Learning material must be created to focus on obtaining certain goals, but at the same time must be engaging so as to keep the learner interested in the topic (Noel, 2018). A poorly designed LMS will find less employee adoption and more resistance to the use of the system. Therefore, it is recommended that organisations hire a team of professional software implementors who will work alongside the subject matter experts to build a robust system with meaningful learning material (Littlejohn, 2017).

Employees are often expected to complete learning in their personal time, instead of during the workday. If they are not interested in the course material or do not see a benefit, it is unlikely that they will dedicate the time required to complete the course. Another discouraging factor for e-learning programmes is when employees find it difficult to navigate the LMS. Depending on the employee's level of computer literacy and the amount of technical assistance available, they can be dissuaded from completing a course (Mungania, 2014). Organisations should provide immediate technical assistance when employees encounter technical problems, and the user interface should be intuitive and user-friendly (O'Driscoll, 2016).

It is advisable for organisations to tackle employee resistance by first explaining the benefits of transitioning to e-learning and helping employees to understand it. Incorporating a rewards programme for employees will motivate them to participate in the e-learning process and will make learners feel recognised for their achievements (Yaari, 2019). By building the curiosity of the employee, an organisation can decrease the level of resistance. It can plan a launch event for implementing e-learning, which can increase employees' curiosity. The organisation needs to conduct surveys and listen to the feedback of employees on the current e-learning system, since it makes employees feel recognised, assists them in taking ownership of the learning and helps the organisation improve on the gaps found in the system (Crider, 2020).

Employees should be mentored when shifting from a traditional learning culture to e-learning. It is recommended that an organisation test-runs the e-learning within a group of target users and analyses the results to understand what difficulties those learners faced and how they can be overcome for a smooth transition (Ware, 2013).

There are further areas of improvement for e-learning platforms. The majority of e-learning platforms do not have a team of competent and skilled teachers to work hand-in-hand with the e-learning platform. No matter how advanced or based on self-study the online learning system may be, it is always recommended to have a team of skilled teachers who can put together course content according to the requirements of the employee or the department (Thuyuyen et al., 2017). Furthermore, the funding of online solutions requires large amounts of money, making this a luxury for large organisations. Small to medium enterprises should be able to implement e-learning just as efficiently without the extravagant costs involved. A solution to this would be for solution implementors and vendors such as SAP and Oracle to target the small- to medium-enterprise market space (Benwell, 2021).

Table 2.2: Summary of challenges faced by organisations when adopting e-learning

No.	Common challenge	Author/s
1.	Technology is ever-changing, which requires time and costs to keep an organisation up to date.	Chipato, 2016 McCullough, 2016
2.	Failure to keep up with changing technologies can see an organisation lose its competitive edge in the market.	Alqahtani, 2016
3.	Immediate feedback on progress is limited compared to face-to-face learning, causing a decline in employee development.	Chipato, 2016 Benwell, 2021 O'Driscoll, 2016
4.	E-learning requires self-motivation and time management skills from all employees.	Noel, 2018
5.	Lack of interest or reward among employees is the primary reason why e-learning fails to ensure a positive return on investment.	Noel, 2018 Littlejohn, 2017
6.	The e-learning system's functionalities are not often understood by employees, which may lead to doubt and the resistance to engage with the system.	Mungania, 2014 O'Driscoll, 2016
7.	Employees are used to traditional learning methods and there is often an unwillingness to adopt change.	Yaari, 2019

No.	Common challenge	Author/s
8.	Individuals are not aware of the benefits that online learning can bring to themselves and the organisation, hence do not use the online system to its full effect.	Alqahtani, 2016 Chipato, 2016
9.	Employees are reluctant to do self-initiated learning and are reliant on a traditional classroom setting whereby a facilitator would initiate their learning process.	Yaari, 2019 Crider, 2020
10.	Specific industries require face-to-face and on-the-job learning as an element of human interaction. For example, when booking family holidays, many travellers prefer to talk to a travel agent rather than making their booking online.	Ware, 2013
11.	Blue-collar workers like miners, drivers and construction workers require on-the-job training. There would be no real incentive for this group of employees to utilise e-learning training if they are not in an office environment.	Thuyuyen et al., 2017
12.	A poorly designed LMS that does not meet the requirements of the organisation will find less employee adoption and more resistance to use the system.	Benwell, 2021
13.	It is costly to purchase an e-learning solution and to hire a team of professional software implementors.	Yaari, 2019 Crider, 2020
14.	Employees are often expected to complete learning on their personal time instead of during the workday. If they are disinterested, preoccupied or distracted, it is unlikely that they will dedicate the time required to complete their courses.	O'Driscoll, 2016
15.	Lack of or insufficient training will result in the employee finding it difficult to navigate the LMS.	Mungania, 2014
16.	An employee's level of computer literacy will play a role as to how effectively they are able to navigate and utilise the e-learning system.	Benwell, 2021
17.	A poor user interface design and lack of technical support or assistance from the organisation can leave an employee feeling lost and wasting time, therefore not obtaining the full benefits that the e-learning solution has to offer.	Chipato, 2016
18.	The majority of e-learning platforms do not have a team of competent and skilled teachers to work hand-in-hand with the e-learning platform.	Crider, 2020

2.4 EXPERIENTIAL LEARNING CYCLE THEORY

Experiential learning cycle (ELC) theory shows the learning cycle of adopting a new learning method. The focus of this theory is experience, which is the main driving force in learning since knowledge is constructed through transformative reflection on one's experience (Baker et al., 2002). ELC theory is divided into two ways of gaining experience: concrete experience (apprehension) and abstract conceptualisation (comprehension).

The ELC theory is combined with two other methods of further transforming the experience so that learning is achieved: reflective observation (intention) and active experimentation (extension) (Lundqvist, 2016).

When these four methods are used together, they make up a four-stage learning cycle that learners go through during the experiential learning process (Figure 2.8). The four stages of experiential learning are used to create educational programmes that actively engage learners. This provides an alternative to the traditional model of information transmission (Lundqvist, 2016), and illustrates how the learner can "touch all the bases" (McLeod, 2017).

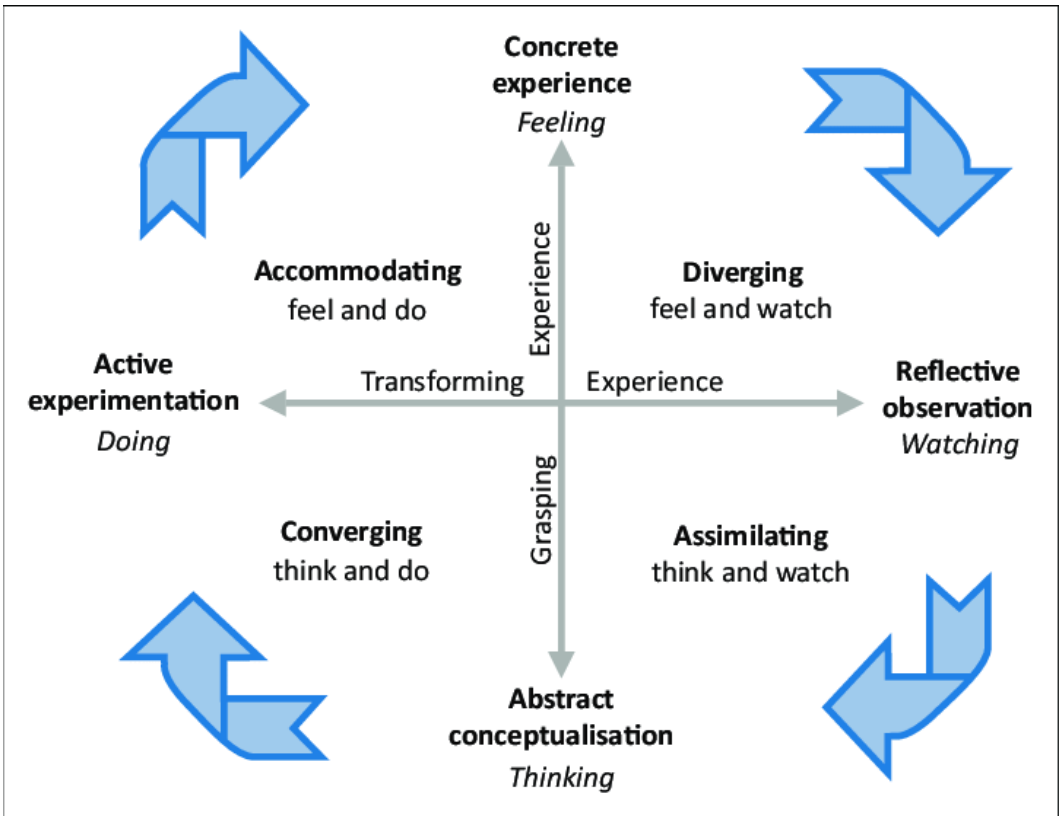

Figure 2.8: Kolb's learning cycle and experiential learning methods

The ELC theory uses the word “experiential” to emphasise the fact that the theory explains learning through experiences. By using this model, an organisation can create an improved training method for its employees. David Kolb published the experiential theory in 1984.

When applied to the transition of e-learning, employees follow the four steps of concrete experience (feeling), reflective observation (watching), abstract conceptualisation (thinking) and active experimentation (doing) (Baker et al., 2002).

The learning cycle is an endless process of exchange between a learner’s internal world and their external environment. For instructors, the learning cycle is about impression and expression. Learners are impressed with the knowledge necessary to live and work in the world today. Through coaching, the learner can express what they have learned in highly skilled ways (Akkiraju & Ivan, 2014). In a traditional learning environment, information transferred from the educator to the learner is known as the banking concept of education, as stated by Freire Paulo: “depositing” information into the minds of learners. In the learning cycle, information is received through concrete experience and abstract conceptualisation. This information is transformed by reflective observation and active experimentation (Paulo, 2008). For a learner, this cycle will not only repeat itself, but the cycle will evolve. For employees to initiate reflection in learning, they need to be stuck with a problem or struck by the strangeness of something that is outside of their usual experiences. This is known as pure experience (Curran et al., 2017).

A benefit of experiential theory is that the model can be entered at any of the above steps. The experiential theory identifies what type of learning a specific learner would prefer. This provides further information on the results of the study aiding the reasoning for the employee’s adoption of the e-learning system. The four different learning styles can be seen in Figure 2.9 as accommodating, diverging, assimilating and converging (Curran et al., 2017).

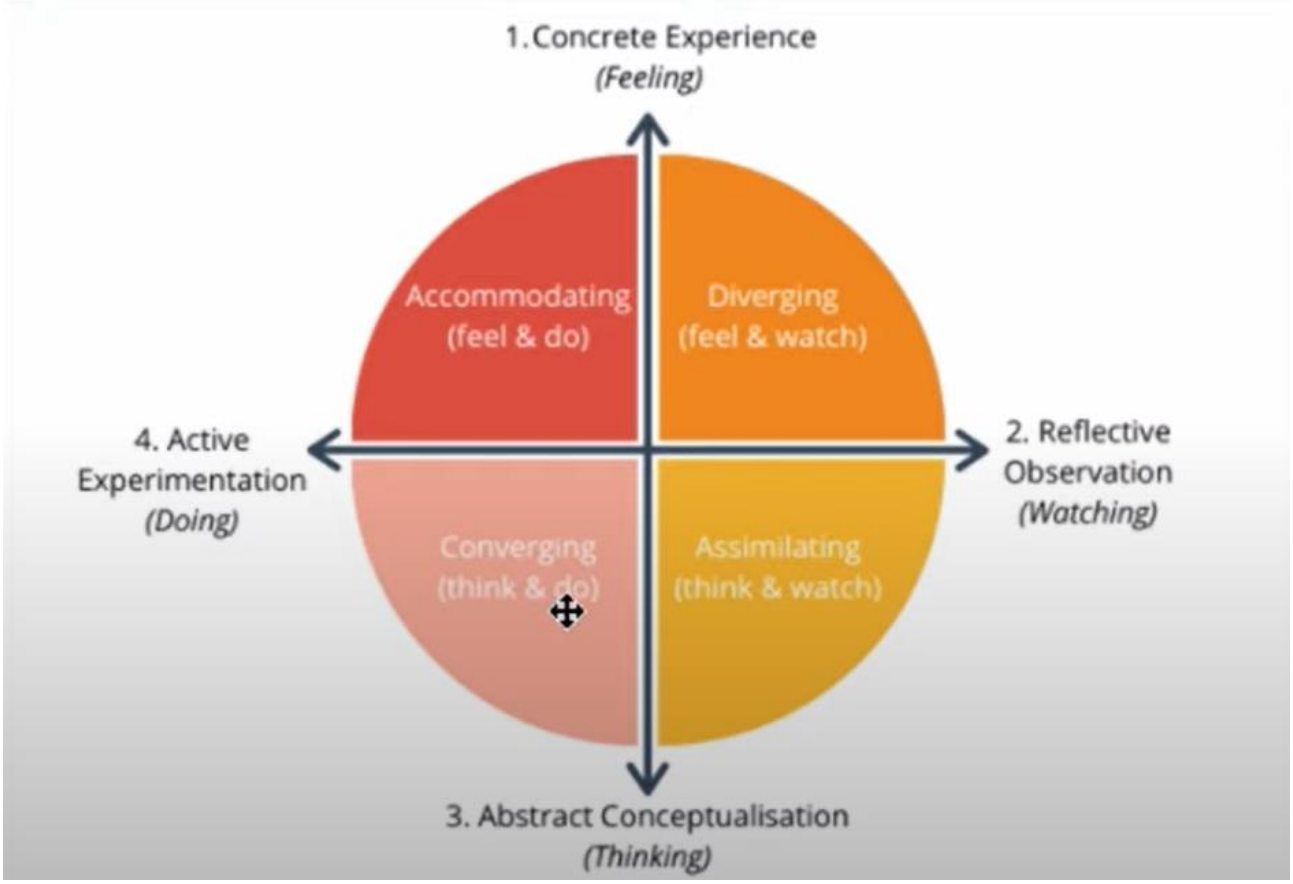

Figure 2.9: Kolb's Learning Cycle

When analysing Kolb's learning cycle, one finds that the first step – concrete experience – means that it is not enough for the employee to watch the instructor use the SAPSFL system or only read about the SAPSFL system. The employee needs to be involved for learning to occur (Egger, 2014). The organisation allows the employee to experience this by allowing them to try a new task in the e-learning system or try an existing task via the new system. This aims to create concrete experience through "doing". The second step – reflective observation – refers to taking a step back from the act of doing and for the employee to analyse the bigger picture and review what they have just experienced (Groves, 2016). Tools that assist the employee with reflective observation include communicating their observation or being asked questions about what they have just experienced on the e-learning system. For example, the instructor asks the learner: "How does the new e-learning system compare to the traditional method of learning that you used?"; "How do you find the delivery of the learning content?" or "How user-friendly is the new e-learning system and what can you do with it?" (Gogan et al., 2015). The third step – abstract conceptualisation – is where the employee begins to make sense of what they are experiencing and have experienced on the e-learning system (Baker et al., 2002).

To do this, the employee does not only look at what actions they have taken on the e-learning system. They include other information such as ideas and learning processes with which they are already familiar (Groves, 2016). The employee is essentially fitting in what they have just learned with what they already know about traditional learning and are making sense of the new change and new system. A great way for the employee to solidify what they have just experienced in the new e-learning system is to present this to the instructor. In the final step of the experiential theory – experimentation –the employee decides how they will put what they learnt about the new SAPSFL system into practice (Hodges, 2014). If the employee does not plan to use what they have just learned, then it is likely they will forget it quite quickly. As soon as the employee stops “planning” and starts “doing” again, they will then re-enter the first step of the experiential learning cycle (Lau, 2015).

The learning styles that form part of the ELC theory are based on two dimensions. The first dimension focuses on whether the employee prefers active experimentation (doing) or reflective observation (watching). The second dimension focuses on whether the employee prefers abstract conceptualisation (thinking) or concrete experience (feeling) (Baker et al., 2002). When referring to Figure 2.9, we find that employees adopt an east-to-west style called the processing continuum (moving from active experimentation to reflective observation). This refers to how the employee approaches their tasks. One also finds that the perception continuum, which runs from the north to the south axis, refers to the employee’s emotional response (how the employee thinks and feels) in transitioning from traditional learning to online learning (Baker et al., 2002).

An employee who adopts the diverging learning style prefers to watch rather than do and prefers to collect their information and then use their own discretion to solve problems. These employees are fonder of working in groups (Groves, 2016).

An employee who adopts the assimilating learning style enjoys the logic and theory of the SAPSFL system, but is less interested in working with people. This employee enjoys the ideas, but not the practical application of working on the newly adopted e-learning system. These employees would begin by reading the manuals and training guides for the adopted e-learning system (Baker et al., 2002).

An employee who adopts the converging learning style enjoys ideas and theories, as well as solving practical problems. This employee actively applies their knowledge in a hands-on way by working on the newly adopted e-learning system. These employees would also begin their learning by reading the training manuals and training guides, but will also think about how to put their learnt theory into practice when using the e-learning system (Vishal, 2015).

An employee who adopts the accommodating learning style involves both doing and feeling. These employees use their intuition to solve problems instead of using a detailed analysis. They prefer to rely on the findings of others regarding the e-learning system. These employees will “jump” directly into the system (Baker et al., 2002).

There are six steps to integrating experiential learning for employees within the workplace environment (Durkin, 2012):

1. Initiate a discussion with the employee base and provide video scenarios to introduce the learners to the topic of the new e-learning system and cover basic material that the learner must know before working on the learning system. This sets up the experience for the employee and prepares them for the content ahead.
2. Perform a mock trial whereby the employee is engaged in a realistic experience that provides them with intrigue, as well as a depth of involvement in the e-learning system.
3. Allow the employees to discuss the experience, as well as the occurrences that took place while working on the e-learning system, and allow the employees to provide feedback on how they felt after being involved in the new system.
4. These employees will then begin to formulate their own hypotheses and concepts regarding their experience. This is done through discussions, as well as their individual reflection, by communicating to colleagues or making notes.
5. The employees are then allowed to experiment on the e-learning system with their newly formed experiences and concepts. Allowing the employee to experiment will enable the ability to interpret conflict and provide conflict resolution.
6. Permit employees to further reflect on the experimentation through discussion or note-taking.

The ELC theory refers to the way learners gain knowledge through real-world experiences. There is no disagreement that experience adds a considerable amount of value to learning, and organisations have begun to utilise the power of experience in technology adoption (Baker et al., 2002).

2.5 DOES THE LITERATURE AND THE DATA SUPPORT OR REFUTE THE THEORY?

The ELC theory supported and demonstrated how the learning cycle worked hand in hand with adopting a new learning method. The focus of the theory used experience, which was the main driving force in the employees' and the organisation's transition to an e-learning system. The employees were involved in the transition by being part of the e-learning system's implementation and upskilling themselves by using the training guides and actively working on the system. This knowledge was constructed through transformative reflection on their experience and involvement (Baker et al., 2002).

ELC theory is divided into two ways of gaining experience: concrete experience (apprehension) and abstract conceptualisation (comprehension), which work together with two further methods of transforming the experience so that learning is achieved: reflective observation (intention) and active experimentation (extension) (Lundqvist, 2016). This study identified that participants experienced the experiential learning process by using these four methods. The four stages of experiential learning were used as they assisted the transition, engaged the employees and provided an alternative to the traditional model of information transmission.

The data and literature have been supported by the experiential theory as it identified what type of learning a particular employee would prefer during their transition from traditional learning to e-learning. This provided further information on the results of the study as it aided the reasoning for the employee's adoption of the e-learning system. The guidelines were built on the theory of the literature, as well as the ELC theory adopted for this study.

2.6 WHAT IS TO COME FOR ORGANISATIONS ADOPTING E-LEARNING

E-learning is exploring new frontiers of innovation and is pushing the boundaries of technology and innovation. Ephemeralisation is the capability of technological development to do "more and more with less and less until eventually, you can do everything with nothing". That is an increase in the competence and efficiency of attaining equal or even more output while needing less input. Ephemeralisation will have a profile impact on the economy. If future economic growth is a goal, then organisations must reconsider their view to e-learning (Littlejohn, 2017).

The 2018 training industry report shows findings related to organisational usage of e-learning. Organisations increased the funds allocated to e-learning, which proved that the organisation would continue to invest in upskilling their employees and will assist them in

working with greater productivity and efficiency (Noel, 2018). E-learning solutions will remain organisations' first choice to train their staff. It offers flexibility as it is easy to deploy. In future, organisations will expand their e-learning to mobile learning applications. This trend began with learning applications that were designed for children to assist them in acquiring mathematical skills and learning different languages. Since the results showed a high success rate and multiple benefits for children, it was unavoidable that organisations would decide to expand into the field of mobile applications to cater for their employees' learning and development (Groves, 2016). Mobile applications are not as costly to design, yet can still cater for a full-scale learning management platform. It is predicted that there will soon be mobile-only e-learning programmes for the current labour force (Katkalo, 2019).

The near future will see the world of e-learning meet virtual reality. Augmented reality solutions are becoming less costly and are accessible to a wider range of organisations. In 2022, the virtual reality (VR) marketplace is predicted to reach an estimated USD209 billion. Websites like AppyPie are already available, which allow users to build their augmented reality (AR) and VR mobile applications (Olds, 2012). The major technology organisations, such as Microsoft, Apple, Google and Facebook, have devoted large financial budgets to their AR and VR development. The opportunities to integrate e-learning with AR and VR are limitless as learning material will be created to transfer the individual to the inside of a VR vehicle, which will assist medical learners to understand the details of the human anatomy (Chen, 2013). These types of ideas will offer a real learning experience in various fields and industries (Alqahtani, 2016). The ELC theory has shown that the cycle of adopting a new learning method and new learning concepts is an increasing concept in modern society. Knowledge is being constructed through transformative reflection and by an individual's experience (Stavan, 2017).

The near future will offer e-learning as a service. In recent years, with the development of online streaming services such as Amazon Prime Video, Netflix and Hulu, one can observe how the entertainment industry has grown. Organisational e-learning is now in a comparable situation. As the attention shifts more towards the interests of the employee instead of the company, one can expect a Netflix-like solution for e-learning whereby the learner can subscribe and choose a learning course they like (Mohammed, 2017).
Employees and learners all over the world will be able to purchase the courses they need instead of being enrolled in packaged courses. Subscription-based learning will assist

organisations to cut down on unnecessary training expenses, and will allow them to focus on their businesses. Companies are merging as more educational technology businesses are pursuing content creators to become combined Learning as a Service (LaaS) providers (Stavan, 2017). Leapest was acquired by Edcast, which is a learning market content creator and technology supplier. These are signs of how organisations are willing to transition from a legacy learning content solution to an online, customised learning solution to meet the growing demand (Renée, 2015).

E-learning will rely heavily on algorithms and data in the future, which will assist recommendation engines to use them for personalised learning (Ellis, 2014). The need for customised and personalised learning experiences that cater to employees' individual needs is important in determining the success of an e-learning programme. Personalisation is reliant on the accessibility of high-quality information, and the more employees who use a learning platform, the more variation and depth of information will be generated from it (Mungania, 2014). If the organisation can generate more data about user behaviour and interests, it can be added to the recommendation engine , which will assist in generating information and courses for specific employees (Muhire, 2014).

As the concept of learning in the workplace is changing, organisations realise that they are not restricted to blended learning programmes or facilitator-led training. Employees can access learning material via social media sites, community forums, video websites, e-books and leader boards. This takes place outside the organisation's LMS (Mungania, 2014). Since the LMS is only able to record details of the employee's tasks within the system, xAPI is a learning system that provides the possibility to collect information about the range of experiences an employee will have in both online and offline training activities (McCullough, 2016).

A big benefit of using xAPI is that it does not require a 24/7 internet connection. Employees can complete their e-learning activities offline and the progress statement will be documented and saved to the Learning Record Store (LRS) once the network connection is active. This is a big advantage for developing countries, where full-scale data connectivity has not yet been implemented (Hodges, 2014).

There is a demand for human resources digitalisation with e-learning systems like SAP SuccessFactors, Workday and similar systems from Oracle and Microsoft (Mungania, 2017). E-learning transitions towards mobile applications and learning experience platforms, offline

learning solutions and xAPI will play a big role in defining the future of organisational e-learning (McCullough, 2016).

The crisis of the Covid-19 pandemic forced organisations globally to change the way they work and learn overnight. Although there was fear among employees that the pressure of working remotely or upskilling remotely would be too much, this approach of learning remotely may, in fact, be the long-term plan for work and education. To counter the drawbacks of the Covid-19 pandemic, organisations have crafted talent strategies that develop an employee's digital capabilities (Kang, 2021). We see organisations increasing their learning spend and committing to developing their employees, ensuring that the ability of their employees to upskill remotely will prevent any setbacks for future disruptions or pandemics. Online learning and classes via telepresence are becoming an accepted and mandatory aspect of a blended working environment. We are hearing other new terminologies such as a hybrid working environment, whereby employers have the option of working full time from home. The Covid-19 pandemic has propelled civilization years into the future, whereby the very nature of our regular and day-to-day training has been challenged and tested. For most businesses, the future of digital has moved from something seen as a nice-to-have to a fully accepted and must-have part of working and learning (Renu, 2021). After the Covid-19 pandemic, organisations are anticipating more openness to a wide range of e-learning solutions with more importance on innovation and fewer one-size-fits-all technology solutions (Renu, 2021). Employees will have flexibility and greater freedom to choose software and applications to assist them in their job-related roles, with executives being more open to feedback from employees around what e-learning solutions should be adopted and why (Kang, 2021).

2.7 CONCLUSION

According to the literature reviewed, organisations are transitioning to e-learning methods and online systems to assist their employees with their learning and development. E-learning has many benefits for employees, but comes with a few drawbacks too.
The findings are reliable, concluding that if an organisation has not already implemented an LMS, then it is likely that they will transition to using one shortly.

Through the literature, we find a few guidelines already being developed:

- **Facilitate the design and development:** An organisation needs to create an environment of blended learning whereby facilitators are involved in educating employees about the e-learning system. The support and guidance will assist employees in achieving their expected learning outcomes.
- **Advise employees to develop their skills:** Employees must be encouraged to participate in the group learning activities provided by the e-learning solution, and to develop a study and work schedule to manage their time effectively.
- **Continuously update course content:** Course content and learning material must be frequently updated and readily available. E-learning partners such as SAP can assist with content development.

It is important to note that the study cannot focus on one single method of e-learning because organisations and their employees use methods that work for their industry and the specific employees' roles. Learning will always be an integral part of an employee's working career and organisations are investing more into the correct technologies that will upskill and educate their workforce to compete with the best in the market. By understanding the impact of e-learning on organisations it is easy to see that this is the current and future direction that organisations are taking. A company without an e-learning option is a company that is going to be left behind.

CHAPTER 3: METHODOLOGY

3.1 INTRODUCTION

According to Buch-Emden (1997), “research is something that people undertake to find out things in a systematic way, thereby, increasing their knowledge”. For this study, this statement had two significant implications. Most importantly, the research was conducted in a systematic manner, which includes the methodologies and guidelines the researcher used to identify new evidence and information. The reliability and validity of the gathered information were founded on systematic data-gathering using methodologies established by earlier researchers (Akkiraju & Ivan, 2014). The next vital point of the abovementioned

statement is that individuals develop their understanding through research. This study aims to improve the knowledge of software development through research. A research methodology will describe why and how certain decisions were made in executing the study (Injazz & Karen, 2013). This chapter focuses on the philosophy, research methodology, strategy, research instruments, data collection, analysis and ethics of the study. It used such strategies and tools to obtain the necessary information to respond to the main research question, as well as the sub-questions.

3.2 RESEARCH DESIGN

3.2.1 RESEARCH PHILOSOPHY

The research philosophy allows a researcher to find a specific way to analyse their work. This was a global view of the topic at hand. When conducting a research study, one needs to focus on two key goals: to fill the information gap, and to solve the research question or problem (Zelkowitz & Engineering Information Inc., 2015). This study has aligned both goals with the research questions in striving to obtain outcomes for each.

There are two core philosophies: positivism and interpretivism. Positivism is a traditional research philosophy that proposes that humans view the world through their own beliefs, senses and thoughts about science. Positivism proposes to remove the individual from bias and subjectivism and to be objective instead (Swift, 2012). When researchers intend to fill a knowledge gap, they will be inclined towards positivism.

Researchers who are more focused on problem-solving are closer to interpretivism (Mejorado et al., 2014). Positivism looks at valid knowledge and reality. Therefore, researchers with a positivist approach look for gaps in knowledge and aim to fill those gaps by conducting a research study. Quantitative studies are typically associated with positivist research as such a study would be based on data for neutral and objective results. This means that the reality is external, and the study is required to advise on a hypothesis. On the other hand, interpretivism looks at reality from a diverse view. It suggests that there is no single reality. Therefore, the study is required to recognise and understand different characters, people, situations and contexts (Orr & Orr, 2014).

Interpretivism was selected as the research philosophy for this study. It allowed this study to look at several aspects, but also to understand that these aspects can never be completely understood in absolute terms. The goal of a research study is to understand and interpret the environment, and through the research, obtain a detailed understanding of the situation (Ryals, 2015). This study intended to examine how individual employees of an organisation responded to certain questions, how they felt and what changes they noticed after the implementation of an e-learning solution. This provided the study with a clear understanding of the impact of transitioning from traditional learning to an online LMS on both the individual and the organisation. When one looks at the ADDIE Framework, one sees that the analysis phase relates to the delivery options of the training that the organisation used. The organisation completed the first phase of the ADDIE Framework by recognising both the users and the delivery methods of the training – online learning methods – using the *SuccessFactors* e-learning solution.

Another reason for selecting an interpretivism research philosophy for this study is because the goal of the study was to understand how the transition to an online learning solution assisted organisations and their employees in their day-to-day work. This study was viewed as an independent participant who is external from all research contexts. The research itself was viewed as subjective (Alt & Puschmann, 2014). What emerged from the research was controlled by the researcher using this philosophy.

The research was performed on employees in their natural social settings and from the perspectives of the participating employees. The interpretivist research philosophy aimed to recognise the opinions of the employees from their viewpoints, which included in-depth knowledge that was more expressive, with qualitative data (Akkizidis & Stagars, 2016).
The interpretivist philosophy was developed to focus on how participants see the world and what their opinions are. In a setting like a company, sharing knowledge and experiences contribute to achieving goals. With the use of the interpretivist philosophy, participants described their feelings to produce expressive and informative results (Lau, 2015). The participants in the study formulated their opinions of the organisation and its business processes, and provided their understanding of the effectiveness of e-learning technology (Alt & Puschmann, 2014). Interpretivist research goes hand in hand with qualitative data analysis as it results in an uncritical description of the participants' views. This combined

human interest with the study. It was significant for the researcher (as a social actor) to appreciate the differences found between the participants (Zviran & Erlich, 2013).

Researchers have produced various forms of research to analyse and answer research questions. Two main methodological approaches are frequently used: a qualitative and a quantitative approach (Yurong et al., 2013). Qualitative methodological approaches comprise archival research and case study strategies (Magdic, 2012), while quantitative methodological approaches include the experiment and survey research strategies.

This study focused on an organisation that had transitioned from traditional learning to an online e-learning platform to achieve its real-world business objectives, and the impact of the transition on the organisation's employees. It therefore employed the qualitative approach.

The qualitative research methodology is exploratory, and its expected outcome is uncertain (Oates, 2006). As the goal of the study was to gather data about a group of participants who made up the population, there was no hypothesis, and comprehensive, in-depth and detailed information was essential. The research population comprised the organisation's employees. Several organisations in Pretoria had transitioned from traditional learning methods to e-learning. However, the focus of this study was on one organisation who had adopted the SAPSFL solution.

The researcher had the option to use focus group interviews, where he would have a conversation with the participants as a group to gain an understanding of their thoughts on the organisation's transition to e-learning. This is an information-gathering technique that provided the study with more detail on what the population appreciated about adopting e-learning methods, as well as what the population did not like about the change. Additionally, the researcher had the option of performing one-on-one, in-depth interviews.
This was performed individually with participants instead of in groups, which created a confidential and more personal environment where detailed responses were provided (Snabe & Zimniak, 2016). Observation is another information-gathering technique where a participant's body language and facial expressions are interpreted, revealing emotions such as satisfaction or dissatisfaction.

The interviews comprised open-ended questions framed around the "what", "how" and "when" of the current environment. Open-ended questions were selected for this study since they provided respondents with the ability to express themselves in their own words.

Qualitative data helped to identify detailed information about the software implementation, as well as the impact it had on the company. This methodological choice is a relatively low-cost method (Buck-Emden, 2015). This study aimed to discover the participants' experiences at the company both before and after transitioning to an e-learning system. The research identified patterns, philosophies and themes that provided an understanding of the feedback received (Egger, 2014).

3.2.2 RESEARCH STRATEGY

The study adopted a case study strategy, which is closely linked to interpretivism. This research strategy helped the researcher increase the value of the study, remain focused on the topic and reduce any frustration. It also saved the researcher a large amount of time (Felderer et al., 2019). The strategy consisted of four main components: the development and analysis of the topic, the selection of keywords, building the research and broadening the search for it.

A case study is a commonly used research strategy that studies one instance of a specific type of scenario. The results of a case study are not generalisable to other fields (Ahearne et al., 2013). As the researcher does not extend the research to other fields or findings, it provides a focus for the research strategy to deliver a detailed understanding in a realistic and factual context, using and triangulating various sources of data.

This study is therefore focused on a sole occurrence and not on a series of instances, which aids in gaining a rich understanding of the subject (Thuyuyen et al., 2017). Using a case study allowed the researcher to make use of a variety of techniques for collecting information, including interviews, questionnaires, the observation of actions and the gathering of information. The purpose of the case study is to examine a scenario with a specific theory in mind. This study researched a single organisation within the information technology industry and selected the single case study method. It is based on an organisation with a successful post-e-learning implementation that was actively using the new learning processes in its daily work. The organisation was selected in an unbiased manner based on the success, effectiveness and total usage of the e-learning system. The study aimed to record all faults identified within the research results (Van Looy & Springerlink, 2016).

3.2.3 THE CASE STUDY

3.2.3.1 Introduction

After a leading software organisation in Pretoria wanted to transform its learning and development methods towards the end of 2018, its Human Resources (HR) Department and major stakeholders found themselves examining their current use of the traditional classroom learning setup in a new light. While many of the organisation's employees were complying with traditional learning methods the organisation's inability to keep up with the upskilling of its competitors caused several sales losses and project failures.

The organisation knew that it required an end-to-end transformation of its learning process as a way to assist employees to maximise their potential. This is when the organisation decided to adopt the SAP *SuccessFactors* e-learning solution, which was fully implemented early in 2020. This study entails a reflection following the implementation to create guidelines related to what worked in the organisation's transition from traditional learning methods to an e-learning platform.

The organisation opted for SAP *SuccessFactors* as the desired solution after careful consideration. SAP *SuccessFactors* is the leader in cloud-based learning management business software, offering a suite of learning applications and capabilities for employees to plan, assign and report on their learning. World-class organisations such as Vodafone United Kingdom, BMW and Royal London Bank have transitioned from traditional learning methods to an e-learning platform in the same way with the use of SAPSFL. SAP is a global company backed by leading venture capitalists and is headquartered in Waldorf, Germany, with clients in over 80 countries.
SAP is the first and only cloud-based solutions company to offer a complete suite of learning and performance management built from the ground up as a cloud-based, real-time data application. Since completing its first few *SuccessFactors* implementations in 2015, the company has been recognised as a visionary in the market by leading research management organisations, winning a number of awards in the process.

The organisation adopting the SAPSFL system started the process in late 2018, aligning stakeholders, resources, implementation teams and ensuring that there was employee

involvement throughout. The new solution was built from the ground up with the goal of having every employee within the organisation onboard the e-learning system within one year. According to the organisation, an average of 200 employees uses the newly built SAPSFL system daily (Curran, 2017). A goal was set of ensuring that at least 90% of employees were certified in three courses every six months following implementation. The HR Department switched from a low-development status to a focused employee-based status centred on upskilling and personal development. The success of the implementation saw new employee content added each week and a major boost in sales, projects and qualifications throughout the organisation.

The importance of the transition from traditional learning to e-learning proved most beneficial at the beginning of 2020 when the Covid-19 pandemic struck, forcing governments to enforce a nationwide lockdown. The ability of employees to use this time to upskill themselves in a self-service manner proved beneficial for both the organisation and its employees. The lead partner at the organisation stated: “Transitioning to the e-learning solution came with many benefits, but the most amazing aspect was being able to visibly see our employees grow in their own capacity and add value to their clients.”

The ease with which employees adapted to the e-learning platform is a great success for the organisation’s decision-making in transitioning to online learning. Seeing sales leads increase significantly adds to that success as the business enhanced its client base globally. Although the SAPSFL system has been incorporated by many organisations, there is little or no literature to guide organisations during the adoption phase, thus this study will develop guidelines that organisations and employees can use during the end-to-end transition from traditional learning methods to an e-learning solution.

3.3 PARTICIPANTS

The organisation had selected its entire technology employee base to train on the e-learning software. The selection included all technology consultants, managers and senior executives. The employees were personnel who were involved in and participated in technology projects and implementations. The organisation did not aim to train the HR Department, Finance Department, external contractors, cleaning staff or security staff.

The participants selected for this study are part of the organisation’s technology project team in Pretoria, who had been involved in then end-to-end transition from traditional learning to online e-learning methods. The researcher was responsible for selecting the participants based on the above criteria.

Interviews were to be scheduled with each participant and would be held at the organisation's head office. Should any circumstances or external factors prevent participants from physically attending the interview, a Skype for Business meeting would be scheduled with the participant. The researcher selected this location as it would allow him to conduct more face-to-face interviews with the participants. It would be cost-effective and time-efficient to interview the participants in Pretoria.

After the participants had been selected, the study ensured that they were employees with enough knowledge and experience in transitioning from traditional learning methods to the SAPSFL system (Sargeant, 2012). Table 3.1 lists all 15 participants. All employees were selected from the organisation’s technology project team in the Information Technology Department as it is the largest department in the organisation (making up 85% of its employees) and because the adopted LMS was only used by this department.

Table 3.1: Interview participant details

Participant number	Department	Role in organisation	Organisational experience
Participant 1	Information Technology	Consultant	2 years
Participant 2	Information Technology	Manager	5 years
Participant 3	Information Technology	Consultant	3 years
Participant 4	Information Technology	Partner	7 years
Participant 5	Information Technology	Consultant	2 years
Participant 6	Information Technology	Manager	6 years
Participant 7	Information Technology	Consultant	3 years
Participant 8	Information Technology	Consultant	6 years
Participant 9	Information Technology	Manager	5 years
Participant 10	Information Technology	Consultant	4 years
Participant 11	Information Technology	Partner	5 years
Participant 12	Information Technology	Manager	4 years
Participant 13	Information Technology	Consultant	3 years
Participant 14	Information Technology	Manager	5 years
Participant 15	Information Technology	Consultant	2 years

3.4 PARTICIPANTS' DEMOGRAPHICS

Each participant was selected randomly by drawing names from a hat, the participants still had to be part of the group of consultants or employees who had previous experience with the SAP *SuccessFactors* e-learning system. Each participant also had to play a significant role in the day-to-day running of the organisation. Influence within the organisation was an important aspect as it provided this study with the rationale for selecting the e-learning participants. The participants' knowledge and use of the SAPSFL system provided the knowledge and experience required to discuss the impact the system had on the employee and the organisation. Another important factor that had to be taken into consideration was the participants' involvement during the implementation of the SAPSFL system. The participants had to have transitioned from using traditional e-learning methods to the e-learning solution adopted by the organisation. These participants would understand what the learning and development process and experience was like before adopting the new technology and would be able to make a direct comparison.

The participants had different levels of experience and skills. Some were employees that were known as “consultants”. These are the hands-on workers of the organisation who are responsible for following instructions provided by their managers. They are involved in building IT solutions for clients and are the individuals who did most of the groundwork on the IT implementation. They make up the majority of the project team and the organisation as a whole. The managers and senior managers selected as part of the research study each led and managed their teams of consultants. They oversaw the consultants and ensured that they were performing their work correctly, providing guidance where needed. The partners, who made up the remaining interviewees, made up the smallest part of the participants. The partners ensured that the overall productivity and business of the organisation was improving. They were responsible for bringing in new business and projects for the consultants and managers. Even though there were three separate groups of participants, they had all had first-hand experience of the SAPSFL system. They had been matched to their specific courses for completion, and had been required to obtain their particular sets of skills by transitioning from traditional e-learning methods.

3.5 DATA COLLECTION

Common qualitative data collection techniques include focus groups, interviews, document reviews and observations. Three interview techniques can be identified informal, structured and semi-structured interviews. Informal interviews offer the respondent the freedom to converse during the research question. This allows them to express themselves freely. Structured interviews are completed in a professional and formal setting where the respondent only provides feedback on a set of prearranged questions that will be asked by the person conducting the interview (Lau, 2015). Semi-structured interviews comprise a list of questions for the participants and offer them room to express their responses and elaborate on aspects that were not mentioned in the initial question.

This study used semi-structured interviews as it allowed the participants to elaborate on their answers. Semi-structured interviews guide the conversation and keep the participants focused on the topic. This allows for two-way communication and the ability for the participant to provide detailed responses. Fifteen interview questions were formulated based on literature to ensure that the participants were comfortable with the interview and had a platform to express themselves. They were able to express their thoughts by communicating their personal opinions on the transition to e-learning, which ensured effective data collection.

The interviewer avoided double-barrelled questions to prevent any confusion and structured the interview questions so as to avoid bias. When formulating the interview questions, the researcher ensured that they were in line with the main research question and the sub-questions, ensuring that each response would contribute to the guidelines and ultimately answer the research questions. The full list of interview questions is included in Appendix B.

Observations are used to physically observe specific situations and outcomes. Participants are observed to analyse their behaviour, which allows for the learning of the dynamics of a particular situation where frequency and behaviour can be measured (Swift, 2012). Observation is a useful data technique for delivering additional data about a certain group because videotaped recordings can be documented and used as evidence of behaviour. Observation provided the study with both narrative data (qualitative) and frequency counts, length of interactions and instructional time (quantitative data).

This study used interviews to collect the data from the research participants. Due to the impact of Covid-19 and its social distancing restrictions, the interviewer decided to opt for Skype meetings to conduct all the interviews. Each interview followed the same steps whereby each participant was sent a Skype meeting request for an online interview. The Skype invitation was sent via email with the email introducing the research topic, the purposes of the study, the purpose of conducting the interview, as well as a confidentiality disclaimer informing the participant that their information and responses would be kept confidential and only used for research purposes. Each participant had the option to accept or decline the Skype meeting invitation. If they accepted, each participant then had to sign the data collection consent form where voluntary participation and confidentiality were further explained. The consent letter can be found in Appendix D.

If a participant declined the Skype meeting invitation, the researcher randomly selected another participant from the organisation until 15 volunteers had accepted the invitations. The researcher managed the interviews with Microsoft Outlook, which displayed the specific date, time and attendee information for each interview.

At the start of the interview, the researcher ensured that no bias occurred as it was vital for this study to ensure that the researcher did not lead the interviewee in a specific direction. To prevent any form of bias, a standardised set of questions was compiled, notes were taken of the entire interview, each participant was recorded as anonymous, no quick judgements were

made, and all participants were treated equally regardless of their seniority and position within the organisation (Scott, 2013).

Body language and tone played an important role during the interview to gain further understanding from the participant (Mejorado et al., 2014). Such nonverbal messages indicated the participant's uncertainty, discomfort or level of enthusiasm with each question and added to the value of the response.

This study was mindful of having full control of the interview and ensured that the respondents remained focused to answer and provide constructive feedback to all the questions related to this study (Baran & Galka, 2019). The participants were requested to ensure that they did not have any external distractions during the Skype interview and that they had a strong internet connection.

Being present at each session, the interviewer was able to clearly understand the interviewees and was able to correct any misinterpretations from their feedback, which allowed a relationship to be built and an understanding to develop between the two parties (Swift, 2013).

Each of the 15 interviews was conducted successfully. Each interview followed the same steps to ensure consistency. Each participant was asked the same semi-structured questions, but the interviewer was open to receiving various responses and engaged freely with the participants to encourage them to provide more detail and elaborate on their answers. Open-ended feedback did not limit the respondent in how the questions had to be answered. This allowed the respondent to provide a verbal description of their thoughts (Egger, 2014).

The researcher recorded all the responses to the questions. The recordings were first stored on the mobile device and then stored as confidential data on a secure hard drive. Each participant's response was typed out and then categorised. The responses were further analysed qualitatively to answer the main research question and the sub-questions by also incorporating the ELC theory into the findings.

The questions involved the following:

1. The participant's role, qualifications, experience and responsibilities within the organisation.
2. Knowledge of the traditional learning methods used by the participant.
3. Knowledge of the SAP *SuccessFactors* e-learning system.
4. A comparison between the traditional learning and the e-learning methods.
5. Overall improvement for themselves and the organisation due to the transition from traditional learning to online learning methods.

The minimum duration of an interview was 30 minutes. The maximum was 60 minutes. Fifteen interviews were conducted, which took 10 hours and 25 minutes in total. To ensure anonymity, each participant was assigned a number to be used throughout this study.

A challenge faced by the interviewer was trying to schedule suitable time slots for the participants. Many of them were working on projects during business hours and had to schedule time with the researcher after hours. This worked in favour of the study since each participant had more time available after hours and could therefore take their time in answering the interview questions. The interviewer found that the participants were not distracted by work obligations. The interviewer followed up with each participant before the interview to ensure that they would still be available to attend and that the time was suitable for them. This was managed via Microsoft Outlook emails and reminders.

Adopting the interview data collection method for this study delivered key information and the data gathered offered constructive feedback to perform an analysis of the main research question and the sub-questions based on the respondent's motivations, opinions and expressions (Akkiraju & Ivan, 2014).

3.6 DATA ANALYSIS

"Thematic content analysis is a method for systematically identifying, organising and offering insight into patterns of meaning (themes) across a data set" (Braun & Clarke, 2014). This form of analysis was utilised for the study's data analysis. The qualitative approach that was followed reiterated that the focus of the information was more on text and words than on numbers. This proved to be suitable for the thematic content analysis.

Thematic data analysis technique is a graphic, descriptive presentation tool that is used to define and expand on the qualitative information generated from the interview responses (Vicikova et al., 2013). The thematic process started when the data collection procedure began and not after the data had been gathered. This study was required to perform an iterative process of understanding and interpreting findings from the start of the process. The researcher's job was to analyse the information collected and to continuously refine the focus of the study (Wang, 2014). The aim of this was for the researcher to become familiar with the information through the main research question and the sub-questions, and to prevent any bias. This is known as progressive focusing. The study used three unique modes to understand the respondents' texts. The text was read concentrating on the actual content and form of the data, the text was then read reflexively, where attention was placed on how the orientation shaped their interpretations and focus. Lastly, the text was read interpretively, where construction of the interpretation was formed (Zelkowitz & Engineering Information Inc., 2015).

Thematic content data analysis aided this study in finding combined themes from the gathered information. Not all themes were found to be linked to the research study. To avoid themes that did not make a valuable contribution, the researcher only analysed information about the research topic and research questions (Braun & Clarke, 2014). This analysis method provided the researcher with multiple options to view the data and allowed this study to focus on examining the connotation of the data (Braun & Clarke, 2014).

The thematic data analysis technique underlined the recording, pinpointing and examining data patterns. Patterns were referred to as themes across the full dataset. They were significant to the description of the data and were related to the main research question and sub-questions. The themes were developed into categories for analysis. The full process is made up of coding in six stages or phases to create meaningful patterns. Thematic content analysis is understood to be a good method to record the meaning and intricacies in a data set. A dataset can have many different attributes, such as text, which can range from one-word replies to a variety of open-ended questions with a reply spanning a couple of pages (Lau, 2015). The complexity of this study was taken into consideration as it may differ depending on the various data types. This analysis method supports assertions with information taken from grounded theory. This is designed to construct theories that are themselves grounded in the information.

In turn, this became identified in the analysis because the process consisted of identifying likely themes, understanding transcripts, building theoretical philosophies and comparing and contrasting themes. The labels linked to pieces of the data are the codes that contributed to a theme. For instance, “learning material accessibility” may be a code, but “online learning platforms” may be the theme (Allen, 2014). Through the process of coding, this study had full records of the development of each of the codes and themes. Any updates made to the links or themes were combined with the concluding report to help the reader understand the choices made throughout the process, reiterating that thematic content analysis is a data analysis method that is inexpensive and comprehensible (Kale, 2015).

Thematic analysis was a useful and effective tool to incorporate into the research, especially when combined with the interview data collection technique, because it provided efficient replication. Thematic content analysis is related to phenomenology because there is a focus on the human experience. This method highlights a respondent’s feelings, experiences and perceptions. Patterned responses are derived from themes that are linked to the main research question and sub-questions. The researcher’s decision was a significant factor when deciding on the importance of themes (Jayanthi & Vishal, 2015).

The following six steps were conducted in relation to the use of thematic content analysis:

1. **Become familiar with the data:** This was performed through preparation such as rereading, noting down and transcribing the initial ideas. The researcher read the transcripts and took general notes as they accord relevant phrases, sentences or words. The researcher then examined his notes, and drew up a list of the key types of information identified.

2. **Create the codes:** The researcher began to code the features of the information through the full dataset received from the respondents. He then ordered and collated the data that was relevant to the individual codes and placed each code into categories to describe each link.

3. **Identify the themes:** Potential themes were created against the codes, while being ordered sequentially. This was done to gather all information relevant to each of the potential themes. The aim was to recognise if several themes have associations between them, as well as to document minor and major themes.

4. **Review the themes:** The study then determined whether the themes fit the codes and if the themes fit the full dataset. Additional themes to generate a thematic content map for the analysis were further identified by searching through the dataset. A comparison of all minor and major themes was conducted. Since more than one transcript was generated, the first four steps had to be repeated for each of the available transcripts.

5. **Define and name the themes:** The researcher then conducted ongoing analysis to refine the specifics of each theme and the overall story of the analysis by generating clear definitions and names for each theme. All the themes were examined in detail to understand their fit and relevance to the research study.

6. **Create the report:** A concluding analysis was conducted on a section of the main data extracts where the analysis would relate to the main research question and sub-questions, while previous literature and objectives were reviewed.

Once the data had been categorised, a review was conducted to ensure that the data had been defined correctly. A review of each of the categories was conducted whereby the researcher decided whether certain categories would be merged or if they would have subcategories. The thematic content analysis process was extensive and needed to be performed on the data multiple times to ensure that a thorough study of the data had been performed (Florczak & Engineering Information Inc., 2016).

3.7 ETHICS

Ethical norms were applied to ensure that this study was held liable for the systematic literature, participant information and data collection found in the research study. A code of ethics for all research students, staff and research studies is used by the University where this study was submitted, which outlines the ethics related to the rights and responsibilities of the researchers and the participants within the study. The values found in the University's code of ethics were applied this study to ensure that ethics and principles were upheld. All participants involved in the study were respected and treated with dignity. It is important to note that the respondents were not affected in any way by the findings of the study and that they each had the right to refuse or withdraw their consent and participation.

Data that was not applicable to the study was removed to strengthen the study's findings, including themes that were not related to the research study. This researcher agreed to obey the ethical code below and ensured strict adherence to all ethical concerns:

- **Promote integrity:** This study ensured that all the respondent data collected was documented and filed securely and accurately. Feedback received from participants that did not support this study was not overlooked or excluded from the research. All participants could express themselves freely and the researcher did not allow any form of bias to take place during the course of the study.
- **Plagiarism:** All work and data submitted by the researcher are rightfully his and he will ensure not to take recognition for work that is not his. The literature and sources used in each chapter of the research study have been numbered and referenced correctly. This study will not include any pre-answered responses.
- **Maintain confidentiality:** The confidentiality and privacy of the data and respondent information remains maintained, together with the anonymity of the participants.
- **Professional codes of conduct:** The information system research professional codes of conduct were always followed, including during the conducting and documenting of the study. The code of conduct states that this study must abide by research integrity, as well as the accurate use of the findings.

3.8 CONCLUSION

Chapter 3 clarified the research philosophy, choice of methodology, research strategy, sampling, data collection methods and the data analysis method that were used to collect data for the research, analysis and interpretation. Interpretivism was selected as the research philosophy for this study, which examined numerous research aspects. The qualitative approach was selected as the methodological approach and the case study was introduced as a research strategy. This was regarded as a proficient strategy since it aimed to provide the study with understandable and robust information as it focused on studying and examining the participants within their environment. The interview data collection method was used together with thematic content analysis to analyse the data. These methods were selected because they supported this study when categorising joint themes from the dataset provided. Increased significance was given to the ethics surrounding the collection of data, the rights of the respondents, as well as the responsibility of the researcher throughout the study.

CHAPTER 4: ANALYSIS OF FINDINGS

4.1 INTRODUCTION

The previous chapters supplied literature on the implementation and use of e-learning by defining the origins, challenges and importance of e-learning for organisations. Chapter 3 defined the research approach and the research methodology that were used for this research study. This chapter discusses the findings and analyses of the interviews conducted at the organisation's head office. The focus of this chapter is on the primary data from the participants. The interviews were conducted with employees of the organisation, which included consultants, managers and partners of the organisation. The interpretation of the findings was based on the interview questions defined for the participants and can be found in Appendix B.

4.2 DATA INTERPRETATION

In this section, the interview questions are discussed and analysed. These findings were analysed and related to the literature to see how the literature ties in with the organisation's feedback. Table 4.1 introduces the interview questions and how each question was formulated, based on the literature, as well as a link to the research questions posed in Chapter 1. This allowed for easier analysis of the findings and linking the findings directly to the literature.

Table 4.1: Interview questions in relation to the literature and the research questions

Interview question	Reference to literature	Paired with research question
<u>Question 1</u>: **How long have you been working at this organisation and what is your current role?**	This question was asked based on the study conducted by Groves (2016) and Noel (2018), who state that, based on an employee's experience and role, you cannot force an adult to learn. The researcher included this question to identify if there was a relationship between the employees and their willingness to be taught.	What organisational and information technology experience should an employee have to assist with transitioning from traditional learning to e-learning?
How does this tie in with the ELC theory?	This question tied in with the ELC theory's **reflective observation** learning cycle stage. This was the act of the employee taking a step back from their day-to-day tasks to review what their wider role and purpose is in the organisation. Reflective observation takes place when the employee is asked a question such as the above. Question 1 required the employee to reflect about their duration of employment and their position within the organisation.	
<u>Question 2</u>: **Do you hold a tertiary qualification? If yes, what qualification do you hold? (optional)**	This question was asked a result of studies conducted by Groves (2016), Mungania (2014) and Renée (2015), who state that, in the USA, only a little over half of recent university graduates who received a higher education are working in jobs that require that education, and the majority of the individuals are not fortunate enough to be granted these opportunities. In certain countries like South Africa, a good education is not easily available (Groves, 2016). The researcher included this question to identify if these statistics from the USA correspond with graduates from South Africa, and to determine if the employee obtained a tertiary qualification before joining this organisation or is currently in the process of obtaining one.	What organisational and information technology experience should an employee have to assist with transitioning from traditional learning to e-learning?
How does this tie in with the ELC theory?	This question tied in with the ELC theory's **active experimentation** learning cycle stage. This stage occurs when the employee considers how they will put their previous learning and experience into practice for their current organisation. If an employee did not plan to use their tertiary education knowledge in their organisation, it was often found that the knowledge previously learnt would gradually be forgotten.	
<u>Question 3</u>: **What is your understanding of e-learning and an LMS?**	This question was asked based on studies conducted by Chen (2013) and Olds (2012), who state that employees increasingly expect to be able to access their training and knowledge online, and if organisations have not yet implemented e-learning or have attempted but failed, they need to try alternative approaches. The researcher included this question to identify if this employee had experience using e-learning as this will affect their transition experience.	What organisational and information technology experience should an employee have to assist with transitioning from traditional learning to e-learning?
How does this tie in with the ELC theory?	This question tied in with the ELC theory's **abstract conceptualisation** learning cycle stage. In this stage, the employee (who has already been exposed to e-learning) was required to consider what they had learnt while using the e-learning system and describe it in terms of what they already know about e-learning.	

Interview question	Reference to literature	Paired with research question
<u>Question 4</u>: **What are your thoughts on traditional learning methods such as textbooks, classroom attendance and group activities?**	Traditionally, organisations have become reliant on formally training their employees using a course or a training event to educate them and improve the skills, knowledge and behaviour required to successfully perform day-to-day work activities (Stavan, 2017).	What are the reasons behind an organisation's transition from traditional learning methods to e-learning?
How does this tie in with the ELC theory?	This question tied in with the ELC theory's **concrete experience** learning cycle stage. This stage was focused on the employee actively trying traditional learning methods to experience how effective or ineffective the learning style is. The employee must try traditional learning for themselves to create a concrete experience. They can then elaborate on this and provide their thoughts on the learning technique.	
<u>Question 5</u>: **Do you prefer traditional learning methods or e-learning methods? Why?**	This question was asked based on the study conducted by Stavan (2017), who states that organisations have become reliant on formally training their employees using a course or training event. The researcher included this question to identify if there was a relationship between the participants' beliefs on traditional learning and what is found in the literature.	What are the reasons behind an organisation's transition from traditional learning methods to e-learning?
How does this tie in with the ELC theory?	This question tied in with the ELC theory's **reflective observation** learning cycle stage. This is the act of the employee taking a step back from their day-to-day tasks to compare the difference between traditional learning methods and e-learning. Reflective observation takes place when the employee is asked a question such as the above. Question 5 required the employee to actively reflect on their experience with both learning methods. This question tied in with **abstract conceptualisation** as well, as it required the employee to consider what they had already learnt from the learning techniques they already knew.	
<u>Question 6</u>: **Which e-learning platform has the organisation adopted for its employees and what are your thoughts on it?**	This question was asked based on studies conducted by Mungania (2017) and McCullough (2016), who list a number of popular e-learning solutions. The researcher included this question to identify if the participant was aware of the e-learning transition and recognised the e-learning system provider, and to provide their opinion on the e-learning system.	What are the benefits experienced by the employees and the organisation since the e-learning implementation? What does a typical transition from traditional learning to e-learning within an organisation look like?
How does this tie in with the ELC theory?	This question tied in with the ELC theory's **concrete experience** learning cycle stage. This stage is focused on the employee actively using the e-learning methods adopted by the organisation to experience (first-hand) how effective the newly adopted learning methods are. The employee must make use of the new e-learning platform to create a concrete experience. They are then able to elaborate and provide their thoughts on the e-learning techniques.	

Interview question	Reference to literature	Paired with research question
<u>Question 7</u>: **How did you find the transition from traditional learning to e-learning?**	This question was asked based on the study conducted by Alqahtani (2016), who states that there will be a level of pushback when trying to transition to anything new in any organisation. Some employees will be attached to the older processes. The researcher included this question to identify the participants' willingness to transition to e-learning.	What does a typical transition from traditional learning to e-learning within an organisation look like?
How does this tie in with the ELC theory?	This question tied in with the ELC theory's **active experimentation** learning cycle stage. This stage occurs when the employee considers how they will put their previous learning and experience into practice for their current organisation. The employee was required to actively put the e-learning methods to use to be able to provide a detailed opinion about the transition, as well as draw a comparison between traditional learning and e-learning.	
<u>Question 8</u>: **How has SAP *SuccessFactors* learning software compared to traditional learning methods?**	This question was asked based on studies conducted by Clark (2012) and Romi et al. (2017), where the benefits of e-learning were documented from a literature perspective. The researcher included this question to determine if the participant had experienced benefits from the transition to e-learning, and what those specific benefits were.	What are the benefits experienced by the employees and the organisation since the e-learning implementation?
How does this tie in with the ELC theory?	This question tied in with the ELC theory's **abstract conceptualisation** learning cycle stage. In this stage, the employee (who has already been exposed to e-learning) was required to take what they had learned while using both learning methods to make a comparison.	
<u>Question 9</u>: **How has SAP *SuccessFactors* learning software compared to other e-learning solutions?**	This question was asked based on the study conducted by Alqahtani (2016), which outlines some of the key functionalities of a *SuccessFactors* e-learning system. The researcher included this question to determine if the participant recognised the benefits that the SAPSFL system brings to the organisation in relation to other e-learning software.	What are the benefits experienced by the employees and the organisation since the e-learning implementation?
How does this tie in with the ELC theory?	This question tied in with the ELC theory's **reflective observation** learning cycle stage. This is the act of the employee taking a step back from their day-to-day tasks to review what their current e-learning solution is versus other online learning solutions. This question required the employee to reflect on their previous experience with online learning software.	
<u>Question 10</u>: **Was there a need for a transition from traditional learning methods? Please elaborate by providing your opinions of e-learning techniques.**	This question was asked based on the study conducted by Mungania (2014), which outlines other online learning methods such as videos and e-books. The researcher included this question to determine if the participant had used other methods of e-learning and if their experience with other e-learning methods had motivated the transition for their organisation.	What are the reasons behind an organisation's transition from traditional learning methods to e-learning?
How does this tie in with the ELC theory?	This question tied in with the ELC theory's **concrete experience** learning cycle stage. This stage is focused on the employee being actively involved within the organisation to determine if there is a need for the implementation of e-learning. The employee must have experienced traditional learning for themselves to create a concrete experience where they could elaborate on and provide reasoning for the need for e-learning.	

Interview question	Reference to literature	Paired with research question
<u>Question 11</u>: **How would you and your organisation be impacted on if the SAPSFL system was removed, and employees had to transition back to traditional learning methods?**	This question was asked based on the study conducted by Sutton (2018), which outlines the benefits of transitioning to an e-learning system. The researcher included this question to determine if the participant had become reliant on the benefits that e-learning brings to an organisation and to determine how the participant would be impacted if those benefits were taken away.	What are the benefits experienced by the employees and the organisation since the e-learning implementation?
How does this tie in with the ELC theory?	This question tied in with the ELC theory's **active experimentation** learning cycle stage. This stage occurred when the employee considered how they would put their previous learning and experience into practice for their current organisation. The employee must actively revert to traditional learning methods if the SAP SuccessFactors system was removed. This question allowed the employee to expand on what they had learnt; how reliant they had become on e-learning and how easy it would be to adjust to traditional learning.	
<u>Question 12</u>: **What do you think was the organisation's main objective for adopting the SAPSFL system and have they met their objective?**	This question was asked based on the study conducted by Yaari (2019), which outlines the main objectives that organisations have when implementing an e-learning solution. The researcher included this question to determine if the participant was aware of the organisation's objectives in transitioning from traditional learning to the SAPSFL system and if these objectives had been met after the implementation.	What are the reasons behind an organisation's transition from traditional learning methods to e-learning?
How does this tie in with the ELC theory?	This question tied in with the ELC theory's **reflective observation** learning cycle stage. This is the act of the employee taking a step back from their day-to-day tasks to reflect on the wider purpose of transitioning to e-learning. This question also ties in with **abstract conceptualisation** as the employee is required to take what they have learnt to determine the organisation's main aim for adopting SAP SuccessFactors as its learning system.	
<u>Question 13</u>: **What were the difficulties or challenges that the organisation faced after adopting e-learning (budget, maintenance, usability)?**	This question was asked based on studies conducted by Noel (2018) and Chen (2013), which outline some of the challenges that organisations face when implementing an e-learning solution. The researcher included this question to determine if the participant was aware of the challenges faced by the organisation and if there is a relationship between the participant's response and the literature.	What are the difficulties and challenges that the organisation faces after adopting e-learning methods?
How does this tie in with the ELC theory?	This question tied in with the ELC theory's **concrete experience** learning cycle stage. This stage is focused on the employee being actively involved within the organisation to determine the difficulties and challenges that the organisation faced. The employee must have experienced difficulties themselves or as part of the organisation to create a concrete experience. They could then elaborate and provide their reasoning.	

Interview question	Reference to literature	Paired with research question
<u>Question 14</u>: **What are your thoughts on employees and/or organisations who are hesitant to adopt e-learning and are comfortable with using only traditional learning methods?**	This question was asked based on the study conducted by Benwell (2021), which outlines some of the reasons why organisations are hesitant to adopt an e-learning solution. The researcher included this question to determine if the participant was in favour of or against the reasoning found in the literature and why.	What are the reasons behind an organisation's transition from traditional learning methods to e-learning?
How does this tie in with the ELC theory?	This question tied in with the ELC theory's **active experimentation** learning cycle stage. This stage occurs when the employee considers how they will put their previous learning and experience into practice to provide an opinion on organisations who are hesitant to adopt e-learning. The employee must have been actively involved in both traditional and e-learning methods to provide adequate feedback to this question.	
<u>Question 15</u>: **Where does the SAPSFL system fall short and how can it be improved?**	This question was asked based on studies conducted by Thuyuyen et al. (2017*)* and Benwell (2021) that outline some of the areas where the e-learning solution falls short. The researcher included this question to determine if the participants found the same drawbacks (as seen in the literature) within the SAPSFL system or if there are any additional areas for improvement within the SAPSFL system.	What are the difficulties and challenges that the organisation faces after adopting e-learning methods?
How does this tie in with the ELC theory?	This question tied in with the ELC theory's **reflective observation** learning cycle stage. This is the act of the employee taking a step back from their day-to-day tasks to review their current e-learning solution and what improvements could be made to it. This question required the employee to reflect on their user experience and provide recommendations for improvement.	
<u>Question 16</u>: **Can an organisation benefit from e-learning? Why?**	This question was asked based on the study conducted by Yaari (2019), which outlines an important area where the e-learning solution benefits an organisation. The researcher included this question to determine if there was a relationship between the participant's view/experience and what had been stated in the literature.	What are the benefits experienced by the employees and the organisation since the e-learning implementation?
How does this tie in with the ELC theory?	This question tied in with the ELC theory's abstract conceptualisation learning cycle stage. In this stage, the employee is required to take what they had learnt while using the e-learning system, and together with their existing knowledge, determine if an organisation could benefit from e-learning.	

Interview question	Reference to literature	Paired with research question
<u>Question 17</u>: **Do you feel that you, your colleagues and your specific organisation have benefitted from adopting an e-learning platform? Why?**	This interview question was asked based on the study conducted by Romi et al. (2017), which outlines the location and mobility benefits provided to organisations who have transitioned to an e-learning solution. The researcher included this question to determine if the participant had experienced these benefits or any others that e-learning brings to the organisation.	What are the benefits experienced by the employees and the organisation since the e-learning implementation?
How does this tie in with the ELC theory?	This question tied in with the ELC theory's **reflective observation** learning cycle stage. This is the act of the employee taking a step back from their day-to-day tasks to review the impact of e-learning on their colleagues and the wider organisation. This question required the employee to reflect on the user experience of others.	
<u>Question 18</u>: **Do you feel that your skills have improved, making you more employable than you were, via the SAP *SuccessFactors* LMS? If yes, please describe your learning experience.**	This interview question was asked based on studies conducted by Silverman & Hoyos (2018) and Renu (2021), which outline the skills that employees will improve on after using an e-learning solution. The researcher included this question to determine if the participant had improved on the skills mentioned in the literature or any further skills due to the use of the SAPSFL system. These skills include the following: • Cognitive attributes that involve comprehension and knowledge, the ability to follow instructions and apply methods to various scenarios to resolve problems. • Interpersonal attributes that are involved in presenting, active listening and negotiating. • Psychomotor attributes involving the acquisition of movements and physical perceptions (Silverman & Hoyos, 2018). • Time management skills that are developed as the employee is required to effectively manage assignments, classroom sessions, deadlines and corporate meetings. • Confidence in technical abilities that is improved with hands-on experienced with numerous types of technology. • Self-motivation and personal drive that are improved as employees are required to schedule their own time to study (Renu, 2021).	What are the reasons behind an organisation's transition from traditional learning methods to e-learning?
How does this tie in with the ELC theory?	This question tied in with the ELC theory's **active experimentation** learning cycle stage. This stage occurs when the employee considers how they will put their previous learning and experience into practice to provide an opinion on organisations that are hesitant to adopt e-learning. The employee must have been actively involved with the SAP SuccessFactors e-learning system to determine if their skills have improved and if they have become more employable.	

Interview question	Reference to literature	Paired with research question
<u>Question 19</u>: **Would you recommend that other organisations implement an LMS?**	This interview question was asked based on studies conducted by O'Driscoll (2016) and Dodds (2019), which outline the benefits and reasons why organisations should opt for implementing an e-learning solution. The researcher included this question to determine if there is a relationship between the participants' recommendations for organisations to implement an LMS and the literature.	What does a typical transition from traditional learning to e-learning within an organisation look like?
How does this tie in with the ELC theory?	This question tied in with the ELC theory's **reflective observation** learning cycle stage. This is the act of the employee taking a step back from their day-to-day tasks to review the impact of e-learning on their colleagues and the wider organisation. This question required the employee to reflect on the benefits that e-learning has provided their organisation in order to recommend LMSs to other organisations.	

Based on the responses received from each participant, the researcher grouped the responses into categories. The researcher transcribed each of the participants' responses and identified categories from each response. The researcher read through each transcript as a whole and made notes about any first impressions. Each transcript was then reread individually, and the researcher labelled relevant parts that stood out. A coding process took place where labels were associated with actions taken when using traditional or online learning methods. This included opinions provided about both learning methods, the processes that each employee followed when learning and their overall thoughts on the benefits they identified for themselves and for the organisation. The pieces of the interviewee's responses were coded if:

- it was repeated in several places.
- if the answer was surprising and not aligned with the general notion of answers.
- if the interviewee stated that it was a critical factor for them; or
- if it stood out and was identified as part of the e-learning literature gathered.

Once the codes had been identified, categories were derived from the sets of codes and themes were derived from the categories. The researcher analysed the codes identified and created categories and themes into which to group the codes. Five categories were identified.

Category A: Knowledge and understanding

The understanding and involvement that the employee had of and in both the traditional and e-learning systems underlined the impact it had on the employee and the organisation. Were participants aware of the processes, did they need to get more involved and how severely did it impact on their learning and development?

Category B: Transition adaptation

The transition from traditional learning techniques to online learning techniques found favour with some employees, but not with others. This category aimed to determine the impact that the transition had on these participants and how they adapted after transitioning to the SAP *SuccessFactors* e-learning system. The transition provided further background on the ease of use of the system and whether it was user-friendly.

Category C: Business strategy

The implementation of a new e-learning system would be part of the organisation's strategy to obtain specific objectives, goals and benefits from the learning system. Each participant understood the business strategy in their own way and stated how the newly implemented system aided the business strategy to be rolled out.

Category D: Challenges

Each participant is assigned a job role and development programme defined around the e-learning system implemented. This category defined the challenges that each participant faced when adopting the SAP *SuccessFactors* system; whether skills, practical or role-based issues.

Category E: Overall benefits

The aim of moving away from traditional learning and towards online learning was to improve the ease of use for employees and reduce costs for the organisation. Participants described how the e-learning system had benefitted them and how they viewed it as playing a positive role within their organisation, both now and in the future. Overall, was this a workable solution for the organisation?

Table 4.2: Interview questions, categories of themes

Interview question	Category	Theme
1. How long have you been working at this organisation and what is your current role?	Knowledge and understanding	Long-term consultants
2. Do you hold a tertiary qualification? If yes, what qualification do you hold? (optional)		Information Technology qualification
3. What is your understanding of e-learning and an LMS?		Online courses
4. What are your thoughts on traditional learning methods such as textbooks, classroom attendance and group activities?		Outdated and not feasible
5. Do you prefer traditional learning or e-learning methods? Why?	Transitioning and adapting	E-learning adoption
6. Which e-learning platform has the organisation adopted for its employees and what are your thoughts on it?		Anticipation for change
7. How did you find the transition from traditional learning to e-learning?		Learning curve
8. How has SAPSFL software compared to traditional learning methods?		Innovative learning experiences
9. How has SAPSFL software compared to other e-learning solutions?		First experience
10. What are your thoughts on e-learning methods such as e-books, video training self-studying and online courses? Was there a need for a transition from traditional learning methods?	Business strategy	Adaptability, efficiency and cost reduction
11. How would you and your organisation be impacted if the SAPSFL system was removed, and employees had to transition back to traditional learning methods?		Dependency
12. What do you think was the organisation's main objective for adopting the SAPSFL system and has it reached its objective?		Innovation and efficiency
13. What were the difficulties or challenges that the organisation faced after adopting e-learning (budget, maintenance, usability)?	Challenges	Connectivity and context
14. What are your thoughts on employees and/or organisations who are hesitant to adopt e-learning and are comfortable with using only traditional learning methods?		Market competition and blended learning
15. Where does the SAPSFL system fall short and how can it be improved?		Functionality and interaction
16. Can an organisation benefit from e-learning? Why?	Overall benefits	Cost-effective and agile

Interview question	Category	Theme
17. Do you feel that you, your colleagues and your specific organisation have benefitted from adopting an e-learning platform? Why?		Increase in employee engagement, seamlessness
18. Do you feel that your skills have improved, making you more employable than you were, via the SAP *SuccessFactors* LMS? If yes, please describe your learning experience.		Accessibility, time management, the effectiveness of quality courses
19. Would you recommend that other organisations implement an LMS?		Saves time, costs, no geographic boundaries, Covid-19

4.3 FINDINGS AND ANALYSIS

All data collected during the interviews was analysed and grouped into categories. The categories were derived based on the codes identified from each participant's response. The common responses and remarks provided by the participants were grouped and categorised.

Having analysed the ELC theory adopted as part of the research study, results that coincided with the theory in relation to responses received from the participants were found. The ELC theory was divided into two ways of learning that being: concrete experience (apprehension) and abstract conceptualisation (comprehension). This was combined with two methods of transforming the experience so that learning is achieved reflective observation (intention) and active experimentation (extension) (Lundqvist, 2016).

Of the 15 participants, three participants use the coaching learning method, which focuses on active experimentation (doing), as well as concrete experience (feeling) to transition from the traditional learning system to the e-learning system. Three participants use the facilitator learning method, which focuses on concrete experience (feeling), as well as reflective observation (watching). Four participants use the subject expert learning method, which focuses on abstract conceptualisation (thinking), as well as reflective observation (watching). Five participants use the standard setter and evaluator learning method, which focuses on active experimentation (doing), as well as abstract conceptualisation (thinking). Each category mentioned in the coming section included the experiential learning step identified. as well as the experiential learning style paired based on the participant's response:

4.3.1 Category 1: Knowledge and understanding

The literature review of the study expanded on what both e-learning and the SAPSFL system are. Are the employees familiar with the IT environment, what roles have they had and is the participant aware of the motives for having moved from traditional learning to e-learning?

4.3.1.1 Theme 1.1: Long-term consultants

In response to the question: “How long have you been working at this organisation and what is your current role?” the majority of the participants indicated that they began their careers as interns with the organisation, but continued to complete their internship and become permanent consultants within the organisation. This is beneficial to the study as many of the participants had been at the organisation long enough to transition from traditional learning methods to online learning using the SAPSFL system.

Some of the participants' responses included the following:

> “I have been working here for five years now, I started off after Tuks and joined the grad programme. Now my role is a senior consultant.”

> “I started with the company in 2017 so I would say roughly three and a half years. I am an employee central consultant assisting with training and upskilling.”

The majority of the respondents had been employed by the organisation for over a year, making them familiar with the systems being used and the learning/skills development methods that each employee was required to follow. The organisation required each employee to be employed for one year as an intern before becoming a permanent consultant. During this transition period, it was compulsory for the participant to complete courses and qualifications to obtain a promotion. As mentioned in the literature review, the experience level of the employee had an impact on their adaptability in transitioning from traditional learning methods to e-learning. Section 2.3.3 of the literature review stated: “This does, however, depend on the experience that the individual has, it is seen that individuals with more work experience show stronger signs of focus and can adapt at a faster rate to technological changes” (Mullins, 2016). As there was little or no literature to guide organisations during the transition phase to e-learning, this question addresses the literature gap having identified the experience level of employees who have transitioned from traditional learning to an SAPSFL system.

4.3.1.2 Theme 1.2: Information Technology qualification

In response to the question: “Do you hold a tertiary qualification? If yes, what qualification do you hold?”, the majority of the participants indicated that they had obtained a tertiary qualification in IT. Many of the participants had attended the University of Pretoria, with the majority of the qualifications being IT-related. Qualifications stated by participants included BCom Informatics, BSc Information Technology, BSc Computer Science, BIS Multimedia and BIS Information Systems.

Some of the participants' responses included the following:

> “Yes, I hold a bachelor’s degree from the University of Pretoria in BSc Information Technology.”
>
> “I attended Tuks and received a bachelor’s degree in Informatics.”

The findings from the responses to this question indicated that most of the employees at the organisation had already obtained a tertiary IT qualification. This was not surprising as the organisation is an IT-focused company. Due to their qualifications, the employees were aware of IT fundamentals and were able to adapt easily to online learning methods. Section 2.3.2 of the literature review gives an indication of the number of jobs that required a tertiary education in 2019. Students who had obtained a tertiary education had a higher chance of being hired by an organisation that offered online learning platforms and, in turn, were more comfortable with adapting to the new technologies. All the participants had acquired a tertiary education; therefore, they had a clear understanding of online learning. This question addressed the literature gap by identifying the education level of employees who had transitioned from traditional learning methods to the SAPSFL system.

4.4.1.3 Theme 1.3: Online courses

The participants’ responses to the question: “What is your understanding of e-learning, a learning management system and how do you prefer to use it?” were based on their ability to complete their courses and certifications online without the use of physical books. The majority of the employees mentioned that the SAPSFL LMS was implemented for the organisation to complete their courses remotely and to easily access the relevant learning material.

The participants mentioned that there was a variety of content available on the LMS and that it was available in the form of e-books, slides, video, audio and diagrams.

Some of the participants' responses included the following:

> “E-learning I would say is something that organisations and even schools use today to cater for circumstances such as Covid-19. All work and information can be obtained online. Here we use the SAPSFL module to do our own certifications, which I find very useful. I enjoy watching the e-learning videos.”

> “E-learning or online learning is learning on the internet. Generally, today online means being connected to the internet. My understanding of e-learning is several learners all attending the same online course at the same time, but from different locations. An LMS is like *SuccessFactors* or *Moodle,* which allows access to learning material for those wanting to complete courses. It excludes the physical classroom environment. I find the exercises and tests towards the end of the theory beneficial.”

The employees’ findings employees indicated that they were fully aware of what e-learning was and how an LMS is used. Many of these participants were familiar with their organisation's own LMS system which is the SAPSFL system and have actively used it for their skills and development training. No respondents did not know what either e-learning or an LMS was. It can be said that this group of participants could make a direct comparison between traditional learning methods and the newly incorporated online learning methods introduced to them. Section 2.2.2 of the literature review stated: “Technology is incredibly relevant in today's society; educators must provide opportunities for students to responsibly use it for their learning in a meaningful way. If the use of technology is clearly understood within the academic environment, it can become a strong tool for development" (Thujudeen, 2017). This signified that the participants in this study were already aware of the benefits and capabilities of e-learning for the advancement of training and development. A basic understanding is seen as a good start for a smooth transition and positive utilisation of the online learning platform. This question has addressed the literature gap by identifying the technological and online learning awareness of the employees who have transitioned from traditional learning methods to the new SAPSFL system.

4.4.1.4 Theme 1.4: Outdated and not feasible

When the participants were asked to give their thoughts on traditional learning, their responses were against paper-based books and physical classroom attendance. This differed slightly as some participants favoured classroom attendance and physical material, but the majority of respondents were in favour of accessing all learning material online. As millions of employees were forced to work from home due to the Covid-19 pandemic, organisations utilised online learning, which employees found flexible and efficient, and were able to use on their own.

Some of the participants' responses included the following:

> "Textbooks and classrooms have pros, but also cons. For me personally, studying online works best because it allows me to be self-disciplined, but allows me to learn at my own pace, but I wouldn't mind picking up a book or being surrounded by fellow students in a class. The interactions are better."

> "I have found that I have completed much more online than I would have without the *SuccessFactors* learning system. Traditional learning methods are great for foundation learners such as juniors, but I am someone who works faster on my computer."

In response to the question: "What are your thoughts on traditional learning methods such as textbooks, classroom attendance and group activities?", many of the participants stated that they did not have an issue with traditional learning methods. The participants stated that they had used these traditional methods throughout their schooling careers. However, they understand that the progression of technology affected the way people learnt and that they were willing to adopt new learning methods to ensure they experienced the benefits of new technology. Section 2.3.1 of the literature review expanded on the multiple traditional learning methods that are still used today. On-the-job training, lectures, classroom training and group activities were praised for the interaction and human touch that these methods brought to the learning environment. As stated by many of the participants, they enjoyed the interactions of traditional learning, but were excited to be introduced to new methods of learning, which were seen as less time consuming, remote and cost-effective.

This question addressed the literature gap since it identified the understanding of traditional learning methods that employees had. The employees were able to distinguish the main differences between traditional learning methods and online learning, which emphasised that they were aware of the change and the new processes that had to be followed for the transition to e-learning to take place.

4.4.2 Category 2: Transitioning and adapting

4.4.2.1 Theme 2.1: E-learning adoption

It was clear from the participants' responses that the employees were willing to adopt e-learning within their corporate environment. Many of the participants emphasised that they had been taught using traditional learning methods as they grew up, but later adjusted as technology began to make its impact on education. The majority of the participants had been introduced to e-learning methods in their tertiary studies, when laptops and tablets were introduced to the classroom. This continued into the corporate environment where less paper-based learning was utilised. The respondents to the question: "Do you prefer traditional learning methods or e-learning methods and why?" comprised consultants, managers and partners from within the organisation.

Some of the participants' responses included the following:

> "E-learning because I feel like I am progressing at my own pace. It is suitable for someone like me who wants to further their education while still working a full-time job. I also enjoy being able to plan my learning path to cater to my needs."

> "Traditional learning methods because I become very bored reading slides by myself. Listening to an instructor or facilitator actually helps me process the information easily. I prefer the instructor to set my performance goals in a structured way."

The majority of the respondents to this question preferred e-learning to traditional learning methods, which signified that the participants had welcomed the SAPSFL system as their new learning and development tool. A common challenge faced by organisations is that their employees cannot adapt to change, especially when the intention is to introduce an online system that no one had previously used.

The majority of participants who were willing to adopt change helped make the transition to SAPSFL positive and successful. Section 2.3.3 in the literature review states: “Online training is seen as a way to overcome common problems such as low usage rates and the disadvantages of traditional learning methods. In general, if the learners believe that the training will be useful and simple to use, they are more likely to enrol and complete online courses” (Ellis, 2014). This signified that employees had searched for and, most likely, chosen the simpler option. Learning has catered for a new modern market where courses have been packaged into efficient and simple options. This was seen in the majority of the participants’ responses. This question has addressed the literature gap by identifying the workforce’s learning preferences, especially in those who have transitioned from traditional learning to the new SAPSFL system.

4.4.2.2 Theme 2.2: Anticipation for change

Participants mentioned that they were aware that the organisation was transitioning from traditional learning methods to the SAPSFL system. An announcement had been made about the LMS to all the organisation’s employees a year before the implementation and positive feedback had been received. The business planned to transition from classroom learning environments, which comprised after-hours lessons followed by homework and physical classroom tests. This had become strenuous on the organisation’s resources, time and budget, and an alternative was needed to create a more efficient learning environment. In response to the question: “Which e-learning platform has the organisation adopted for its employees and what are your thoughts on it?” the respondents stated that the SAPSFL system had been implemented and the majority of respondents praised the idea and the new solution. The majority of the participants were positive and mentioned some of the functionalities of the SAPSFL system (which were new to the participants), such as the ability for them to track their results, progress with activities and tests, as well as the ability for the employees to download learning material, make study notes on the system, save their exercises and access the content remotely and at any time.

Some of the participants' responses included the following:

> “We implemented the *SuccessFactors* learning module, this was about a year into me joining, but I was lucky to be included as part of the implementation team that oversaw the implementation and the post-training to our employees. I think it was a good

decision and we were keen. We all have access, and the system is catered to each of our roles, so it offers us the learning material that relates to the area we are focused in. The new user interface is great and there is a large amount of video content which I use regularly while sitting on the Gautrain."

"That would be the *SuccessFactors* LMS. It's a good system, I have worked on other online learning systems such as Skill Share, but the *SuccessFactors* system is nice because it provides users with a user-friendly interface. It allows us to communicate with one another and it has a reporting tool that allows me to evaluate my learning and set objectives. I was involved in the requirements-gathering workshops with the implementation team and provided feedback on what learning functionality we want the e-learning system to have. These features, such as performance tracking, goals setting, and employee-assigned content, have all been included in the system."

The participants' findings indicated that they had adopted the SAPSFL system well and that transitioning from traditional learning methods was not an issue for the majority of them. This assisted the organisation greatly because it increased the speed at which employees were "onboarded" to the system and helped them feel comfortable enough to begin working independently. It was mentioned that the online platform became very useful during the Covid-19 pandemic as many employees used their time to not only familiarise themselves with the learning system, but certify themselves in multiple subjects. Section 2.3.4 of the literature review states: "SAP *SuccessFactors* learning is ranked as one of the leading cloud HCM solutions built for large corporations". This statement tied in with the excitement in the participants' responses. The LMS already has an established and reputable reputation in the software world. Many of the employees mentioned that they had either heard of the solution before its implementation or they were excited by the prospect of being able to use the new software. The literature states: "SAP *SuccessFactors* learning provides an open content, nongeographical network where management has the flexibility to acquire the right external content for their organisation in an inexpensive, convenient and easy to scale way". These were key features of the LMS that participants mentioned assisted them during the Covid-19 pandemic. As the employees of the organisation had been forced into lockdown, the flexible study method and open content allowed many of them to continue their studies at home. This question addressed the literature gap by identifying the system and online learning awareness of the employees who had transitioned from traditional learning methods to the new SAPSFL system.

4.4.2.3 Theme 2.3: Learning curve and involvement

Based on the participant's responses, most of the employees found the transition from traditional learning to e-learning effortless. They were able to adapt and understood that this was where education and self-development tools were moving toward. Many participants mentioned that they would not rule out traditional learning methods going forward and that they would always use what they had learnt in combination with the online learning platform. In response to the questions: "How did you find the transition from traditional learning to e-learning?" a mixed group of participants mentioned that they found no issues with the transition and welcomed it as a new learning curve.

Some of the participants' responses included the following:

> "Well, there were no issues from my side. I am still in fact learning more about the system each time I log on to use it. It seems that SAP is adding new features as we go along. It's allowing us to be more hands-on, to think for ourselves and to be more involved within using interactive learning. Our facilitators and the SAP implementation team provided us with helpful training guides."

> "I was very excited about the release of the system, so it was a smooth transition for me. The team that implemented the system did so very efficiently and we were provided with updates and training throughout. I have heard and read very positive things about it and when the lockdown kicked in, the system became very useful to everyone. I think people were actually studying and certifying themselves more once it was available. I'm looking forward to self-studying the material and the media content provided."

The majority of the participants had minimal difficulty when they transitioned from traditional learning methods to online learning. Based on the responses, the participants adopted the change as a learning curve and were willing to adapt to the e-learning methods. Section 2.3.6 of the literature review states: "It is often found that there is an unwillingness to adopt change. Change is often difficult to accept and changing an organisation's learning method is no exception. Very often the individuals are not conscious of the benefits that online learning can bring to the organisation" (Noel, 2018). This statement did not apply to the majority of participants from the interviews or the organisation as a whole.

The participants, due to their educational backgrounds and interest in IT, were excited and willing to transition from traditional learning methods to SAP *SuccessFactors* e-learning. This question has addressed the literature gap by identifying the involvement and willingness of the employees who have transitioned from traditional learning methods to the new SAPSFL system. The feedback received emphasised the importance of having employees take part and be involved in the e-learning implementation, as well as after the transition.

4.4.2.4 Theme 2.4: Innovative learning experiences

The participants were able to compare the SAPSFL system directly with the traditional learning methods used previously by the organisation. The majority of the participants had been recruited by the organisation before its transition to online learning. In response to the question: “How has SAP SuccessFactors Learning software compared to traditional learning methods?” the majority of the respondents stated that the two learning methods differ considerably. Many of the responses stated that internet access was required for the SAPSFL system to be used and that performance feedback was provided through technology-based tools such as reports and emails, whereas with traditional learning internet connectivity was not needed, exercises and learning were done face to face, and some very good instructors guided participants through the course. The responses were from a mix of employees who had transitioned from traditional learning to the online SAPSFL system.

Some of the participants' responses included the following:

> “I guess you can compare them directly. Well, for starters, the traditional learning techniques required less discipline, but imposed more structure. It also creates a demanding schedule that has to be stuck to. With the SAPSFL system is so innovative that it allows for much more flexibility and gives employees more control over their lifestyle. I think just the ability to have so much more access to content, I remember how expensive university textbooks used to be. The learning reports are fantastic as well as to track my progress, performance and test results.”

> “The online system is great; it could have been expensive to implement as it’s a very innovative design, but I’m sure that, in the long run, the company will benefit from it. From my experience if I had to compare them both, I would say that the online system is flexible as it’s based online. I have more time to spend with family and I can do the

courses in my own time and even on weekends. The way we did it before was very time consuming. Currently, I am assisting with instructing and mentoring so it provides a great platform to assess my team."

The findings from the respondents indicated that the two learning methods were different: each had its positives and its negatives. The majority of the group were in favour of the SAPSFL system as they saw many benefits, which made learning more flexible and affordable and less time-consuming. "Innovative" was a keyword used by many respondents, signifying that they saw a lot of improvements with the e-learning methods. Section 2.3.5 of the literature review states: "There were several ways that the employees of the organisation would be required to adapt to the online learning techniques. Employees would be required to communicate with their instructor if they were unfamiliar with the e-learning environment, they would need to ensure that they have the necessary tools, equipment and internet connectivity to allow for a smooth online connection. Most importantly, the employee would be required to manage their time wisely" (Mohammed, 2017). When the participants' responses were analysed, it was clear that the majority of the employees understood that the transition required some changes. This also tells us that these participants found some challenges with the necessary hardware and internet connection, but were willing to manage their time for e-learning courses. This question has addressed the literature gap by identifying the activeness and use of the SAPSFL system by the employee. The feedback received emphasised the awareness of change and the benefits realised by the majority of the employees.

4.4.2.5 Theme 2.5: First experience

The employees were asked if they had used other forms of e-learning software before using the SAPSFL system, and how the various e-learning systems compared with each other. The majority of the respondents stated that the SAPSFL system was their first e-learning system experience and that before that they were using traditional learning methods. A few participants had experience with other e-learning systems (such as Google Classroom), but the participants mentioned that the SAPSFL system outweighed other e-learning solutions in terms of the abundance of functionality and favourable usability it provided. The responses to the question: "How have SAP SuccessFactors Learning software compared to other e-learning solutions?" were from a mixed group of participants, including consultants and managers who had transitioned to the SAPSFL system.

Some of the participants' responses included the following:

> “To be honest, I’m not sure if I’ve used another e-learning system. I know that Blackboard is considered an online educational platform, so I would only be able to compare it to that. During my university days, we used Blackboard and click UP, which was fully online. Course material for each module was delivered on Blackboard. We could load our learning material, complete quizzes and upload assignments. Students could even communicate on the platform. In the corporate environment, I would say that the SAPSFL system is a lot more informational, and certification driven. It’s used to ensure that employees complete their compliance training with the aim of improving business processes, evaluating learning and developing on-the-job skills.”

> “I’ve used Google Classroom as a facilitator, which allows students to join their class, ask questions, and save questions and answers, and it allows facilitators to share files with the students. SAPSFL is much more business-orientated and focuses on employee development. I feel that with SAPSFL you may need a good IT foundation to be able to use and navigate the system. There are a lot of features and functionality that can benefit the employee if used properly. Also, SAPSFL is able to integrate to third-party systems to utilise their features as well, but on one single platform.”

A few of the respondents indicated that they had worked with other educational learning systems (WizIQ, Oracle, Moodle, Docebo) before SAPSFL, but not one directly rivalled SAPSFL. Those who could compare, mentioned that the SAPSFL system was very focused on business and employee development, and that it offered a wide range of user experiences and learning features, so much so that training was essential to be able to make use of the new e-learning system. Section 2.3.4 of the literature review states: “Among these LMS options offered, 38% of organisations that use an LMS are still considering a system change. Adopting the incorrect or less than optimal software can cause more problems for the organisation than solutions” (McCullough, 2016). This aligned with the participants’ responses as many LMSs are adopted by organisations, but are not effective. SAPSFL has had a higher success rate among organisations as it offers learners more information and functionality as mentioned in their responses. This question addressed the literature gap by identifying if employees were aware of other e-learning solutions other than the new SAPSFL system.

4.4.3 Category 3: Business strategy

4.4.3.1 Theme 3.1: First experience

Three of the interview questions were focused on the organisation's business strategy and the reasons for implementing an online learning platform for its employees. The organisation made the participants aware that a new and improved learning system would be rolled out, replacing the physical need for textbooks and classroom attendance. Cost reduction was a big focus of the organisation, and learning material was expensive to replace and continuously update, especially when in the IT industry. In response to the question: "What are your thoughts on e-learning methods such as e-books, video training, self-study and online courses? Was there a need for a transition from traditional learning methods?" the majority of the participants stated that they were happy to assist with the transition by aligning with the organisation's vision and adapting to the new e-learning methods introduced.

Some of the participants' responses included the following:

> "It's very useful and efficient in completing courses. I've experienced very easy-to-use content and I enjoy the visual content such as the videos and slides. I would say yes, there was a need because we need to keep up with the changing environment and it's almost as if it was a breath of fresh air with the new system. From what I see, most people at the office enjoy using it and learn a lot as the videos stick to one topic per video. Being able to play and pause allows us to make notes."

> "I really enjoy using the SAPSFL software, I completed the training and I now find it quite easy to navigate the system, which provides content in an ordered and structured approach. It was a system I first had to adapt to, but thereafter I was comfortable and enjoy the self-study materials and videos. I find myself using it late in the evenings as that's when I can focus the most. Yes, I think there was a need for employees to transition, mainly because there were way too many outdated books at the office that had to be cleared out. Technology is allowing us to progress and do our work by other means, so we need to take advantage of it."

The majority of the responses were in favour of e-learning methods. The participants saw the many benefits provided by the e-learning solution and focused on adapting and keeping up

with change. There was minimal hesitation towards moving away from the traditional learning methods. The majority of the respondents said "yes" and were in favour of their organisation's transition from traditional learning to online learning. Due to their busy schedules, the employees were hopeful that learning would become quicker and more efficient, while the organisation saved costs. Section 2.3.5 of the literature review states: "The approach e-learning takes is to keep one key point per video or session and that key point or key video needs to be delivered preferably within the five- to ten-minute mark as the learner needs to be able to process the information before they are distracted or become disinterested in the content. Learners today have a very short attention span and prefer to have the instructions and information provided to them as quickly as possible" (Muhire, 2012). This was in line with the feedback from the participants. The participants stated that the e-learning methods presented to them assisted with their learning and development as videos were divided into separate and shorter lessons. This was seen as a training technique that considered the employees' concentration span. This question has addressed the literature gap by identifying whether the employees have had prior experience with e-learning methods and how this has assisted them in transitioning to the SAPSFL system.

4.4.3.2 Theme 3.2: Dependency

The employees have been using the SAPSFL system as their first method of learning and certifying themselves in new skills. The majority of the employees were in favour of the transition from traditional learning methods to online learning. When further insight was obtained regarding the reliance of the system, the respondents were asked: "How would you and your organisation be impacted if the SAPSFL system was removed, and employees had to transition back to traditional learning methods?".

Some of the participants' responses included the following:

> *"SuccessFactors* has been very useful so I doubt it would ever be removed, employees and my team are now dependent on it. The speed and ease at which we can self-study material that I can deliver to my team for upcoming projects has been very useful. If the system was removed, it would be difficult to go back to traditional learning. I mean we would have to because there would be no other choice, but because employees are used to the online material, going back wouldn't be ideal. A positive is that employees would go back to practical and on-the-job training, which I am capable of conducting as well."

> “If the system were to be inaccessible now, it would create a lot of issues because we are based and working from home due to the Coronavirus. I don’t see classroom-facilitated learning being effective with social distancing. From my experience, conducting these lessons can have several challenges, such as space, the risk of spreading illness and so on. The costs of the training would increase for the organisation, and the time and effort would increase for us as employees. I personally feel that on-the-job training would be required again, but that would not be ideal.”

The findings indicated that the organisation became dependent on the SAPSFL system after the transition was made from traditional learning methods. The majority of the participants stated that they were comfortable using the online system and that costs, resourcing and the time taken to obtain a new certification would increase if the employees had to transition back to traditional learning methods. A handful of participants stated that they did not have a problem with transitioning back as they were familiar with the traditional learning methods. Section 2.3.1 of the literature review states that on-the-job training formed an important part of the traditional learning methods used by employees before the transition to e-learning. “This emphasises is on the employee’s ability to learn, having observed their managers or colleagues while in the working environment. On-the-job training is one of the most used and oldest techniques of informal training. This technique is considered informal training as it does not occur as part of a formal training programme and because the employee's colleagues, mentors and managers serve as their teachers” (Allen, 2014).

This tied in with the employees’ responses as many of the participants said that they would not be upset if they had to revert to traditional learning as on-the-job training was very beneficial to their development. On-the-job training was a technique not offered via e-learning platforms, including SAPSFL. This question has addressed the literature gap, having identified the reliance that employees have on the SAPSFL after the transition from traditional learning methods. The feedback received emphasised the benefits provided by the system and the dependence of employees on e-learning.

4.4.3.3 Theme 3.3: Innovation and efficiency

The organisation had notified its employees of the transition from traditional learning methods to online learning well in advance of the implementation of SAPSFL. The employees were aware of the organisation’s intentions, but also formulated their own

understanding once the e-learning system was live and available for use. The responses to the question: “What do you think was the organisation’s main objective for adopting the SAPSFL system and has it reached its objective?” were from a mixed set of employees, including a consultant, manager and partner.

Some of the participants' responses included the following:

> “The main objective for implementing the system was to have everyone at the organisation work more effectively, track their performance, and provide efficient results that employees can improve on. Implementing a cloud-based solution has many benefits, but I think the main focus was for employees to receive better training. It allows everyone to be updated immediately and simultaneously when policies change, and gives everyone access to new information at the same time. By this, yes, the objective was met.”

> “To reduce costs and introduce innovation in learning. To schedule time, have meeting rooms and print textbooks is expensive, so this enables employees to use other forms of learning such as audio and visual. Yes, the organisation has met the objective, which was to save on costs and improve the learning process.”

The responses from the participants agreed that the organisation had met its objective. The majority of participants stated that the organisation’s main objective was to reduce costs and improve the learning experience, having used innovative processes. These objectives were communicated to the participants beforehand. Once they made use of the LMS themselves, they agreed with the innovative processes built into the solution. Section 2.3.4 of the literature review states: “Organisations adopting SAPSFL are developing a culture of continuous learning across the business and beyond, while closing skill gaps and increasing employee engagement” (Ellis, 2014). The participants are aligned with the idea of continuous learning and mentioned even more benefits for e-learning adoption. Positive feedback was provided for this question as each participant had a unique answer on the organisation’s reasoning for implementing the LMS, which emphasised the multitude of benefits that the LMS offers the employees and the organisation. This question addressed the literature gap by identifying the employees' understanding of online learning and the wider reasoning for the implementation other than solely benefits for the employee. The

feedback received emphasised the business understanding that the employees have of their organisation's decision to implement such a change.

4.4.4 Category 4: Challenges

4.4.4.1 Theme 4.1: Connectivity and context

Once transitioned, all the participants were using the SAPSFL system and had gained enough experience to distinguish any difficulties or challenges faced when using the LMS. The purpose of the question: “What were the difficulties or challenges that the organisation faced after adopting e-learning?” was to identify and analyse the major challenges that the organisation faced and to find solutions to these challenges.

Some of the participants' responses included the following:

> “The initial costs to implement an SAP system is not cheap so the cost-effectiveness factor would be realised, but in the long run. We also see that the LMS has so many features and functionality that it requires internal training before a user can access and navigate the system. Lastly, I would say connectivity issues. If based at the office, our employees have no issues with connectivity, but due to the large number of employees working from home, there have been some complaints that the LMS uses a lot of data for the high-quality video content that is made available. In the transition from the traditional way of learning, it takes time to adjust to the new activities set out in the LMS.”

> “There were not too many challenges to begin with. At the organisation we are all computer skilled and capable of using the solution without any major issues. The connectivity would be the only issue on my end. Since I am working from home, I see that the system works better on a fibre network, and I am running LTE. That is something that can be resolved, but it has been a challenge on my end. The quizzes and the activities take longer to complete due to the connection speed, so it almost feels like I have less time to complete them. Other than that, it was quite easy to use and navigate the system, which I enjoyed.”

The majority of the challenges faced by the participants were external factors like internet connectivity. Due to the Covid-19 pandemic, all the participants had been forced to work from home, where they had slower than normal internet connectivity. This, in turn, caused the LMS to operate at a slower speed. The organisation faced an initial high cost for the implementation of the SAPSFL solution. This was seen as a challenge, but as employees made more use of the LMS, the organisation began to reap the rewards of the investment in the system. A few of the employees mentioned that they could not ask further questions or obtain clarity on some of the learning material provided on the LMS. Section 2.3.6 of the literature review states: “Depending on the employee's computer literacy level, not having much technical assistance available can dissuade the user from completing a course” (Mungania, 2014). “Organisations should provide immediate technical assistance when employees encounter technical problems, and the user interface should be intuitive and user-friendly” (O’Driscoll, 2016). The participants' responses for not having a physical trainer present to assist or answer questions were in line with the literature review. This was a common challenge faced by employees when adopting the LMS. The learner was on their own for the majority of the learning process. This question addressed the literature gap by identifying the challenges brought by technology. The feedback received emphasised that the employees understood that technology resolved many problems, but can create new challenges, which required newer solutions.

4.4.4.2 Theme 4.2: Market competition and blended learning

As e-learning has grown, organisations are recognising the benefits of transitioning from traditional learning methods to online learning. The participants were well into completing their online courses and certificates with the SAPSFL system and understood the new features, benefits and challenges that came along with transitioning to online learning techniques. The participants were asked: “What are your thoughts on employees and/or organisations who are hesitant to adopt e-learning and are comfortable with using only traditional learning methods?*”.*

Some of the participants' responses included the following:

> “Transitioning from traditional learning methods such as books and classroom attendance will assist employees increase their productivity. Employees should give it a chance as there are many learning methods available on the LMS, providing surety that

their unique learning style will be catered for. I also feel that the organisation benefits because it has less maintenance and faster results. The course material is easy to update, so if new topics are required, this can easily be incorporated into the employee training. Being hesitant to adopt these benefits would only slow down your organisation and make them unable to compete with its competitors. It's almost as if companies were to stop using laptops today. Imagine how that would drop their productivity?"

"Looking at our organisation, it was very capable for us to adopt the SAPSFL system. There are plenty of benefits today that will allow the organisation to categorise all its learning content while allocating it appropriately to the correct employee. We have technically skilled employees, and we have previous experience in implementing SAP solutions, so the implementation capabilities and acceptance of the system would not be as difficult as it could be for other organisations. I don't see an issue with being hesitant to adopt e-learning. I feel that blended learning could work equally well as it incorporates traditional learning methods like textbooks and classroom learning together with online quizzes and activities. This is an easier way for organisations to adopt e-learning, but ensure they are growing their employees with the latest technologies."

The findings from the majority of the participants indicated that organisations should adopt an online learning platform for their learning processes to improve and to remain competitive in the market. It was stated that blending learning was a good option and a solution for adopting both traditional and e-learning methods, should there be any hesitation by the employees to transition. On the other hand, a few employees stated that organisations do not need to transition from traditional learning as it was the oldest and the most effective training technique. The overall responses from the participants were that they were in favour of adopting e-learning methods for both themselves and their organisation. The fact that these participants are actively using an e-learning system increased their support for the transition to online learning methods.

Section 2.3.6 of the literature review states: "It is advised for organisations to tackle employee resistance by firstly explaining to the employees and helping them understand the benefits of transitioning to e-learning. Incorporating a rewards programme for employees will motivate them to participate in the e-learning process and will make learners feel recognised for their achievements" (Yaari, 2019).

This statement from the literature review was aligned with the responses provided by the participants. As the participants have been actively developing their skills on the LMS, they understand the benefits that the organisation has been receiving by selecting the e-learning route. Therefore, the majority of participants disagreed with organisations that are hesitant to adopt e-learning. They disagree as they believe the LMS has improved overall development and has increased efficiency. This question addressed the literature gap, having identified the employees' awareness of what value online learning has brought to organisations. The feedback received emphasised that employees are in favour of the transition and understand that the solution will move the organisation forward.

4.4.4.3 Theme 4.3: Functionality and interaction

The participants in the study were familiar and comfortable with using the SAPSFL system. They were able to identify both the benefits and disadvantages of the LMS. The organisation intended to improve the efficiency, quality and speed of learning, while reducing costs. There were, however, drawbacks, and improvements needed to be made to the SAPSFL system, some of which were not identified before the implementation. The responses to the question: "Where does the SAPSFL system fall short and how can it be improved?*"* were from a mixed set of participants who have actively used the SAPSFL system.

Some of the participants' responses included the following:

> "From a mentor perspective, it would be nice to interact on the system with my team instead of using external applications. Built-in message or video calling would be very beneficial to mentor my employees while there are actively learning. I've also noticed that tests or even small quizzes cannot be retaken. I'm not sure if that's how the system has been set up by the business, but it would help to retake a quiz or a test for practice purposes. Once a quiz is complete, it provides you with your mark, but there is no way of going back to redo the quiz. If this cannot be updated, then it would be beneficial to set up a separate section of quizzes and practice activities."

> "The system's advantages surely outweigh the drawbacks. but what I have noticed is that the course material is very company focused. There is no library of materials that can be searched to reference or material available that does not tie in with the organisation's syllabus. It's not somewhere that the system is falling short, but it is an improvement that I would recommend. A lot of the material we use is linked to other

topics or software systems, so if e-books or even URL links were placed on the LMS for these external topics, it would broaden our learning. In addition, the other modules, such as Performance and Development, are not included in the scope of this system. It would have to be purchased by the organisation as an additional system to be integrated into SAPSFL."

The findings indicated that some improvements could be made to the SAPSFL system. The majority of the participants mentioned that the system lacked the functionality to retake tests or to search a library of learning material. Participants stated that they would like to see more versatility in the learning content and not be focused on only what the organisation sets out to complete as part of the syllabus. A few of the participants mentioned external shortfalls of the system, such as the lack of face-to-face communication with trainers, and requested that trainers be incorporated together with the LMS. Overall, the participants' responses indicated that, even though the use of the SAPSFL system had many benefits, there were still several improvements that could be made to enhance the user's learning experience. Section 2.3.6 of the literature review states: "E-learning will rely heavily on algorithms and data in the future, which will assist recommendation engines to use them for personalised learning" (Ellis, 2014). This was in line with the participants' responses as the system was limiting to a standard. The employees were not able to retake tests unless the rules built into the system were updated by the solution implementation experts. In addition, the material could not be downloaded unless defined that way in the back-end coding of the system. The participants agreed that this was where the LMS fell short. In a traditional learning environment, this would not have been a problem as the facilitator would be able to grant reattempts on a test and could provide learners with learning material. This question has addressed the literature gap by identifying employees' involvement within the SAPSFL system by identifying where improvements are needed. The feedback received emphasised that employees have spent enough time in the online learning environment and have thought constructively enough to identify gaps within the new system.

4.4.5 Category 5: Overall benefits

4.4.5.1 Theme 5.1: Cost-effective and agile

The participants involved in the study had each transitioned from traditional learning methods to e-learning by adopting the SAPSFL management system. In addition, each

participant had been using the LMS long enough to have determined the overall benefits that it had for both themselves and the organisation. The purpose of the question "*Can an organisation benefit from e-learning? Why?"* was to identify the reasons for the growing trend of transitioning from traditional learning to e-learning from an employee's perspective.

Some of the participants' responses included the following:

> "Yes, 100%, an organisation can benefit from e-learning. All organisations can benefit from e-learning in one way or another I feel. But, to sum it up, it's because of the 24/7 accessibility. As a professional consultant, I need real-time access to my information. I want to be able to take courses and complete my certifications. Companies are now allowing their employees to study when they want and how they want, but they can at the same time monitor their employees' progress. For example, I can sit on the couch and complete an entire day of courses, which will send my results directly to my manager. And more so for the organisation, its cost-effective. When I started at this company, so many employees had to travel overseas for training. Now, with that same money, you can train an entire department."

> "Yes, an organisation can benefit from transitioning to e-learning systems. A major benefit is that learning material is always changing and needs to be updated, especially within the IT industry. As we are an IT company, it is easy for our material to be outdated within a year or two. We require updated content, as well as multiple mediums to learn or download the learning content. When organisations opt for online learning, they can update their curriculum on a real-time basis. In a traditional learning environment, the trainers could not do that as they would have to wait for new material to arrive in heavy textbook formats. It's great to see that every organisation can customise their e-learning according to their corporate demands and vision to compete in the marketplace."

The majority of the participants mentioned that organisations would benefit from the transition to e-learning solutions. The benefits outweighed the disadvantages, and e-learning was regarded as an important functionality for organisations to adopt if they wanted to remain competitive in the marketplace. The main reasons were that the solution was seen as cost-effective in the long run, and that it catered for the ever-changing learning curriculum.

Section 2.3.3 of the literature review states: “From a compliance perspective, e-learning provides organisations with many benefits. Where employees have to go through a specific induction, safety or license-based training, which requires them to have prerequisite training, accreditations or a specific number of hours completed, then not only can the organisation ensure that the employee follows their correct path of development, but they can ensure that the employees are monitored” (Yaari, 2019). The participants frequently mentioned that they preferred to self-study at their own pace, which is why e-learning becomes beneficial. In a traditional learning environment, self-study was difficult to conduct, but with e-learning, the employee is able to control the pace of the learning, while the organisation is still able to monitor the employee’s progress. The participants’ feedback complemented the literature review on evaluating how the organisation would have benefitted from e-learning. This question addressed the literature gap, having identified the benefits of e-learning for an organisation from an employee’s perspective.

4.4.5.2 Theme 5.2: Increase in employee engagement, seamlessness

As part of the literature defined in Chapter 3, the SAPSFL management system was perceived to have impacted on the entire organisation, from the least experienced to the most experienced employee. In addition, the managers' ability to track employee development and reduce the organisation’s environmental impact was proven through the eradication of paper use. Since each participant involved in the interview provided their first-hand opinion on this, the researcher asked the question: “Do you feel that you, your colleagues and your specific organisation have benefitted from adopting an e-learning platform? Why?”.

Some of the participants' responses included the following:

> “Yes, this is a change that was always expected and needed for improving the results of individual employees, as well as the results of the organisation. We are now part of the generation of technological advancement, where information is provided at your fingertips and mobile phones are our ‘go-to’. That being said, I am able to access my learning content via my mobile, and set my courses and objectives, all while sitting on the Gautrain or taking public transport. It’s an e-learning design, which has both me and my colleagues wanting to learn even more.”

> "I would say so, yes. Even though my friends and colleagues are in different departments within the organisation, the system has set our unique courses, which cater for each of our career paths. I find it very cool that even though we are in different fields, both my colleagues and I see the amazing benefits of the SAPSFL system and feel even more engaged to make use of it. I have now been certified in over three areas in less than five months. And yes, the organisation has definitely benefitted because its employees are benefitting from upskilling. So, more skills, more money for the company."

The majority of the employees stated yes, the transition from traditional learning techniques to online learning benefitted them and the organisation. It increased employee engagement and they mentioned that the interface was simple and seamless, which contributed to the usability of the system. Section 2.3.6 of the literature review states: "Innovators make up only 2.5% of people, are seen as the risk-takers and are generally the youngest of the group" (Rogers, 2016). This corresponds with why the organisation benefitted from the transition from traditional learning to online SAPSFL. Many of the employees were already regarded as innovators when it came to adopting the e-learning solution. They looked forward to the change and embraced the adoption. As seen from the participants' responses, the more willing the employees were to adopt the change, the higher the likelihood of a successful transition. This question addressed the literature gap, having identified the discussions that have been held around the SAPSFL system. If the employees were aware that their colleagues benefitted from an online learning system, then it meant that a collaborative environment has been built around e-learning, which has created positive discussions among colleagues around the workplace.

4.4.5.3 Theme 5.3: Accessibility, time management and the effectiveness of high-quality courses

All LMSs have aimed to upskill their users and ensure they improved in the area of coursework. The user would be defeating the purpose of the LMS if they had not gained from the transition to online learning and the benefits it had to offer. As each of the participants spent a significant amount of time using the SAPSFL system, it would only benefit the organisation if those participants were better equipped than before the transition to e-learning. The purpose of the question: "Do you feel that your skills have improved, making you more employable than you were, via the SAPSFL management system? If yes, please describe

your learning experience" was to identify the skills that employees have developed and to identify if the system had gaps or learning barriers for any of the employees.

Some of the participants' responses included the following:

> "Definitely, the *SuccessFactors* e-learning system has allowed me to broaden my knowledge by providing me with case studies, demonstrations and discussion groups with other learners from all over the world and streamed videos. This allows me to process information, but then apply it in real-world working scenarios. Other than that, I am now able to manage my time more efficiently as the coursework is all self-study. I enjoyed and I am still enjoying the learning experience, mainly because it is risk-free. By saying that, I mean that within the e-learning environment, I am not intimidated or scared of getting an answer wrong. Learning is about making mistakes and building on them until you succeed. This has allowed me to become results-orientated in my work."

> "Yes, fully! I feel that I have definitely improved my overall facilitation and management capabilities. I have improved my management skills since there are so many assignments that are part of the online curriculum. In addition, I have improved my research skills and my ability to manage stakeholders. More importantly, our own company played a big role in training us on the e-learning system. They ensured that employees were equipped with the necessary information and training needed to use the system, which created a good relationship between the employees and the newly adopted system."

All the participants agreed that the LMS implemented by the organisation assisted them with their development. The majority of the employees stated that they improved their time management and self-study skills, while delivering high-quality and effective course content. This is first-hand evidence that the SAPSFL system has improved the organisation and its employees. The organisation implemented an efficient solution for employees who have improved their skills and who have continued with their development.

Section 2.5 states: "Learning will always be an integral part of an employee's working career and organisations are investing more in the correct technologies, which will upskill and educate their workforce to compete with the best in the market. By understanding the impact that e-learning has on organisations, it is easy to see that this is the current and future direction

that organisations are taking. A company without an e-learning option is a company that is going to get left behind" (Noel, 2018). The organisation ensured that its employees were well trained and equipped with the required resources. The respondents stated that employees were required to complete several courses, ensuring that their skills and development goals were met. The participants' responses are in line with the literature review, which emphasised that they had improved their skills using the SAP *SuccessFactors* LMS. This question addressed the literature gap about having identified the employees' skills growth and willingness to develop using the SAPSFL system. The feedback received emphasised the rate of the employees' progress and their personal motivation to use the e-learning system.

4.4.5.4 Theme 5.4: Saves time, costs, no geographic boundaries, Covid-19

With the interview discussion recently held, the participants provided their remarks on the transition from traditional learning methods to online learning methods. With those thoughts still fresh, the interview came to an end with the final question to each participant: "Would you recommend that other organisations implement a learning management system?" The purpose of this question was to obtain the participants' final views on the transition. Yes, the participants would have benefitted from the already implemented LMS, but would they recommend that other organisations go through the same journey for the same benefits?

Some of the participants' responses included the following:

> "Yes, I would recommend it. The clichéd saying: "Your employees are your greatest asset" is true. I read in a study that organisations who adopt an e-learning platform have a 55% increase in employee satisfaction as it boosts employee morale and longevity. If an organisation wants to be results-driven by tracking their learning and development initiative from beginning to end, then an LMS is a critical aspect of achieving it. Now that the world is on lockdown due to the Covid-19 pandemic, it makes sense for all organisations and other training institutions to adopt some sort of e-learning or online training platform."

> "I would say it depends on the organisation's needs. If the company is continuously required to deliver training, the training is still paper-based, or they are finding that the skills and development budget is too high, then an e-learning LMS should be considered. The system will allow the employees to learn with both an action focus and

a subject focus, which is important to understand the material. SAP, as an implementation partner, is great at customising the system towards your organisation's processes, which makes it feel like it's your very own e-learning solution."

All the participants agreed that online learning adoption would have benefitted an organisation. Thus, the participants' feedback has complemented the literature review when evaluating how other organisations would have benefitted from e-learning. This question addressed the literature gap by identifying the benefits that e-learning has brought to other organisations from an employee's personal involvement and perspective. In addition, the participants verified that several tests and pilot testing had taken place before the e-learning system was released to the wider employee base. This ties back to the ADDIE Framework described in Chapter 2. In this framework, we see that the development phase ties back to the testing of the new learning methods that the organisation had adopted. The organisation completed Phase 3 of the ADDIE Framework by ensuring rigorous testing of the SAPSFL system before rolling it out to its employee base.

4.4 RESULTS ACCORDING TO THE EXPERIENTIAL LEARNING CYCLE THEORY

The ELC theory has been incorporated into the findings and analysis of the research study. The ELC theory emphasised employees' learning methods when adopting an e-learning system. The participants' responses mentioned in Section 4.4 have been broken down and aligned to the ELC model. The theory was that learning by experience is the main driving force in learning due to the fact that knowledge is constructed through transformative reflection on one's experience (Baker et al., 2002). The ELC theory describes two ways of gaining experience: concrete experience (apprehension) and abstract conceptualisation (comprehension). These work together with two methods of further transforming the experience so that learning is achieved: reflective observation (intention) and active experimentation (extension) (Lundqvist, 2016). The four modes of learning were used together with the participants' responses. The participants' responses were based on their experience with the newly adopted SAPSFL system, which served as a basis for reflection. From these reflections, this study assimilated the information to form results on how and by what means the employees adopted the e-learning solution.

In the sample documented in Section 4.4 of this study, 15 participants provided 57 responses to the interview questions, which were analysed. The participants each answered every interview question. The study selected three random participant responses for each question. The participants' responses were reflected against the learning methods of the ELC theory and categorised appropriately. Following the ELC theory, each employee took on a different learning method that suited their learning style. The aim of this activity was to analyse which learning techniques the employees used to transition from traditional learning to the SAPSFL system and to distinguish which learning styles favoured the transition.

Although all the participants answered all the interview questions, the participants mentioned in Table 4.3 had specific discussions for each question as these participants' responses allowed the researcher to extract their learning theory preference. In order to link the theory back to the participant, the participants' responses had to be analysed and the experiential learning step identified. For example, based on the ELC theory, it could have been identified that a participant used abstract conceptualisation (thinking) as well as reflective observation (watching) as part of their main learning methods. To further link the theory back to the participant, the researcher identified a participant who mainly uses this learning step as a subject expert.

This means that:

- the participant had a reflective and authoritative style.
- the participant systematically analysed and organised subject matter; or
- the participant delivered their knowledge by lectures/presentations and texts.

Together with a participant’s response and the ELC theory, this participant’s style was identified as assimilating, whereby they focused on reflecting, thinking and watching when learning about the SAPSFL system.

Table 4.3 elaborates on this and on the participants who had specific discussions for each question:

Table 4.3: The ELC theory – the main method used by participants

No.	Question	Participant No.	Coach	Facilitator	Subject expert	Standard setter and evaluator
1.	How long have you been working at the organisation and what is your current role?"	8			✔	
		4	✔			
		11		✔		
2.	Do you hold a tertiary qualification? If so, what?	3				✔
		7				✔
		12		✔		
3.	What is your understanding of e-learning, a learning management system and how do you prefer to use it?	1			✔	
		5				✔
		14	✔			
4.	What are your thoughts on traditional learning methods such as textbooks, classroom attendance and group activities?	3				✔
		13				✔
		6		✔		
5.	Do you prefer traditional learning methods or e-learning methods and why?	9	✔			
		5				✔
		12		✔		
6.	Which e-learning platform has the organisation adopted for its employees and what are your thoughts on it?	6		✔		
		7				✔
		15			✔	
7.	How did you find the transition from traditional learning to e-learning?	2				✔
		8			✔	
		11		✔		
8.	How does SAP *SuccessFactors* learning software compare to traditional learning methods?	5				✔
		9	✔			
		14	✔			
9.	How does SAP *SuccessFactors* learning software compare to other e-learning solutions?	3				✔
		9	✔			
		15			✔	
10.	What are your thoughts on e-learning methods such as e-books, video training self-study and online courses? Was there a need for a transition from traditional learning methods?	1			✔	
		3				✔
		7				✔

No.	Question	Participant No.	Coach	Facilitator	Subject expert	Standard setter and evaluator
11.	How would you and your organisation be impacted on if the SAPSFL system was removed, and employees had to transition back to traditional learning methods?	4	✔			
		9	✔			
		10			✔	
12.	What do you think was the organisation's main objective for adopting the SAPSFL system and has it reached its objective?	7				✔
		10			✔	
		14	✔			
13.	What were the difficulties or challenges that the organisation faced after adopting e-learning?	5				✔
		7				✔
		15			✔	
14.	What are your thoughts on employees and/or organisations who are hesitant to adopt e-learning and are comfortable with using only traditional learning methods?	6		✔		
		10			✔	
		12		✔		
15.	Where does the SAPSFL system fall short and how can it be improved?	9	✔			
		13				✔
		15			✔	
16.	Can an organisation benefit from e-learning? Why?	1			✔	
		10			✔	
		12		✔		
17.	Do you feel that you, your colleagues and your specific organisation have benefitted from adopting an e-learning platform? Why?	2				✔
		8			✔	
		14	✔			
18.	Do you feel that your skills have improved, making you more employable than you were, via the *SuccessFactors* LMS? If yes, please describe your learning experience.	7				✔
		11		✔		
		13				✔
19.	Would you recommend that other organisations implement an LMS?	3				✔
		5				✔
		11		✔		
Totals			11	11	14	21

Each participant's ELC theory learning method can be deducted from the responses they provided as seen in Figure 4.1.

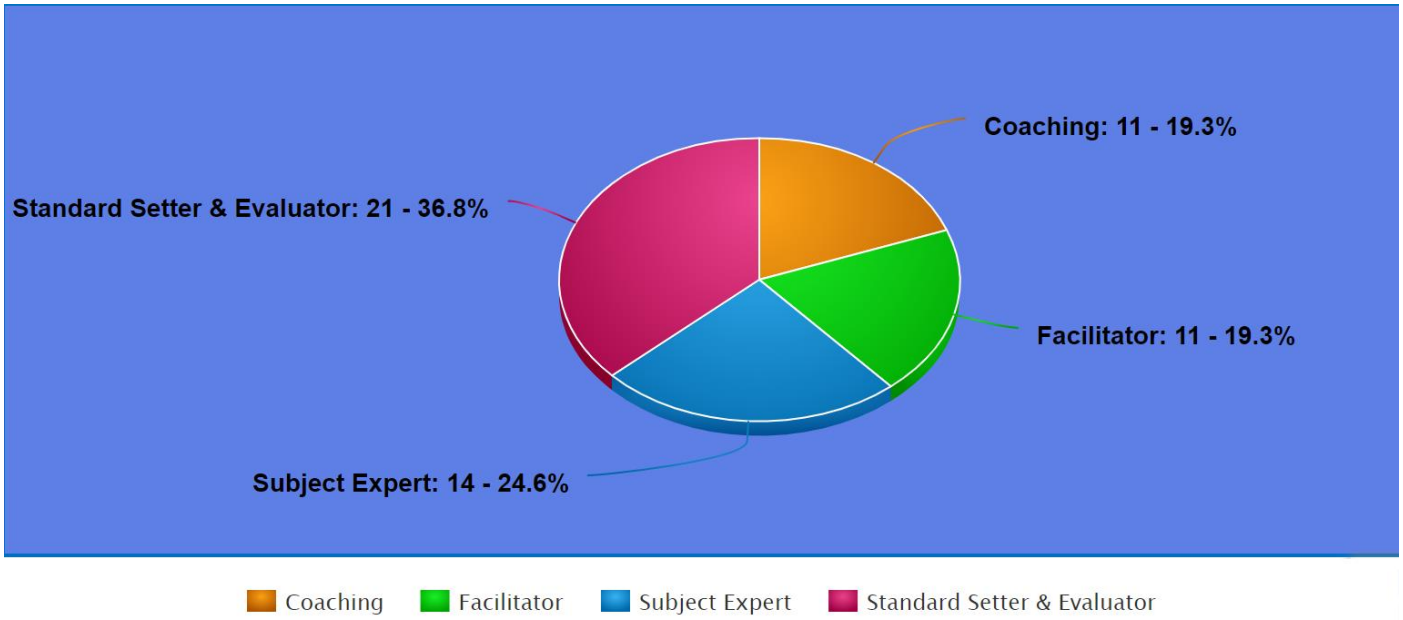

Figure 4.1: The ELC theory – Main learning methods used by participants

Table 4.4 represents a list of all participants, analysed according to their ELC theory learning method and ELC theory learning style, based on their interview responses. The purpose of this table was to identify which learning style was preferred by the employee in their transition from traditional learning to e-learning within the organisation.

Table 4.4: Participant in relation to their ELC theory learning method and learning style

Participant No.		ELC theory learning method		ELC theory learning style
Participant 1	is a	subject expert	using	abstract conceptualisation (thinking) and reflective observation (watching)
Participant 2	is a	standard setter and evaluator	using	active experimentation (doing) and abstract conceptualisation (thinking)
Participant 3	is a	standard setter and evaluator	using	active experimentation (doing) and abstract conceptualisation (thinking)
Participant 4	is a	coach	using	active experimentation (doing) and concrete experience (feeling)
Participant 5	is a	standard setter and evaluator	using	active experimentation (doing) and abstract conceptualisation (thinking)
Participant 6	is a	facilitator	using	concrete experience (feeling) and reflective observation (watching)
Participant 7	is a	standard setter and evaluator	using	active experimentation (doing) and abstract conceptualisation (thinking)
Participant 8	is a	subject expert	using	abstract conceptualisation (thinking) and reflective observation (watching)
Participant 9	is a	coach	using	active experimentation (doing) and concrete experience (feeling)
Participant 10	is a	subject expert	using	abstract conceptualisation (thinking) and reflective observation (watching)
Participant 11	is a	facilitator	using	concrete experience (feeling) and reflective observation (watching)
Participant 12	is a	facilitator	using	concrete experience (feeling) and reflective observation (watching)
Participant 13	is a	standard setter and evaluator	using	active experimentation (doing) and abstract conceptualisation (thinking)
Participant 14	is a	coach	using	active experimentation (doing) and concrete experience (feeling)
Participant 15	is a	subject expert	using	abstract conceptualisation (thinking) and reflective observation (watching)

To conclude, the final remarks from the participants were mostly that organisations must adopt an e-learning platform if they have not already done so. The feedback from participants was heavily weighted in favour of the benefits offered by online learning solutions. The purpose of this question was to understand the target audience for online corporate learning, which is the modern learner. Employees were keen to upskill and learn. However, if an organisation did not provide enough learning opportunities, these modern-day learners would have to look elsewhere for the development they required.

Section 2.3.3 of the literature review states: “The internet is now an everyday part of society and so is online learning. In today's world, employees are increasingly expected to access their training and knowledge online” (Renu, 2021). This was in line with the participants’ responses, since internet connectivity has become a critical need in modern-day households, not only because technology has been advancing, but also because millions of people around the world have had to adapt to working from home due to the Covid-19 outbreak. The idea has changed: previously, organisations were encouraged to implement e-learning, but today it is almost certainly a necessity. In addition, using the ELC theory, this study identified that 11 interview responses were aligned to the coaching learning method, 11 responses were aligned to the facilitator learning method, 14 responses were aligned to the subject expert learning method and 21 responses were aligned to the standard setter and evaluator learning method.

Of 15 participants, three were identified as using the coaching learning method, which focuses on active experimentation (doing) and concrete experience (feeling) to transition from traditional learning to e-learning. Three participants were identified as using the facilitator learning method, which focuses on concrete experience (feeling) and reflective observation (watching). Four participants were identified as using the subject expert learning method, which focuses on abstract conceptualisation (thinking) and reflective observation (watching). Five participants were identified as using the standard setter and evaluator learning method, which focuses on active experimentation (doing) and abstract conceptualisation (thinking). The importance of these results is identifying which learning method was adopted by the employee in their transition from traditional learning to e-learning within the organisation. As all 15 participants were in favour of the adoption of e-learning, it proved that the four ELC theory learning methods were used as part of the guidelines to transition from traditional learning to online learning platforms in a corporate setting.

CHAPTER 5: CONCLUSION

5.1 INTRODUCTION

The conclusion serves as the closing chapter of the research study and provides the summary of findings for the guidelines to analyse the end-to-end transition from traditional learning to e-learning from a corporate viewpoint. This chapter aims to answer each of the four sub-questions, as well as the main research question defined in Chapter 1. The sub-questions focused on the reasons behind the organisation's transition to e-learning, the best practices of adopting an e-learning solution, and the benefits and challenges faced by the organisation throughout the process. The conclusion further examines how the results from the data and literature either support or refute the theory.

5.2 SUMMARY OF FINDINGS

To fully analyse the end-to-end transition from traditional learning to e-learning in a corporate environment, the study followed a qualitative methodological approach with the case study method selected as the research strategy and interviews selected as the data collection method. The analysis of the data collected was performed by identifying themes and categories in the participants' responses. The sections below explain the findings of the study in further detail.

5.2.1 Sub-question 1

What are the reasons behind an organisation's transition from traditional learning to e-learning methods?

Theoretical studies conducted by Hopkins (2011) provided the various reasons why organisations would transition from traditional learning to online learning. Some of these reasons were that organisations intended to minimise the instructor's role and have their employees guide themselves around their course material. Organisations intended to have employees meet at specific times for training sessions, where employees could connect to their learning material at any time and location via an internet connection. Many of the reasons behind the organisation's decision to transition emerged during the findings.

The participants responded with very similar answers, which included that the organisation aimed to increase the effectiveness of their skills and development training. Employees frequently mentioned that they knew they had to contribute and apply their knowledge before being able to proceed to the next chapter of the course material.

This specific organisation did not experience financial costs as a constraint and therefore the above findings have been specific to this organisation and may not apply to other organisations. Participants responded by stating that, before the transition from traditional learning, they required more flexibility in their training. Many of the participants stated that their daily workload kept them very busy and that missing a day at the office to attend physical training would have created a backlog of work. In addition, the participants reported that their time was limited during the day and that they could not incorporate training in between their deadlines. The only solution would be to adopt an online learning platform whereby each employee completed their required training at their own time and pace. This was one of the organisation's main drivers behind transitioning from traditional learning to online learning with the help of SAPSFL. Due to the Covid-19 pandemic, the organisation required employees to upskill from home, hoping that the added flexibility of allowing employees to set their training schedules would assist with employee development during the nationwide lockdown. As a result, once the transition was adopted, employees reported that using the LMS allowed a better work-life balance and that they did not accumulate backlogs of overdue work. The employees were productive and proactive in using the new system and stated that their time management skills had improved. Employees concentrated on work during the day and focused on the course curriculum after hours or in their spare time.

Table 5.1: Summary of the reasons behind an organisation's transition from traditional learning methods to e-learning

Organisations intended to minimise the instructor's role.
Organisations intended to have employees meet at specific times for training sessions.
The organisation aimed to increase the effectiveness of their skills and development training.
Financial costs were not a constraint.
Participants required more flexibility in their training.
Participants stated that missing a day at the office to attend physical training created a backlog of work.
Participants reported that their time was limited during the day, and they found it difficult to incorporate training in between work deadlines.
Participants requested training to be done at their own time and pace.

The organisation required the added flexibility of allowing employees to set their own training schedules.
Due to the Covid-19 pandemic, employees were requested to work and upskill from home.
The organisation requested an improvement of the employees' time management skills.

5.2.2 Sub-question 2

What organisational and IT experience should an employee have to assist with transitioning from traditional learning to e-learning?

Chipato (2016) stated that every learner's brain is unique and when new information is introduced, instructors must offer multiple learners' various entry or access points to the learning. This refers to a learner's prior knowledge, interests or past experiences with different resolution paths to connect questions to answers. He further explained that the brain must find a way to reconcile prior learning when new information is introduced. This process is called cognitive conflict. This study included different participants with disparate levels of experience within the organisation. The participants ranged from recently hired employees (minimum one year) to managers and partners who had spent several years at the organisation. Through the participants' responses, it was evident that the less experienced employees required more time to adjust to the LMS. In addition, the less experienced participants belonged to the group of employees who mentioned that it was challenging not having a facilitator to assist with the transition. It was found that the more experienced employees were already equipped with time management skills and the ability to work independently, which meant that they required less time to adjust to the transition from traditional learning to e-learning.

The organisation needed to recognise the skills levels of those less experienced when transitioning to new technologies. The questions to be asked were: How has this transition upheld the organisation's goals? What degree of disruption has it caused to those employees? What additional assistance did the less experienced employees require to fully adopt the new system? The key to balancing the transition and assisting the less experienced employees required communication and clarity. The importance of informing employees of the changes to the learning process, why changes occurred, how the changes have been implemented and how the employee and the organisation would benefit were substantiated.

Even though the transition was more challenging for them, feedback from the less experienced employees was positive. These employees have never seen their lack of experience as a barrier and were keen to acquire new knowledge and skills. The organisation ensured that its employees had enough time to study and further their knowledge. The feedback from the less experienced employees stated that the seniors provided assistance and mentorship where needed; they guided the junior employees and helped them develop their e-learning capabilities. This form of leadership assisted the organisation with the transition from traditional to online learning.

5.2.3 Sub-question 3

What are the benefits experienced by the employees as well as the organisation since the e-learning implementation?

Theoretical studies conducted by Luismang and Mullins (2015) stated that organisations aimed to increase their overall productivity, revenue and sustainability, but that those began by providing a foundation for development for their employees. (Mullins, 2015) stated that the transition to e-learning began with small steps like automated reminders, approvals and automatic access to training, which allowed management to keep track of and monitor their employees' development progress and deadlines. The organisation benefitted since management could determine whether their employees had logged in for the training sessions, completed the training required, evaluated the answers provided and defined timelines as to when and how training had to be completed.

A major benefit is that e-learning introduces standardisation to ensure that employees across the organisation access the same learning material and receive equivalent training. No employee was left behind and all training was delivered across the organisation at the same level. Analysing the feedback from the employees, this study identified that all new employees had adjusted to the business, had been given the same starting point with equal base knowledge and were granted an equal level of expertise. The organisation was extensively involved in assembling the online course content. The development, planning and design of the course content tied in with the ADDIE Framework described in Chapter 2. In the framework, we saw that the design phase tied into the blueprint creation of the training, which the organisation had adopted.

The organisation had completed Phase 2 of the ADDIE Framework by planning the course content, designing the e-learning user interface and writing up the objectives of the online training.

It was mentioned that, due to the everyday workload, employees fell behind in their performance, and issues were raised during their everyday practice with backlogged items. By recording the training programme using the SAPSFL system, and by ensuring that all the training material was in place, the organisation ensured that human error, bias, moods and environmental factors were prevented from affecting the learners.

Table 5.2: Benefits experienced by the organisation and employees after the implementation of the SAPSFL system

Benefits	Description
Automatic access and notifications	The SAPSFL system notified users when an event occurred that they had to know about. For example, instructors and learners were updated with submissions, cancellations, rescheduling of assignments and tests. The administrator sent out ad hoc notifications or broadcast messages to keep employees updated.
Management progress monitoring	The employees' progress was managed in real-time with course content added and updated in real-time.
Review and provide feedback on submissions	The submission of assignments and tests was viewed, edited and marked, and feedback communicated to the employee in real-time.
Standardisation	The syllabus was standardised for learners per level, group or department, and not limited to geographical location.
Reporting	Ninety standard reports were available in SAP *SuccessFactors* to report on employee development, management, course content, progress and results. Custom report functionality was available to design reports unique to the organisation's data. Reports allowed the organisation to develop a vision, and drive strategy and sustainability. It allowed the organisation to identify weaknesses and strengths.
Avoidance of human limitations	Content was available on time, assignments and tests were submitted at any hour from any location, and facilitators could work remotely and monitor employees via their web cameras.
Cloud storage	Learning material was stored securely online, eliminating the need for textbooks. The content was updated in real-time, preventing

Benefits	Description
	outdated material. Cloud storage allowed for reach to a wide range of employees globally. It was stored securely with a password and/or biometric access.
Security	SAP *SuccessFactors* online learning was paired with firewalls and antivirus software, usernames and passwords were required for system access. *SuccessFactors* used permissions and roles set to define who within the organisation was able to access specific areas of the system. Management received access to create and manage learning material, but employees only received access to view material and submit tests and assignments.
Mobility	The organisation allowed its employees to access the course material anywhere, anytime. The course content and learning material could be accessed from multiple devices. There were no geographical limitations to course content access and security measures were applied.
Flexibility	The system provided employees with full control and accountability of their learning and development within the organisation. It removed the requirement of being present in classrooms and provided employees the freedom to coordinate their education with their commitments, and ensured that they were learning at the best time for them.
Compliance	The use of automated assignments and secure document management, such as e-signatures and workflow policies, were in place.
Reduce learning and development time	Online tutorials and demos were made available to employees, no travel time and accommodation were required for physical training, less time was spent away from office work, which reduced the costs spent by the organisation.

The benefits found above are specific to the organisation and have not been applied to any other organisation. The findings proved that the transition from traditional learning to online learning was advantageous for the organisation. The employees benefitted greatly after the implementation due to their positive attitudes toward the transition. Other factors included the transition plan, the vision set out by the organisation, good communication and the employees' technical abilities in adapting to change.

5.2.4 Sub-question 4

What are the challenges the organisation faces after adopting e-learning methods?

Theoretical studies conducted by Mohammed and Olds (2017) state that organisations that transition from traditional learning to online learning in a corporate environment face many challenges. In addition, several factors play a part in how smoothly a transition unfolds: the organisation's budget, resources, employee willingness to adopt the transition, skills levels of the consultants and the quality of the software implementation. The difficulties commonly found were that an organisation had to transform their existing subject matter into e-learning course material. This required the learning and development team to be innovative when converting legacy material into engaging online content that could be accessed in the relevant e-learning format. This could be time-consuming if the learning material was not already available to upload. Another common challenge faced by organisations is the lack of employee motivation and engagement. Not all employees are fully committed to the new system and are easily distracted, busy or simply unmotivated to self-study.

Based on the data analysis and feedback received from the participants, the organisation in this research did not face the challenges mentioned by Mohammed and Olds (2017), but experienced their own, unique difficulties throughout the process of transitioning from traditional learning to e-learning. These challenges were mainly due to the impact of Covid-19 and how it affected their employees' ability to use the SAPSFL management system. At the office, employees were equipped with the necessary hardware and connectivity to fulfil their roles and responsibilities. Due to the Covid-19 pandemic, employees were forced to work from home. This meant that employees who did not own laptops or other computer hardware had to purchase or borrow hardware from the organisation.

Employees who used more than one screen were compelled to purchase their own screens for home use, and all employees working from home had to ensure that they were connected to a high-speed internet line for optimal use of the SAPSFL system. Employees who did not have the means of obtaining fast internet reported that their learning activities, assignments and tests took longer than usual to complete. In addition, employees found that the deadlines defined in the SuccessFactors LMS were concise, but tight. The employees felt pressured and often found themselves having to speed up their learning after hours to meet their deadlines. A few employees reported that they were unable to retake tests to improve their marks and mentioned that they had to follow strict procedures set out by the system.

Employees identified the absence of a fully allocated facilitator for guidance during the initial stages of using the e-learning system as a challenge

Table 5.3: Difficulties and/or challenges experienced by the organisation and employees after the implementation of the SAPSFL system

Challenges	Description
Hardware and connectivity	Many employees had to purchase or borrow hardware. The cost of a fast internet connection was a challenge for employees to run the e-learning system without delays.
Tight deadlines	Deadlines for course completion are defined in the LMS often without adjustment. Employees had frequent deadlines to meet or else risked failure in the course.
Mandatory system process	The course content was set out and delivered according to the system's defined process. For example, the employee would only be able to proceed to the next chapter once the current chapter and activities had been completed, which was a limiting feature.
Absence of a full-time facilitator	It was reported that when first using the SAP *SuccessFactors* system, a full-time facilitator allocated to guide the employees on how to use the system would have been preferred. Training was provided, but employees needed a "go-to" person for assistance with issues that emerged during the transition.
Technical/user issues	At first, employees struggled to navigate the system to find the specific content required. This was due to technical issues, where the system was offline and there was no alternative system available. The employees had to resort to traditional learning methods such as printed notes during this time.
Unable to download material	The SAPSFL system did not allow employees to download material for confidentiality and security reasons. This was a business decision to prevent learning material from being downloaded from the system.
Time management	Employees were required to manage their own time by allocating set times for their e-learning and development without affecting their daily office tasks and deadlines.

These findings are specific to this organisation and may not apply to other organisations. Organisations should make provision for these challenges if identified beforehand. To assist

with this, employee feedback was important to ensure a smooth transition from traditional learning to e-learning. Feedback assisted in limiting the difficulties encountered as it improved the adoption of the new system. It was also important for the organisation to ensure that it allocated experienced implementation consultants to advise it on challenges that might arise and the resolution process. If the business had been advised and informed beforehand, the repercussions on the employees would have been minimal. Overall, the feedback from participants was that although there were challenges, they were negligible in placing the e-learning transition at risk. In general, the employees were able to manage any difficulties and were pleased with the transition to the online learning system.

5.2.5 Sub-question 5

What does a typical transition from traditional learning to e-learning within an organisation look like?

Theoretical studies conducted by Stagars (2016) stated that an organisation's implementation of a new software solution is the most important step in its transition to digitalisation. Benwell (2021) added that it is important for key discussions to take place between the business's stakeholders and the implementation team to ensure that a strong solution is built with the correct requirements. Allen (2014) emphasised the importance of training prior to the "go-live" of a system and ongoing development for employees afterwards.

Three interview questions were used to obtain information from the participants on what a typical transition from traditional learning to e-learning within an organisation entailed. Based on the data analysis and feedback from the participants, the organisation followed the transition steps mentioned within the literature and went even further to ensure that security was provided to the system and to the organisation's confidential data. The solution was made country-specific, incorporating the ability to store South African ID numbers. Once the system had been deployed, the implementation team and facilitators ensured a smooth transition of the employees to the e-learning system with the use of seminars, training and informational guides.

A few of the participants in this study were involved in the end-to-end implementation of the e-learning system. Their role was to represent the organisation's business and provide key

requirements and feedback on the build of the system to ensure that all the organisation's policies were met. These participants emphasised that being involved from the very beginning and the high amount of daily communication with the implementation team ensured that the system went live on time, on budget and within scope, while still ensuring smooth and informational transition for the employee base.

5.2.6 Main research question

What would the guidelines look like when an organisation performs an end-to-end transition from traditional learning to the SAPSFL online solution in a corporate setting?

The guidelines were based on the literature, theory, as well as the data collected and analysed. The study aimed to understand how the participants had adopted the e-learning system, as well as the outcome of that adoption. To support the transition towards online earning, organisations need financial assistance. Major organisations such as Deloitte, PricewaterhouseCoopers and Ernst & Young were responsible for setting the quality standard and led the way forward in technology adoption for learning and development (Mullins, 2016).

The guidelines below supported the organisation in taking the appropriate measures for transitioning to e-learning. These practices can be used by other organisations to counteract the challenges created by the Covid-19 pandemic to build robust e-learning solutions for their employees and for the stability of the company.

A) **Facilitate the design and development:** Create an environment of blended learning whereby facilitators are involved to educate employees about the e-learning system. The support and guidance will assist employees to achieve their expected learning outcomes and will deliver better results for the organisation.
B) **Provide incentives to facilitators and employees:** Incentives are an ideal way to ensure that employees stay motivated to achieve their e-learning goals to the best of their ability. Offer awards and rewards for employees if they reach a specific mark or number of completed courses.

C) **Continuously update course content:** Course content and learning material must be updated frequently and be readily available. A library of e-learning should be available to employees, ensuring that they do not run out of material and have access to the latest and most updated content anywhere at any time. It is important to cater for multiple languages and employees with disabilities. A robust e-learning system will be translatable into the preferred language and will have voice-activated reading prompts for the blind. E-learning partners like SAP can assist with content development so it is important for an organisation to have its course content ready to share with the e-learning implementation partner.

D) **Develop ethical guidelines for the suitable use of reporting analytics:** Use reporting and analytics based on employees' performance and goals to track their progress and provide support, especially for those who require additional mentoring. Pay close attention to privacy issues to ensure that employee data is not compromised.

E) **Provide orientation to employees:** An orientation session will effectively introduce the e-learning system to the employee base and create an engaging learning environment, meeting expectations and providing an understanding of the online learning system.

F) **Develop an employee e-learning support service using different technologies:** It is important to provide personal contact through several mediums such as email, telephone, *Skype*, discussion boards and the appropriate social media to reduce the feeling of isolation and to ease an employee when they reach a roadblock within the system.

G) **Ensure a high quality for all courses:** Employees must feel engaged when using the e-learning solution, and have peace of mind that the course content is well documented and presented in a structured and easy-to-understand format.

H) **Take proactive steps to adapt to the new environment:** Consider the employee's workload when assigning e-learning courses and ensure that the material can still be access by employees in an offline mode if there is a break in their internet connection.

I) **Advise employees to develop their skills:** To enhance the learning experience, employees must be advised to develop their digital skills to help them with learning online. They must be encouraged to participate in the group learning activities provided by the e-learning solution, and to develop a study and work schedule to manage their time effectively.

J) **Ensure that employees are using secure devices:** Ensure that the employee base has virus protection installed on its computers at all times. Set passwords and login

information to ensure that the e-learning content is not compromised. With the Covid-19 pandemic, organisations have seen an increase in phishing attempts and malware scams. It is recommended that the employee base only uses secure company devices when handling company information, which will tighten security measures around e-learning and email.

K) **Update the organisation's policies where needed:** For example, online learning credits should be based on the outcomes, final marks obtained, and the competence achieved rather than the number of hours invested in the system by the employee.

5.3 RESEARCH CONTRIBUTION

The contribution of this study was derived from both the literature review and the research findings. This study obtained what was understood from prior research and compared it to the current discoveries from the study. By constantly comparing the findings with the literature review, this study discovered findings not identified in existing literature.

5.3.1 Theoretical contribution

The theoretical contribution was a key aspect of the research paper as it focused on improving the quality of the current literature. It aimed to extend the literature review, making a substantial contribution to the field of study and identify any gaps within the current study. The study aimed to add to the knowledge and understanding of learning and development from a corporate viewpoint through the use of the ELC theory. This theory showed the learning cycle of the organisation, adopting the new learning method of e-learning. The focus of this theory was employee experience, which was the main driving force in the transition to e-learning since knowledge is constructed through a transformative reflection on one's experience. The quality of the steps within the research paper established the strength of the theoretical contribution. The ELC theory described the different ways in which the employee experiences learning abstract conceptualisation, concrete experience, active experimentation and reflective observation. These four models, portrayed as a cycle, provided information that served as a basis for the reflection of the transition to e-learning and allowed the researcher to assimilate the information as part of the analysis. When these four methods are used together, they make up a four-stage learning cycle that the employees went through during their experiential learning process.

Conducting the same study, but in a different context would not serve as a contribution to the research. Collecting data from organisations that have adopted online learning would generally not add to the literature, since it has been done before. Hence, this study's focus was on an organisation that had not only transitioned from traditional learning, but had implemented a SAPSFL management system. The research aimed to discover why SAP *SuccessFactors* was easier for organisations to adopt, how SAPSFL was implementing the transition from traditional learning, what the new learning experience was like for employees and answers to other questions. For this contribution, the study evaluated the specific behaviour related to the adopted e-learning system as expressed by the employees.

The study makes an important theoretical contribution to the field of online learning and SAP *SuccessFactors* solutions. The ELC theory identified what type of learning a specific employee would prefer. This provided further information on the results of the study, aiding the reasoning for the employee's adoption of the e-learning system. The results assist in articulating the underlying processes by which SAP *SuccessFactors* is used to transition an organisation and its employees from traditional learning methods to online learning. This study makes a theoretical contribution, having explained the process of the SAP *SuccessFactors* LMS adoption, which was used as a tool by the management of the organisation to upskill and develop its employees, which, in turn, assisted with the growth, experience and turnover of the organisation. In doing so, this study worked directly with the employees of the organisation from all levels to draw on their experiences to better understand how individuals were affected by the transition and how they progressed afterwards. A portion of the study originated during the Covid-19 pandemic, which the researcher incorporated into the study to provide results on how this transition was vital for the organisation to keep its employee growth active, even during a global pandemic.

The ELC theory supported and demonstrated how the learning cycle worked hand in hand with adopting a new learning method. The focus of the theory used experience, which was the main driving force in the employees' and the organisation's transition to an e-learning system. The employees were involved in the transition by being part of the implementation of the e-learning system and upskilling themselves by using the training guides and actively working on the system. This knowledge was constructed through transformative reflection by their experience and involvement.

The data and literature have been supported by the ELC theory as it identified what type of learning a specific employee would prefer during their transition from traditional learning to e-learning. This provided further information on the results of the study as it aided the reasoning for the employee's adoption of the e-learning system. The guidelines were built on the theory of the literature, as well as the ELC theory adopted for this study.

As far as the theoretical contributions of this paper are concerned, the research study contributed to the understanding of some related contracts that have not been explored in depth in previous literature related to the adoption of e-learning within a corporate setting. Hence, it has helped to develop a better understanding of the benefits and challenges for and overall impact on employees when they transitioned to SAPSFL, which was the key theoretical contribution of the research. In this regard, the findings of the paper have reinforced the necessity for organisations to transition to a reliable e-learning system to assist with their employee growth.

This study contributed by exploring the factors that will help explain the mechanisms to build an enhanced employee base through SAPSFL. Additionally, the present study expanded on previous research with similar analyses of online learning adoption and compared those outcomes to the SAPSFL adoption. The research added to those studies within the context of learning and development, and helped to develop an understanding of the SAP *SuccessFactors* solution and its benefits in a corporate setting. This was particularly important since existing literature on the comparison between the organisational implementation of SAP *SuccessFactors* solutions and other learning software is scant and, in turn, has added to the limited research on corporate investment in SAPSFL.

5.3.2 Practical contribution

The practical contribution of this research study is found in the guidelines that were developed for organisations that perform an end-to-end transition from traditional learning to the SAPSFL online solution in a corporate setting. In addition, the practical contribution comprises the detailed insight provided by the case study. The case study showed that the transition to online learning benefits organisations, which implies that the employee's learning importance and understanding of work and tasks within the organisation must be emphasised.

This has helped increase the corporate adoption of an SAP *SuccessFactors* LMS, allowing the company to grow and remain competitive within its business and IT market. The ELC theory allowed for the development of guidelines on the new technology, which the employees have been able to test in practice.

The case study also revealed that employees and organisations must be favourably disposed to digitalisation and the adoption of new technological processes to ensure an effective and efficient transition from traditional learning to online learning. This research contributes to an understanding of the connection between e-learning and large corporations, based on theoretical assumptions, and how e-learning can be incorporated to improve employee development. To this end, the guidelines to transition from traditional learning to e-learning methods can be used as a practical tool for organisations planning to adopt an e-learning solution. The guidelines are created from analysis and experience, and are adaptable for use.

5.4 DELINEATIONS AND LIMITATIONS

Together with the reliability of the findings, the delineations and limitations of the research study are detailed in the following section. The integrity of references, the applicability of findings and the excluded factors will also be described in further detail.

This study was conducted in one organisation within the private sector in Pretoria, South Africa. That organisation had successfully implemented the SAPSFL system and had been using it to aid its employees in their learning and development. The solution had to be active and in use for at least three months to ensure that its employees were aware of the system's functionality, benefits and impact on the organisation. Since the organisation is an implementor of SAPSFL systems, it customised and enhanced the standard functionality of the solution, which provided the learning solution with additional capabilities that improved the results of the research. The organisation listed and described any customisations other than the standard SAPSFL functionalities. The researcher selected employees with different levels of experience as participants in the study. All employees selected had been exposed to and were active learners on the SAPSFL system. The different levels of knowledge and experience included employees who had worked at the organisation for one to two years, employees with three to four years' experience and employees with more than four years'

experience in the organisation. All these employees had transitioned from traditional learning methods to e-learning methods within the organisation.

The requirement was that all participants had to be employed by the organisation and had to have transitioned from traditional learning to the organisation's e-learning methods. The employees had to have used the e-learning system for at least one month while being employed by the company.

Bias may have occurred where participants had a personal preference or were more inclined to use the system since they were also the implementors of the SAP *SuccessFactors* solutions. The researcher limited the understanding of the decision to the human sense-making theories and will not consider these factors. Employees within the organisation may also have had a personal dislike for the use and functionality of e-learning software, specifically SAPSFL. Participants were selected randomly from within the organisation. Each employee within the organisation who was classified as actively working on the e-learning system received a number. An online number generator (*random.org*) was used to generate 15 numbers and the researcher asked employees who matched the randomly generated number to volunteer by contributing to the research through an interview. All employees were documented as an anonymous research participant.

5.4.1 Integrity of references

The research study was aimed at the transition from traditional learning to e-learning methods, with the focus on the SAPSFL solution.

An in-depth analysis was conducted in online learning and SAP *SuccessFactors* learning implementations. The benefits, barriers, organisational diversity, risks and influences on the organisation were studied. The study offered the researcher a platform from which to make interpretations. The opinions debated reflect the views of the literature and its authors. The dependability and the value of the evidence and conclusions made from the research study have greatly depended on the reliability of the sources.

5.4.2 Reliability of findings

The reliability of the findings was strictly based on the content and material found within the analysis of the study, as well as the knowledge and experience of the researcher and participants. The findings and the dependability of the research resulted in an outcome on the trustworthiness and consistency of the results found within the research study.

5.4.3 Applicability of findings

Organisations and their employees were analysed through the study after transitioning from traditional learning methods to e-learning. The findings and results discussed in the research study are directly related to e-learning and employee development, but more specifically to SAPSFL. The findings of the research study were not presumed to apply to any other SAP products or system implementors, except those stated in this section.

5.4.4 Factors excluded from the study

Organisations outside Pretoria were excluded from this study. The research concentrated exclusively on an organisation in Pretoria. No organisation from the public sector was included in the findings of the study. The employees selected as participants were not newly hired staff (working for the company for less than one month) and the study did not include employees of the organisation who had not interacted with the e-learning system.

5.5 RECOMMENDATIONS

The organisation and its employees proved that they were capable of ensuring a successful transition from traditional learning to online learning, overcoming many of the challenges and difficulties.

To help increase the use of the SAPSFL system, the following recommendations are proposed:

- Ensure that the system is ready to be used by employees. Since the organisation has successfully transitioned from traditional learning to e-learning, it is vitally important that the LMS is maintained and there are no bugs or issues that will delay employees' learning.

- Ensure content readiness by continuously releasing the latest or new learning material for employees. Ensure that the current content available on the SAPSFL module is aligned to the objectives, aims and goals of the business. Organise the learning material so that it is easily accessible for the online system and customise the learning content to suit the businesses plan.
- Use stakeholders within the organisation to improve the learning process. Stakeholder input and approval from various parts of the business can be beneficial in finding gaps and moving the learning experience forward. This involves consulting the various stakeholders, obtaining feedback from all those involved in the learning and curriculum, and requesting a collective input.
- Ensure that employees drive their learning and development at a continuous pace. Communicate due dates for the completion of curricula and establish that a specific number of courses or certifications must be completed before the employee can be considered for promotion. This creates the motivation to study and a reward factor for which employees can aim.

All measures were based on self-reporting and the respondents could choose to what degree they wanted to respond. Bias may exist in the results, particularly in favour of the organisation's decision to adopt e-learning. This emphasised that the study can be expanded upon, but could still be used to inspire future researchers to find out more on this topic.

5.6 FUTURE RESEARCH

It is recommended that future research be conducted and continued with a focus on organisations (found within the corporate environment) that have transitioned from traditional learning methods to online learning. It would be ideal to compare the guidelines in this study to the guidelines emerging from studies on other organisations. A direct comparison between the types of learning systems in a corporate environment would be beneficial to evaluate the most effective systems.

For many organisations, providing online courses and hybrid learning will play an essential role in their long-term survival. Because many employees are deterred by expensive course fees associated with full-time organisational learning, and have conflicting responsibilities like career goals or raising a family, future research can be conducted on the balance between these responsibilities that employees have created with the assistance of online learning on the SAP *SuccessFactors* LMS.

5.7 CONCLUSION

The organisation had completed a successful transition to the SAPSFL system. The positive nature of the feedback received from participants emphasised that the transition from traditional learning to e-learning was the right decision for the organisation. Throughout the study, the researcher obtained data to answer the main research question and sub-questions. The reasons behind the organisation's approach to transition from traditional learning to e-learning have been described, together with the impact on employees from different levels.

A few years ago, organisations could not implement online learning. The best offer was to record the trainer or lecturer with a video camera. Today, this has evolved with the use of SAP *SuccessFactors,* where organisations are incorporating interactive learning available through mobile phones, tablets and laptops, not only to improve the quality of skills and development, but also to reduce the cost of education. The gap between the skills with which traditional learning methods were designed to equip employees and the skills that employees truly need to be successful in the digital era have become more distinct. The need for technology in the workplace has increased dramatically over recent years, making it a requirement for organisations to begin implementing learning courses, as done by tertiary educational institutions. The rise in automation in organisations has increased opportunities for self-learning, which has encouraged employees to study beyond their 20s and 30s. The solution incorporates a tool for lifelong learning, which is a powerful way to improve the organisation. Many benefits for the organisation were identified regarding the transition to the SAPSFL system, but most significantly, it removed the "presence" factor of employees having to travel and attend physical classroom sessions.

This has helped significantly due to the impact of lockdown protocols during the Covid-19 pandemic. The integration of the SAPSFL system has helped improve the productivity of the organisation. If this implementation rate increases among other organisations, it will certainly improve the overall economy going forward. Organisations and corporate environments are well positioned to help drive the evolving education system. They are well placed to provide the services required for career and lifelong learning, and also have the technological hardware available to deliver online education. The implementation of the e-learning solution tied in with Phase 5 of the ADDIE Framework: implementation.

The organisation ensured that its plan and intention met the learner after implementation. Course content was delivered in a new online medium and evaluation is used to gauge how effectively employees have transitioned from traditional learning methods. This serves as a successful implementation of and transition from traditional learning methods to e-learning.

There will always be a place for traditional learning methods in the organisational space, but the generational shift will be toward online learning. While it is almost impossible to predict in what direction technology will take us, online learning, together with SAP *SuccessFactors*, is set to become a major part of learning in organisations around the world. The world is on the cusp of seeing the integration of technology significantly disrupt the way education is delivered, and the cost at which education and employee development can be provided.

“Online learning can be a lifeline to those who have obstacles. There is no limit to geographical distances or physical disabilities.” – Paul Levinson

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APPENDIX A

ETHICAL CLEARANCE

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

RESEARCH ETHICS COMMITTEE

Faculty of Economic and Management Sciences

Approval Certificate

20 July 2020

Mr L Chokalingam
Department: EMS Deans Office

Dear Mr L Chokalingam

The application for ethical clearance for the research project described below served before this committee on:

Protocol No:	EMS186/19
Principal researcher:	Mr L Chokalingam
Research title:	Guideline to Analyse the End-to-End Transition from Traditional Learning to SAP SuccessFactors Learning online solution: A Corporate Viewpoint
Student/Staff No:	11048222
Degree:	Masters
Supervisor/Promoter:	Dr AA Steyn
Department:	EMS Deans Office

The decision by the committee is reflected below:

Decision:	Approved
Conditions (if applicable):	
Period of approval:	2019-10-21 - 2020-10-30

The approval is subject to the researcher abiding by the principles and parameters set out in the application and research proposal in the actual execution of the research. The approval does not imply that the researcher is relieved of any accountability in terms of the Codes of Research Ethics of the University of Pretoria if action is taken beyond the approved proposal. If during the course of the research it becomes apparent that the nature and/or extent of the research deviates significantly from the original proposal, a new application for ethics clearance must be submitted for review.

We wish you success with the project.

Sincerely

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CHAIR: COMMITTEE FOR RESEARCH ETHICS

APPENDIX B

INTERVIEW QUESTIONS

1. How long have you been working at the organisation and what is your current role?

2. Do you hold a tertiary qualification? If yes, what qualification do you hold? (Optional)

3. What is your understanding of e-learning, a Learning Management System and how do you prefer to use it?

4. What are your thoughts on traditional learning methods such as textbooks, classroom attendance and group activities?

5. Do you prefer traditional learning methods or e-learning methods? Why?

6. Which e-learning platform has the organisation adopted for its employees and what are your thoughts on it?

7. How did you find the transition from traditional learning to e-learning?

8. How has SAP SuccessFactors Learning software compared to **traditional** learning methods?

9. How has SAP SuccessFactors Learning software compared to other **e-learning** solutions?

10. What are your thoughts on e-learning methods such as e-books, video training self-studying and online courses? Was there a need for a transition from traditional learning methods?"

11. How would you and your organisation be impacted if the SAP SuccessFactors Learning system was removed and employees had to transition back to traditional learning methods?

12. What do you think was the organisation's main objective for adopting the SAP SuccessFactors Learning system and have they reached their objective?"

13. What were the difficulties or challenges that the organisation faced after adopting e-learning? (Budget, maintenance, usability?)

14. What are your thoughts on employees and/or organisations who are hesitant to adopt e-learning and are comfortable with using only traditional learning methods?

15. Where does the SAP SuccessFactors Learning System fall short and how can it be improved?

16. Can an organisation benefit from e-learning? Why?

17. Do you feel that you, your colleagues and your specific organisation have benefitted from adopting an e-learning platform? Why?

18. Do you feel that your skills have improved, making you more employable than you were, via the SAP SuccessFactors Learning Management System? If yes, please describe your learning experience.

19. Would you recommend that other organisations implement a learning management system?

APPENDIX C

ORGANISATION CONSENT LETTER

EPI-USE AFRICA (PTY) LTD.
46 INGERSOL ROAD, PRETORIA
SOUTH AFRICA, 0081
WWW.EPIUSE.COM

04 May 2020

RE: Lushan Chokalingam - MCom Request for Permission to Conduct Research

Dear Mr. Chokalingam and to whom it may concern,

We refer to your email dated 03 May 2020.

Your request for permission to conduct research at EPI-USE Africa in the Information Technology department has been granted.

If you should have any further enquiries please feel free to contact us at +27(0) 12 470 2100.

Yours sincerely,

Stephen Meyer | Africa Solutions Management | EPI-USE Africa (Pty) Ltd.
mobile: +27 72 581 7708| office: +12 470 2100|
www.epiuse.com | disclaimer
A member of groupelephant.com, going Beyond Corporate Purpose

APPENDIX D

CONSENT LETTER

Letter of Introduction and Informed Consent

Dept. of Informatics

GUIDELINE TO ANALYSE THE END-TO-END TRANSITION FROM TRADITIONAL LEARNING TO SAP SUCCESSFACTORS LEARNING ONLINE SOLUTION: A CORPORATE VIEWPOINT

Research conducted by:
Mr L. Chokalingam (11048222)
Cell: (+27) 076 6149 152

Dear Participant

You are invited to participate in an academic research study conducted by Lushan Chokalingam Masters student from the Department of Informatics at the University of Pretoria.

The purpose of the study is to analyse the transition from traditional learning to E-learning within the corporate environment. Many employees are currently using or have transitioned from using physical textbooks and attending classroom style training to having their courses and learning material delivered online.

Please note the following:

- This is an anonymous study survey as your name will not appear on the interview questionnaire if you choose for it not to. The answers you give will be treated as strictly confidential 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 interview questions that I will read from the attached interview questionnaire as completely and honestly as possible. This should not take more than 30 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 R Steyn, 012 420 3341, riana.steyn@up.ac.za if you have any questions or comments regarding the study.

In research of this nature the study leader may wish to contact respondents to verify the authenticity of data gathered by the researcher. It is understood that any personal contact details that you may provide will be used only for this purpose, and will not compromise your anonymity or the confidentiality of your participation.

Please sign the form to indicate that:

- You have read and understand the information provided above.
- You give your consent to participate in the study on a voluntary basis.

Participant's signature **Date**

APPENDIX E

TRANSCRIPT

Transcription 001

Media Recording Duration: 29:01:35
Media Recording Date: 10 August 2020

Five Questions have been selected from the transcription between the researcher and Participant 1.

Interviewer: **"Question 1: How long have you been working at the organisation and what is your current role?"**

Participant 1: "I have been employed by the company for three years now, I am an Employee Central Functional consultant part of Rob's practice."

Interviewer: "Question 2: Do you hold a tertiary qualification? If yes, what qualification do you hold?" (Optional)

Participant 1: "Yes I have a BCom Informatics Honours degree from the University of Pretoria."

Interviewer: "Question 3: What is your understanding of e-learning and a Learning Management System? (LMS)?"

Participant 1: "E-learning I would say is something that organisations and even schools use today to cater for circumstances such as Covid-19. All work and information can be obtained online. At work we use the SAP *SuccessFactors* learning module to do own certifications which I find very useful."

Interviewer: "Question 10: What are your thoughts on e-learning methods such as e-books, video training self-studying and online courses? Was there a need for a transition from traditional learning methods?"

Participant 1: "It's very useful and very efficient in completing courses. I've experienced very easy to use content, the videos the e-books, the slides etc. I would say yes, there was a need because we need to keep up with the changing environment and it's almost as if it was a breath of fresh air with the new system. From what I see most people at the office enjoy using it and learn a lot as the videos stick to one topic per video."

Interviewer: “Question 16: Can an organisation benefit from e-learning? Why?”

Participant 1: “Yes, 100% an organisation can benefit from e-learning. All organisations can benefit from e-learning in one way or another I feel. But to sum it up its because of the 24/7 accessibility. Companies are now allowing their employees to study when they want and how they want but can at the same time monitor their employee’s progress. I for example can sit on the couch and can complete an entire day of courses which will send my results directly to my manager. And more so for the organisation its cost effective. When I started at this company so many employees had to travel overseas for training now with that same money you can train an entire department.”

APPENDIX F

INTERVIEW MEETING SCHEDULE

Interview Meeting Schedule		
Participants	**Date**	**Status**
Participant 1	20 August 2020	Accepted
Participant 2	20 August 2020	Accepted
Participant 3	20 August 2020	Accepted
Participant 4	21 August 2020	Accepted
Participant 5	21 August 2020	Accepted
Participant 6	24 August 2020	Accepted
Participant 7	24 August 2020	Accepted
Participant 8	24 August 2020	Accepted
Participant 9	25 August 2020	Accepted
Participant 10	25 August 2020	Accepted
Participant 11	25 August 2020	Accepted
Participant 12	26 August 2020	Accepted
Participant 13	26 August 2020	Accepted
Participant 14	27 August 2020	Accepted
Participant 15	27 August 2020	Accepted