



**The impact of the 4th industrial revolution on traditional travel agents in the
tourism industry: Richards Bay Airport**

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DECLARATION

I, Phindile Precious Maseko do hereby declare that this study is the result of my own work and that this has not been submitted in part or full for any degree or for any other degree to any other University.

P.P Maseko

Date

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ABSTRACT

The Internet provides a powerful environment for the development of virtual representations of tourist destinations for indirect experiences that far surpass the capacity of conventional travel agents. Nowadays, consumers have numerous different options as the Internet gives companies more ways to create direct consumer connections and provides a diverse pricing range. The Internet has revolutionised the way clients make their travel decisions. Technology is a part of daily life today, some may reinforce it and some may detest it but what is certain is that technology has advanced a lot in terms of simplicity and congeniality, mostly in the mid-1990s.

Travel agents have historically been seen as a key conduit between travel service providers and travellers. IT advances give customers an alternative to booking with a traditional travel agent - the prospect of preparing and scheduling vacations on the internet. This study aims to examine how the introduction of the 4th industrial revolution has impacted on traditional travel agents in the tourism industry. Using a qualitative and exploratory approach, this study has collected data from travel agents and travellers in the area of Richards Bay through structured interviews and an online survey using purposive and convenience sampling methods; and thematically analysed the data collected.

A significant conclusion of this study is the need for a systematic method to the evaluation of issues impacting decision-making amongst travellers. Research results indicate that there is a need for managers to adopt a management plan that will allow travel agents to use the 4th industrial revolution to their advantage. Moreover, travel agencies need to move with the times and offer more complex services that are not offered by online agents, thus gaining more clientele.

Key words: 4th industrial revolution, Traditional travel agents, Tourism, Technology

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List of Acronyms

4thIR - Forth Industrial revolution

CRS - Central Reservation Systems

GDS - Global Distribution Systems

IT - Information Technology

OIS - Organisational Information Systems

TTA - Traditional Travel Agents

OTA - Online Travel Agents

KZN - Kwa-Zulu Natal

RBCT - Richards Bay Coal Terminal

RBM - Richards Bay Minerals

IOT - Internet of Things

CPS - Cyber-Physical Structures

UN – United Nations

ASATA – Association of South African Travel Agents

CHAPTER ONE: INTRODUCTION TO THE STUDY

1.1 INTRODUCTION

When one looks at the rising interest in the 4th industrial revolution worldwide, questions arise. How will the introduction of the 4th industrial revolution impact on traditional booking methods in the tourism industry? How will it contribute towards the economic development of the tourism industry? This researcher tried to answer the above questions by focusing on the readiness of the tourism industry and its brick and mortar stakeholders such as traditional travel agents and tour operators in the area of Richards Bay, City of uMhlathuze under the King Cetshwayo District Municipality. Having observed that the town of Richards Bay is small but its travel agents service tourists that travel further North of KwaZulu-Natal (KZN); such as, among others, ST Lucia, Hluhluwe Game Reserve, and Sodwana Bay. The study wanted to explore how ready these travel agents are for the 4th industrial revolution and how their businesses will be impacted by it.

According to the Cambridge Dictionary (2017), the industrial revolution is the time during which work began to be done more by machinery in the factories than by hand at home or in the workplace. It seems that the advancement of the Internet as a dissemination channel has been clear in South Africa as the number of Internet clients and cardholders rises (Dangor, 2018). Before the arrival of technology, one had to go through a lengthy process to visit a destination.

Nowadays the Internet provides users with benefits they have not yet gained from other distribution networks, including a) the freedom to connect with each user in a customized manner; b) the simplicity of two-way communication (feedback and interactivity) where content is changed at any time and; c) the dissemination of information at any moment from anyone, anywhere on the planet (Lemax, 2021). As a result, many agencies became members of a network or alliance which allowed them to practice competitive discounts that were inaccessible to online agencies (Camilleri, 2017). Although not exclusively, traditional travel agents focused on the segment of luxury clients with offers that are impossible to find on the Internet and make customers loyal to the agency (Wearemarketing.com, 2021). However, the advance in science and technology has consistently enabled the growth of

industrialisation around the world and over the years helped add more precise and clear definitions to the term 4th industrial revolution (Belvedere *et al.*, 2013).

There have not been many studies that focus on the impact of the 4th industrial revolution on traditional travel agents in South Africa, those that have touched on the topic of traditional travel agents and the 4thIR, such as the commentary by Tourism update (2020) focused rather on how the 4thIR will affect rural tourism in Africa at large. Several scholars whose studies are outside of Africa recommended that travel agents are to use the 4thIR and its technological advances in their favour, like that by Siebenaler & David, (2002) and Gretzel, *et al.*, (2015)

1.2 BACKGROUND

Before the first industrial revolution, “travel agents relied on the professional travel experience, attending industry conferences, reviewing brochures and establishing personal relationships with vendors so they could make suitable customer recommendations” (Impact of Technology on the Travel Agency Business, 2020).

However, the internet has revolutionized the way clients make their travel decisions in such a way that consumers now have numerous different options. Furthermore, the internet gives online agencies more ways to create direct consumer connections and provides a diverse pricing range (Tumeh, 2019). The internet provides a powerful environment for the development of virtual representations of tourist destinations for indirect experiences that far surpass the capacity of conventional travel agents (Azouri *et al.*, 2016). The internet is currently the perfect link between customers and dealers, more than hundreds of websites have ample details for travellers and sufficient information for their travel preparation (ITTAB, 2020). Furthermore, technological advancements now allow travel agents to perform online searches, book, and confirm travel, (TNTTR, 2021)

Agents do not have to keep hard copy files on customers anymore, nor do they have to spend a great amount of time collecting payments from their customers and sending out balances or invoices to wholesalers. Payments, bookings, and confirmations can now be handled online easily and customers can obtain details via email.

1.3 PROBLEM STATEMENT

Travel agencies mainly exist as intermediaries among travel service providers such as airlines, hotels, and clients. Traditional travel agencies do not deal with tangible goods but with knowledge (Cheung & Lam, 2009). The technological revolution of our world is gradually impacting the tourism industry, all tourist destinations and companies constantly have to implement new approaches in an attempt to boost their competitiveness (Smith, 2018). On the other hand, the modern, advanced, informed, and demanding traveller becomes increasingly familiar with the evolving technology and needs versatility, specialisation, usability, and interactivity (Smith, 2018).

It is also anticipated that the Internet will change the position of tourism intermediaries, and especially travel agencies (Malthus, 2017). Travel agencies have been the key suppliers of tourism services and the industry's interface with consumers (Camilleri, 2017). Most travellers are fully adapted to planning their trips through the Internet (Gretzel, *et al.*, 2015). Gretzel, *et al.*, further points out that social networking sites and video sharing are becoming more popular, that the desktop computer is being used less frequently, tablet, smart phones and GPS are being used more frequently.

Over a period of time, more and more people have started traveling which has led to the development of the travel industry, turning the travel industry into a key engine for financial advancement (Siemieniuch *et al.*, 2015). For some nations, the travel industry is one of the fundamental income sources in their economy. Seemingly though, this industry has been providing less and less job opportunities since the introduction of the 1st industrial revolution, this could be worse with the 4thIR said to be the biggest of all the revolutions.

Hence research findings concerning the position of traditional travel agencies when it comes to technological advances and the efforts they make to grow confidence in their clients so as not to lose them in favour of online agencies are still inconsistent. Nevertheless, the existence of travel agencies is uncertain to the degree that the Internet empowers customers to create and buy their itineraries online, (Smith, 2018).

1.4 AIM OF THE STUDY

This study aims to investigate how the introduction of the 4th industrial revolution will impact traditional travel agents in the tourism industry. Creswell, (2014) and Malthus, (2017) noted that the thesis aim includes the direction the project will take, its goals, the incentives involved, and the size and complexity of the planned inquiry. Kumar (2011) also points out that, as work advances, the goal and purpose of qualitative studies are to investigate as much as possible. This investigation will be favourable in identifying factors that influence travellers to use online booking systems and the effects of these systems on traditional travel agencies.

1.5 OBJECTIVES

According to Bernard *et al.* (2017:11), research objectives refer to the “general purpose of the study”. Additionally, Kumar (2011) and Bernard *et al.*, (2017) point out that an objective indicates the central thrust of the study. The following are objectives of this study.

1. To examine whether traditional travel agencies have been affected by the advancement in technology and the anticipated 4th industrial revolution.
2. To determine the preparedness of traditional travel agencies and the tourism industry at large in anticipation of the introduction of the 4th industrial revolution.
3. To outline factors introduced by the 4th industrial revolution that motivate travellers to use the online booking methods rather than traditional travel agencies.
4. To determine the impact of the 4th industrial revolution on the tourism industry.

1.6 RESEARCH QUESTIONS

1. How have traditional travel agencies been affected by the advancement in technology and the anticipated 4th industrial revolution?
2. To what extent is the tourism industry prepared for the introduction of the 4th industrial revolution?
3. What are the factors introduced by the growth in technology that influence traveller’s decisions and perceptions towards new and old travel booking methods?

4. How does the introduction of the 4th industrial revolution impact the tourism industry?

1.7 SIGNIFICANCE OF THE STUDY

The results of this study will be of benefit to several tourism stakeholders in and around Richards Bay and especially to traditional travel agents, below is an explanation of how this study is significant to traditional travel agents and tourism stakeholders.

Traditional travel agents will be able to identify factors that push travellers to use online booking systems instead of traditional travel agents and provide updated information; this will help them attract more travellers to make use of their services and thus creating job opportunities for unemployed youth in the tourism industry. Moreover, traditional travel agents will be able to address their state of readiness towards the 4thIR and identify changes that they need to make to compete on a global scale and attract consumers around the world.

This study will add to the existing academic body of knowledge in the tourism studies with regard to the readiness of traditional travel agencies towards the introduction of the 4th industrial revolution. This will enable researchers who are interested in this topic to be able to identify gaps in the field of research that need to be addressed that this study may have opened. In addition, local and provincial tourism industry stakeholders will be able to identify issues that need to be addressed that concern employment within the tourism industry. Furthermore, this study will provide a better understanding of the factors that affect a traveller's preference of online and traditional travel agents which will assist tourism stakeholders to improve their service standards

The researcher considers this study highly feasible as it requires no special infrastructure for its completion, the financial resources that the researcher applied for at the institution will be adequate to complete the study. Although there is a time constraint set by the institution, I consider it adequate to complete this study. Furthermore, the information needed for the study is readily accessible on academic

platforms, and should there be a problem encountered with accessing information, the researcher worked with her supervisor to seek assistance.

For any project to influence the world, it must be distributed to a wider audience. This project's results will be communicated through publications in journals such as the journal for hospitality and tourism insights and conferences. The title of the article is as follows: The readiness of traditional travel agencies towards the introduction of the 4th Industrial Revolution: The case of Richards Bay. As a realistic researcher, the outcomes of this study will be shared with those travel agencies and agents involved in the project. The aim would be to have wider discussions about what the study means and what we, as individuals and organizations, can do about the findings.

1.8 CHAPTER OUTLINE

The chapter outline of the study is as follows:

Chapter One: Introduction - This chapter presents a brief overview of the question under study as well as break down the reasons that made the researcher to undertake the study. This chapter looks at the aims of the study, the objectives, and the incorporation of the research rationale.

Chapter Two: Literature Review -This chapter critically analyses the insightful perspectives of the literature under study. It looks at the other studies that have been done by other researchers.

Chapter Three: Research Methodology- This chapter covers the research approach, research design, research philosophy, research strategies, data gathering techniques and analysis, limitation of the study, trustworthiness of data and ethical considerations. Besides, the pilot study and information investigation are evaluated in this part of the research.

Chapter Four: Results, Discussion, and Interpretation of Findings - This chapter looks at the results as well as interpreting the findings to make meaning of the studied material.

Chapter Five: Conclusions and Recommendations - This chapter provides the conclusions and proposes recommendations from the study.

1.9 CHAPTER SUMMARY

This chapter presented the research problem and research background and the objectives of the study related to the impact of the 4th industrial revolution on traditional booking methods in the tourism industry. This chapter further explains the significance of the study and chapter outline of the study. The next chapter presents the literature review related to the research aim and to the objectives of the study.

CHAPTER TWO: LITERATURE REVIEW

2.1 INTRODUCTION

Technology is a part of daily life today, some may reinforce it and some may detest it but what is certain is that technology has advanced a lot in terms of simplicity and congeniality, mostly in the mid-1990s (Gretzel, *et al.*, (2015). The internet in itself has had a deep impact on businesses in the tourism industry; such as the introduction of new types of businesses and in many cases added options for customer (Atzori *et al.*, 2010, Oztemel & Gursev, 2018). However, the depth of such an impact is not yet known in the case of South African traditional travel agents as studies have not yet addressed this issue Mohammad *et al.*, (2013). The travel and tourism industry is one of the first to be affected by technology with new travel intermediaries launching and being key forces in the industry.

The advent of the Internet as a means of both delivery and e-commerce has led to a lot of discussion and controversy over the travel agents' present and future positions (Lemax, 2021). Suggestions have been made, in particular, that the role of bricks and mortar travel agents is being overtaken by new e-mediaries on the one hand, and principals using the Internet to connect directly with customers on the other (Buhalis, 2003). Although some papers have tried to highlight the important features of traditional travel agencies (Hovhannisyan & Keller, 2015), it is still unclear as to how these agencies will avoid losing clientele after the 4thIR is fully introduced.

Therefore, this chapter explores four concepts of this study which are; the 4th industrial revolution, focusing on previous technological revolutions and how the introduction of the 4th industrial revolution will impact traditional travel agents. The second concept is traditional booking methods in the tourism industry. The third concept is traditional travel agents, focusing on their history and how they have adapted to the technological revolution. The last concept is online booking methods in the tourism industry. The second part of the chapter looks at the legislature guiding the 4th industrial revolution and travel agents in South Africa followed by the theoretical framework adopted by this study.

2.2 THE 4TH INDUSTRIAL REVOLUTION

Although there is still no common consensus about what constitutes an industrial revolution (Maynard, 2015), four universal stages of technological development have been established (National Academy of Science and Engineering, 2013). The first industrial revolution is seen as one of the great advancements in civilization that started with the use of water and steam powered mechanical manufacturing facilities after the end of 18th century (Dangor, 2018). Later, at the beginning of the 20th century, the implementation of electrically driven mass manufacturing technology was branded as the second industrial revolution through the division of labour (Janssen *et al.*, 2019).

After that, in the mid-1970s, the third industrial revolution started to support more manufacturing automation, by making electronics and information technology (IT) more common in factories (Camilleri, 2017). In all, it took about two centuries for these three technological revolutions to evolve. In recent years, governments and society as a whole have recognized the movement towards the 4th industrial revolution and have taken advantage of what it can do (Siemieniuch *et al.*, 2015). The 4thIR is thought to contribute to the creation of a qualitatively distinct social context by intensifying the features of the 3rd industrial revolution. This stands with a statement that incorporates a variety of factors taken as the case itself.

Past innovations still have a huge effect on today's technologies; however, sadly, future technologies may not be reliant on today's technology and innovation rates. Machines were developed in the first and third industrial revolutions so that people could speak to machines, but in the 4th industrial revolution, machines are created to talk to humans and other machines, this is destructive (Dangor, 2018). A new age is now being witnessed by the tourism sector that was once dependent on brute force (Loss, 2021). The tourism sector needs to re-invent itself in order to succeed in this current scenario.

This will entail the introduction of a plan for digital transformation to include the specialized expertise required to equip employees so that 4thIR can be advantageously harvested. Experts in the tourism industry have estimated that the 4thIR will cause drastic shifts in the tourism for a number of years to come (Loss, 2021). Therefore, it is crucial for operators in this sector to reflect on developments in

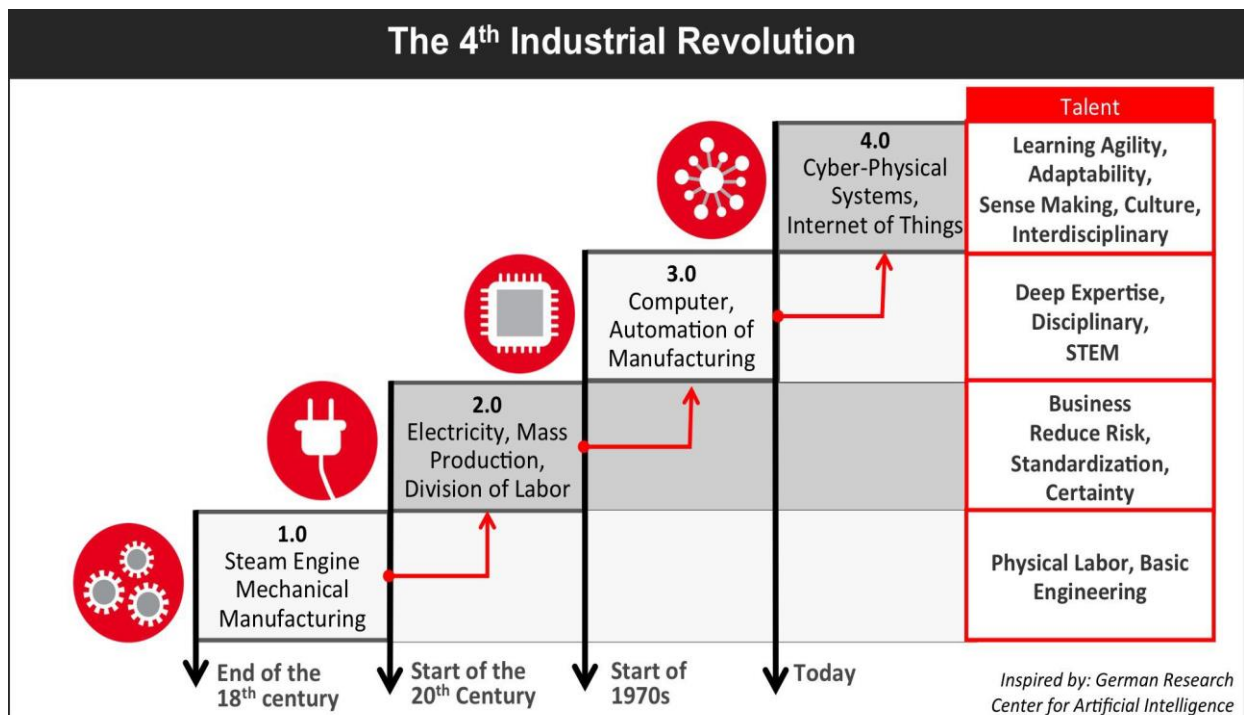
networking technology and emerging patterns in convergence. Melike and Kudret, (2018) pointed out that new crisis are very likely to arise among industry operators with the emergence of 4thIR and that a new paradigm would be required to address them. Industry experts have concluded that the implementation of 4IR would lead to new challenges and opportunities in the tourism industry in particular in the areas of transport, marketing tourism aspirations and types of services (Benjamin *et al.*, 2020).

Big data analytics, cloud computing, the Internet of Things (IoT) and simulation will for instance, trigger dramatic shifts in the tourism industry's service delivery and marketing (Talwar *et al.*, 2020). In addition, product digitization, big data, and cloud computing would make it possible to more reliably understand and satisfy specific consumer needs (Talwar *et al.*, 2020).

The 4thIR also facilitates the technology in a simulated world to “sightsee” destinations, services and reservations, room availability, food and drinks may be pre-ordered regularly (Davutoglu, *et al.*, 2017). Intelligent robots will provide services in all rooms and restaurants, such as welcoming, bell-boy services, payment, advertising, on-site instruction and food and beverage orders (Talwar *et al.*, 2020). In this way, manufacturers and users will now be able to exchange common ideas of imagination and perspectives focused on the use of advanced technologies (Melike & Kudret, 2018).

Today, enterprises are actively tracking and introducing emerging technology with the goal of rising efficiency and reducing the marginal cost of manufacturing and selling products and services in order to reduce costs, win over customers and secure adequate benefit for investors (Wearemarketing.com 2021). Tourism in developed countries must completely comprehend the technical forces that have given rise to modern economic structures in order to understand the enormity of the economic transition taking place today (Oztemel and Gursev, 2018). As an economic activity, tourism needs connectivity and transport components to communicate with other supply chain components in order to create an efficient and profitable mechanism that can transfer economic activity through the value chain (Benjamin *et al.*, 2020).

Figure 1: Industry 4.0 in time frame



Medium. 2021. Future of Work: Learning to Manage Uncertainty. [online] Available at: <<https://medium.com/@heathermcgowan/future-of-work-learning-to-manage-uncertainty-990601de86e8>> [Accessed 16 February 2021].

According to Lukac (2015), since production must be met faster and accurately nowadays, more automatic manufacturing systems, often based on technological applications, are used to fulfil the requirements of production. This then raises the question of unemployment, the more machines are built to take over duties that have been performed by humans for years, and the fewer people will be employed.

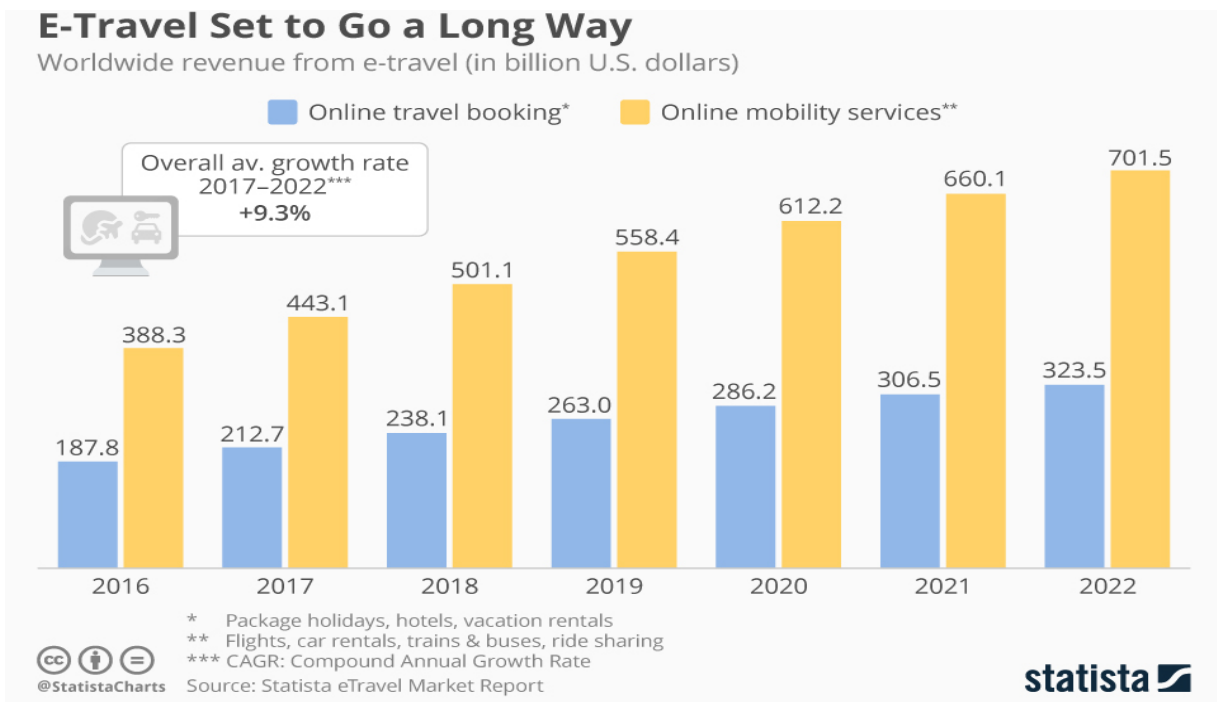
Davutoglu, *et al.*, (2017) suggest that technological revolutions would influence the existing growth processes of all industries, in particular by increasing the effect of Industry 4.0 on the formation of new businesses by producing digital goods with smart factories without human resources and with advanced robotics. They also argue that emerging technical trends such as the Internet of Services and the Internet of Objects would change existing market structures by irresistibly influencing them, leaving the labour-intensive industries in a challenging position (Li *et al.*, 2017).

On the other hand, Firat and Firat, (2017) claim that things like pay salaries, absences, ineffectiveness, low labour rates, housing health expenditures, travel

service, and other litigation costs would stand out in future smart factories and houses. We also contend that electricity prices such as heating and ventilation in smart buildings have been left behind, which saves money and lowers CO2 pollution in the context of climate change, thereby adding to the preservation of the atmosphere in the interest of stability (Siemieniuch *et al.*, 2015).

However, it is proposed that users using interactive Internet in tourism will save time and costs in terms of immediate feedback, response, awareness and anticipation of cloud storage challenges, large-scale data processing and high-tech usage Gretzel, *et al.*, (2015). In addition, Industry 4.0 developments such as large data modules, autonomous systems, smart manufacturing, centralization and environmental awareness have the ability to move the tourism industry’s job policies to a disparate model in the process of transforming the travel, lodging and food / drink sectors thus affecting job creation (Li *et al.*, 2017).

Figure 2: Online bookings growth rate in the travel industry.



Loesche, D. (2019). *Infographic: E-Travel Set to Go a Long Way*. [online] Statista Infographics. Available at: <https://www.statista.com/chart/11272/worldwide-revenue-from-e-travel/> [Accessed 24 Apr. 2020]

However, it seems that opposing opinions prevail concerning the impact of the digital economy on the future of traditional travel agents. While some studies revealed a “dis-intermediation of traditional travel agents” (Sheldon, 1997, Melike & Kudret,

2018) arguing that there is a lesser need for traditional travel agents, some conveyed that travellers still rely on their services (Buhalis, 2003). Another imperative inquiry is how can the lack of expertise in the travel industry be overcome under the state of unstable, fixed work and generally low pay? In recent decades, the travel industry has been developed and enhanced to be one of the biggest and fastest developing industries around the globe (Firat and Firat, 2017).

2.2.1 Online booking methods in the tourism industry

Like the preceding revolutions, the 4thIR has the potential to increase global levels of income and improve the quality of life for people around the world (Lukac, 2015). To date, those of us who have benefited the most from preceding revolutions have been customers who have been able to afford and enter the modern world; technology has made possible new goods and services that make our personal lives more productive and pleasurable (Camilleri, 2017). Ordering a taxi, scheduling a hotel, purchasing of food, paying for goods and services, listening to music, watching a movie, booking a flight or playing games, you can do all of these remotely (Janssen *et al.*, 2019).

Figure 4: Utilizing technology for bookings



Inerun.com. 2021. Blog | Inerun. [online] Available at: <<https://www.inerun.com/blog.html>> [Accessed 16 February 2021].

Seemingly, technological progress would also set about a supply side revolution in the future, with long-term improvements in quality and profitability. Rates of shipping and connectivity might plummet, logistics and global supply chains might become more productive and trading rates might decline, all of which will open up new opportunities and accelerate economic growth consumers (Gretzel, *et al.*, 2015). On the other hand, it is also possible that the technology-driven relocation of employees would result in a net rise in healthy and rewarding employment (Talwar *et al.*, 2020).

However, at this stage we cannot predict which situation is going to occur, and experience shows that the outcome is going to be a mix of the good and bad. Even so, one thing is sure, that talent will constitute the crucial factor of development in the future, rather than money. This will result in an increasingly divided labour market with low-skill / low-pay and high-skill / high-pay divisions, which will in turn contribute to heightened social tensions (Travel agency systems, 2021). As well as being a key economic concern, inequality is the biggest societal concern associated with the 4thIR.

Melike & Kudret (2018) noted that the creation of the first calculator and then the introduction of the computer with digital advances in communication technology brought a new level to production processes and services in an analysis of the possible impact of the 4th industrial revolution (4thIR) on tourism. Automation-based output led to an increase in productivity with the third industrial revolution, which culminated in the elimination of weekly working hours and the right to yearly paid leave (Davutoglu, *et al.*, 2017) Travel and tourism started to grow around the same time, in tandem with growing household income, and since then there have been advances in technology, horizontal and vertical convergence of tourism industries, travel credits, the introduction of new destinations, and various shifts in fashion and leisure tastes (Lemax. 2021). As a result of these changes and the exponential growth in the world population, urbanization, crowding, noise, congestion, environmental degradation and other industrialization-induced issues, many people see travel and tourism as a must to cope with the stresses of modern industrial life (Melike and Kudret, 2018).

2.3 TRADITIONAL TRAVEL AGENTS

According to Firat & Firat (2017) in 1975, the only way to schedule air travel before the introduction of online booking systems was to dial a telephone number and communicate to an agent seated at a computer console attached to a reservation system. A call may have taken fifteen minutes while the agent checked and clarified the flights and fares available. However, the scheme succeeded and the fruits of the work of travel agents became visible in the growth of air travel after the de-regulation of the late 1970s by airlines (Firat & Firat., 2017) Travel agents played a valuable economic role, serving as intermediaries between airlines and accommodation providers, helping travellers select from a complex and often frustrating variety of flight and accommodation choices.

Travel agents started disintermediating with the growth of the internet, at least in their capacity as travel agents, Spencer (2014). The disappearance isn't difficult to explain, not long after the initial expansion of the Internet to companies and families; online travel sites (including Travelocity, Expedia, Priceline, and Orbitz) became accessible to users in the late 1990s, (Spencer, 2014). Individual airlines have launched platforms that offered their own tickets and consumers swiftly shifted to these sites instead of making long phone calls to travel agents, booking a significant share of tickets through the airlines' own online sites (Firat & Firat 2017).

Given the apparently invaluable role of travel agents in helping travellers surf the market, one would have predicted their absence to cause some chaos in the airplane ticket business. However, the disturbance did not occur, (Law & Buhalis, 2010). Even as some traditional travel agents went out of business, air travel continued to soar. Because of the essence of travel, agencies are attracted to demographics of wealthy recreational travellers and business tourists, generating geography of agencies clustered in financial districts and higher-income cities and suburbs (Lemax. 2021). The industry is experiencing strong growth as increased business and leisure travel is prompted by economic prosperity (Li *et al.*, 2017). Around the same time, the function of both the travel providers (airlines, hotels, etc.) and the logistics networks is disrupted by emerging digital technology that provide innovative ways of serving consumers around reduced cost (Khaitan & McCalley, 2015).

Despite the changes in technology, many traditional travel agencies are still operating since not all tourists are searching for online services. This is mainly because online deals may appear to be incomplete in terms of interaction but some still prefer traditional travel agents. As a result, several agencies were part of a network or association that offered them the ability to obtain favourable promotions that were unavailable to online agencies. While not specifically, they concentrated on the category of premium consumers with products that cannot be replicated on the Internet and that carry memories to the consumer and keep them faithful to the agency (Talwar *et al.*, 2020).

Differing opinions exist on the effect of technology on the future of traditional travel agencies (Onyango & Keso, 2018). Although earlier research pointed to a sort of disintermediation of traditional travel agencies (Sheldon, 1997), recent studies showed that travellers still depended on them (Firat & Firat, 2017, Onyango & Keso, 2018). Key reasons for this commitment are the high importance of face-to-face contact, intimate and professional counselling and reducing high search costs (Talwar *et al.*, 2020). Thus, it is important for the travel service industry to improve its service standards to better understand what factors affect a traveller's preference for online and traditional travel agents (Zhang *et al.*, 2006).

The supply chain within the tourism industry has changed largely because of the spread of new technologies. A study by Zhang *et al.* (2006) explained how e-travel agency functions. In their view, search capability, rich destination knowledge, digital presentation, online group availability and a wider range of choices are very useful features of online travel agencies that should be similar to the notion of perceived usability which would contribute to the intention of prospective users to use online travel agencies

2.3.1 Traditional booking methods in the tourism industry

Technology is commonly used for reservation, accounting, and inventory control functions within travel agencies. There is a range of systems used by travel agencies such as Global Distribution Systems (GDS) such as Galileo, Sabre, and Amadeus that are used for bookings, knowledge collection, customer service and reporting (Travel agency systems, 2021). Organizational information systems (OIS) used for

accounting, reporting, management of records, and billing, over the years, the adoption of information technology (IT) has helped to reduce costs and improve service delivery (Al-Mamary *et al.*, 2014).

However, Internet development may have posed a challenge to travel agencies, which has prompted some to believe that travel agencies ought to dramatically change their market strategies if they are to continue at existing levels (Dangor, 2018). The analysis by (Onyango & Keso, 2018) which included exploratory interviews with travel industry executives, advised travel agencies on a variety of warning signs that they should be aware of when they perform their business, firstly, those easy bookings are likely to be made on the Internet; secondly, that the number of travel agencies is declining; thirdly, that consumers continue to explore the Internet.

The emergence of the Internet as an alternate delivery mechanism now allows the conventional travel agency to be re-evaluated and its existence at the storefront (TAS, 2021). IT is a great advantage to travel agents for a long time, is now proving to be a big challenge to their economic viability (Lemax. 2021). The core practices in the travel industry are database processing and the use of their combined skills and experience to plan travel plans for a wide variety of customers. The pressures of maintaining a large inventory of airline seats, hotel space, and rental vehicles contributed to information management from such service suppliers (Loss, 2021).

In fact, the use of automated booking systems for airlines was an early and advanced application of computer technology (Dangor, 2018). At the service end of the travel business, travel agencies were interconnected to their vendors' computer systems to ease booking processing. The previously mutually advantageous relationship between the travel agencies and their vendors has become progressively combative (Naqvi & Jia, 2014). Led by airlines, travel providers have decreased their distribution costs by reducing fees paid to travel agents and sidestepping agents as they sell directly to the public (Loss, 2021). Competitive and profit-related pressures to cut costs have resulted in a gradual erosion of travel agents' payments since the mid-1990s (Gretzel, *et al.*, 2015).

Although technology is not the primary consideration, the main reservation networks provide both structures for handling a dynamic product continuum and methods for direct sale to the public (The New Technology and Travel Revolution, 2021). An analysis of the travel industry trade press soon shows the strength of feelings regarding using digital technologies to circumvent travel agents and worsening connections between travel agents and travel providers (Li *et al.*, 2017). Communication technology has played a significant role in the travel agency's growth and will add tremendously to the industry's ongoing transformation. One fundamental issue to consider is how the technology will affect the travel agency at the storefront travel agency that has had a place in many malls and shopping districts (Khaitan & McCalley, 2015).

Figure 3: Growth in the use of technology for travel purposes



Jason Lim. (2019). *How Mobile Technology is Changing World Travel?* [Online] Available at: <https://jasonlimhl.wordpress.com/2015/09/21/the-connected-future-of-travel/> [Accessed 24 Apr. 2020].

Consumers have better access to knowledge and costs, with more competition and more convenience overall. Nevertheless, it is claimed that the Internet has made it

easier to transfer control from mainstream travel agents to customers, as they already have access to a wide variety of online travel providers that also struggle with the pricing of the services and goods provided (Law *et al.* , 2010).

Hudson *et al.* (2001) claimed that a traditional travel agent still has considerable impact on customer decision making and that scheduling a more complicated trip with several stops could be quicker and safer with a conventional agent rather than with the online one. However, Cho and Agrusa (2006) established a pattern of attitudes of the consumers towards online travel agencies which showed that external variables such as details, quality, product / service, accessibility, technology / usability are key factors in gaining customers. Product name, promotional and entertainment factors were included in their model Cho and Agrusa (2006) Arguments for using an online agent may be; ease, lower costs, faster access to destination information, comparable costs and 24/7 accesses to information. Buhalis (2003) pointed out that the most significant reasons for not booking online were security issues, lack of faith in the use of technology, lack of personal support and loyalty to the conventional travel agency.

Information technology (IT) provides travel agencies with a diverse selection of resources by providing the platform for knowledge sharing and dissemination of tourism goods (Loss, 2021). IT has allowed travel agencies to plan complex travel paths while offering up-to-date schedules. The expansion of Central Reservation Systems (CRSs) and Global Distribution Systems (GDSs) has also created an important reservation mechanism that helps travel agencies to easily make reservations and issue travel documents (TAS, 2021). Thus travel agencies use IT to enter the repositories of tourism vendors, check supply and prices, and confirm bookings (Sheldon, 1997; Onyango & Keso., 2018).

However, the development of the Internet has been said to have presented numerous challenges for travel agencies (Law *et al.*, 2004). Agencies not only need to balance the usability of the Internet's information and reservation features, but they also need to add significant value to providing customers with online connectivity (Smith, 2018). Furthermore, conventional travel agencies must deal with

IT-based organisations, such as Expedia and the Internet Tourism Network, which provides information to online consumers (Buhalis, 2003).

2.4 LEGISLATIVE FRAMEWORK GUIDING TRADITIONAL TRAVEL AGENTS IN THE TOURISM INDUSTRY

The tourism industry in South Africa is guided by the Act No. 3 of 2014: Tourism Act, 2014 and in section 2(1)(a)-(d) provides the objectives of a task to promote or develop the tourism industry for the benefit of the social economy in South Africa. The latter subsection states the objectives of the Act as follows:

- (a) “promote the practising of responsible tourism, contemplated in subsection (2), for the benefit of the Republic and for the enjoyment of all its residents and foreign visitors”,
- (b) “Provide for the effective domestic and international marketing of South Africa as a tourist destination”;
- (c) “Promote quality tourism products and services”;
- (d) “promote growth in and development of the tourism sector”.

The internet gives an option for low-cost access to worldwide markets for a developing country like South Africa. By being more involved in communications technology, South African travel agencies can use this component to their advantage (Santiago, 2018). In addition, by facilitating associated communication technology policies on travel, the South African government may encourage this undertaking. The government can thus better plan the future development of South African traditional travel agents and the tourist industry through the following responsible tourism which

- (a) seeks to avoid negative economic, environmental and social impacts
- (b) generates greater economic benefits for local people, enhances the well-being of host communities and improves working conditions and access to the tourism sector
- (c) involves local people in decisions that affect their lives

(d) makes positive contributions to the conservation of natural and cultural heritage and to the maintenance of the world's diversity

(e) provides enjoyable experiences for tourists through meaningful connections with local people and a greater understanding of local cultural, social and environmental issues

(f) provides access for physically challenged people; and

(g) is culturally sensitive, engenders respect between tourists and hosts, and builds local pride and confidence.

Development is a fundamental task that requires extensive research for the benefit of drafting, proposing and approving of bills in legislatures that will give a directive by law of what is acceptable and not acceptable in a developing country like South Africa. Technology is a major key player in the tourism industry as the world is in evolution of a new industrial revolution which is tech driven, the above legislation employs those who are tasked with the developing structure to participate fully for the benefit of maintaining the economy but guided by the laws of the country.

Moreover, there is a statutory body called the Association of Southern African Travel Agents (ASATA) which its membership is voluntary and includes South African retail travel agents, travel management companies, wholesalers and suppliers of travel-related products and services (About - ASATA, 2021). One of many principles that a travel agency who is part of this body must adhere to is the effectiveness in maintaining client relations and providing best services. The evolution of the 4IR influences the usage of social platforms as means of communication, these social media platforms are, emailing service, apps and sometimes live conferences through zoom or Microsoft teams. Most people like to move with the moving times and as a travel agent, one is duty bound to adapt to ways that clients are associated with. South Africa is adapting to the evolution and this study is in a position to propose methods that can be adopted and by traditional travel agents in South Africa that may assist them in adapting to and harnessing the 4thIR.

Furthermore, according to Santiago, (2018), there is no one-size-fits-all approach to developing 4thIR plans and regulations since each country's distinctiveness and

participation in the global market must be carefully considered. However, this must be weighed against the country's socio-economic development goals. Rural economic growth in South Africa is hampered by inadequate infrastructure, such as the road network and electricity supplies, as well as low levels of competency. South Africa's network penetration, particularly beyond the metros, is rather low when it comes to the deployment of 4IR and its reliance on modern information and communication technology.

The World Economic Forum's founders, Klaus Schwab, who established 4IR idea, say that the speed of current discoveries has no historical precedence. The Social and Economic Council of the United Nations warns that this rapid and unprecedented technology change may disrupt the United Nations (UN) objectives for development, especially the inclusive development agenda for the benefit of the developing countries. Younus, (2017) argues that the 4thIR marginalizes the illiterate living in less developed regions.

2.5 THEORETICAL FRAMEWORK

Throughout qualitative research, the theoretical framework creates a viewpoint that shapes the kinds of questions that ultimately guide the data collection and interpretation methods; and how to respond to the demand for change (Creswell, 2014). Theory tends to gather evidence because it determines the kinds of facts to be investigated extensively, as the theory's components, research questions can be assumed based on the link between these components (Creswell, 2014). The research theory that was adopted by this study is the modernization theory.

Modernization theory is a social science paradigm developed in the United States after World War II to examine and explain the transition from traditional to contemporary cultures (Bordoloi, & Das, 2017). The modernization theory provides a means of observation of discourse about the evolution in technology, to identify persistent patterns across business units or organizations (Martinez, 2015). The lines between the real world and the virtual world of technology are becoming increasingly blurred as larger segments of society are inundated with machines. It is not individual technology that is creating this new industrial revolution, but the

convergence of many technologies, new forms of energy generation and innovative business models, all of which together are being used to create something new and unpredictable.

Although the common features that societies appear to evolve as they become modern may vary from one version of the theory to another, but all believe, in general, that institutional structures and individual behaviours become more specialized and incorporated into social and economic forms that are characteristics of advanced Western societies (Mücen, 2018). The modernization theory is a description and interpretation of the transition processes from conventional or underdeveloped to modern societies. The theory implies that advanced industrial technology not only induces economic development in developing economies, but also other systemic and cultural changes (Magalhães Freire *et al.*, 2018). Such as in the case of traditional travel agencies, the introduction of online booking methods through technological revolution has equipped the conventional traveller with information and an online platform to make their own bookings instead of using a traditional travel agent.

The modernisation theory portrays progress as a common developmental course taken by all cultures, from farming, rural and conventional cultures to post-industrial, urban, and global modes (Shrum, 2000; Modernization Theory, 2021), Bordoloi, & Das, (2017) posited that The theory claims that progress is merely a question of transmitting information and technology that is unproblematic and simple, context-free, and not destructive to the current social and cultural arrangements in developing countries (Herkenrath & Bornschier, 2003). In a way, modernization theory implies a uniform, one-way, and top-down expansion structure for all identities, for all time, for all places, and all settings (Timmons & Hite, 1999; Magalhães Freire *et al.*, 2018). Modernization theory, as a paradigm for social reform and growth, refuses to recognize the prospect of creating an integrated and multifarious mechanism of information generation and sharing that is made possible by recent developments in technology.

Modernization is a transitional process; for a culture to transition into modernity, its conventional institutions and values must be entirely replaced by a collection of

modern values (Huntington, 1976; Modernization Theory, 2021). Huntington also posits that modernization is an inevitable process because of its systemic and disruptive existence, which is built up by it. Thus traditional travel agencies have been replaced by online travel agencies that are available 24/7, are not prone to human error and accommodate all kinds of travellers. These online agents however, may not be offer tailor made itineraries as opposed to traditional travel agencies (Li *et al.*, 2017).

Modernization theory emerged during the decolonization and Cold War periods, when the US's economic and geopolitical stability was threatened by a poverty-stricken Global South drawn to communism (Bordoloi, & Das, 2017). Modernization theory arose as an intellectual undertaking involving a wide range of disciplines, including geography. It describes the distinctions between "traditional" and "modern" communities (Martinez, 2015).

2.6 CHAPTER SUMMARY

This chapter examined literature concerning the impact of the 4th industrial revolution of traditional booking methods in the tourism industry. The discussion revealed that some of the negative impacts of the technological revolution have caused some traditional travel agents to shut down while some have used the technological revolution to their advantage and offered their services online. This chapter also examined the theory that was adopted by this study. The following chapter discusses the methodology used in conducting this study.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 INTRODUCTION

As defined by the literature review, research on the impact of the 4thIR on traditional booking methods in the tourism industry remains somewhat limited. The research approach chosen for this study, qualitative research approach, is important because it makes an informed decision on the research design and helps decide the technique and method best suited for this study (Saunders *et al.*, 2016). This study follows a qualitative and exploratory approach, supported by the research design and data sampling as laid out in this chapter. This chapter also discusses how the research instrument was conducted and administered to research participants as well as data analysis. This chapter concludes by addressing any concerns around the principles of trustworthiness and the limitations of the study.

3.2 RESEARCH DESIGN

The research design provides the structure of the research and links all of the elements of the research together (Babbie & Mouton, 2011). According to Brynard *et al.* (2014) a research design is an outline that spells out a plan detailing how the research question is going to be solved and including detailing the methods that are going to be used to collect and analyse data obtained from the field. Cohen *et al.*, (2013) postulated that there is several research designs associated with a qualitative research approach. An exploratory research design was chosen as it attempts to extract new information or bring new knowledge or add additional knowledge to what is already known concerning a topic of interest Lee & Lings (2015). The research design was used to explore the lived experiences of traditional travel agencies during the introduction of the 4th industrial revolution. Through this design, the researcher was able to deeply engage with travel agents and domestic tourists on the impact of the 4th industrial revolution on traditional booking methods in the tourism industry.

The rationale for choosing an exploratory research design is based on the fact that the factors concerning the readiness of traditional travel agents towards the introduction on the 4thIR have not yet been comprehensively explored. As mentioned in the literature review, studies that have touched on the topic have only focused on the advantages the 4thIR brings (Firat & Firat, 2017; Janssen *et al.*, 2019). Moeketsi in Tourism update (2020) focused rather on how the 4thIR will affect rural tourism in

Africa at large. Several scholars whose studies are outside of Africa suggest that travel agents are to use the 4thIR and its technological advances in their favour, like that by Siebenaler & David, (2002) and Gretzel, *et al.*, (2015). This effectively means that new and additional information regarding this issue needs to be explored in detail.

Exploratory research design does not attempt to deliver the final and conclusive answers to the research questions, but rather explores the research topic and objectives with variable levels of depth. Saunders, *et al.*, (2012) notes that “exploratory research is the initial research which forms the basis of more conclusive research and can even help in determining the research design, sampling methodology and data collection method” to be used in the study.

3.3 STUDY AREA

This study will be conducted in the City of uMhlathuze within the King Cetshwayo District Municipality, in Richards Bay. The Target population are domestic travellers who have booked accommodation; flights and car hire who are visiting the area and employees of all traditional travel agencies in Richards Bay who are in charge of bookings.

The City of uMhlathuze (KZ 282) is located on the north-east coast of the province of KwaZulu-Natal with a population of 384 449 (User, 2020). The municipality has specific major economic sectors under the City of uMhlathuze that include mining, manufacturing, forestry, commercial farming, tourism, and an industrial zone. The Richards Bay Industrial Development Zone has been labelled as a national significance for inspiring development in the industrial sector; it has major firms such as RBM, Transnet, RBCT, and Mondi, to mention a few. These companies account for a huge percentage of the employment rate in the Richards Bay area. The city boasts a busy regional airport. Richards Bay Airport's capacity will soon be extended to accommodate more facilities in a new location suitable for commercial use and leisure travellers.

Figure 5: Map of Richards Bay



Kimony.co.za. 2021. *ABOUT THE COMPANY : Kimony Magnetite*. [online] Available at: <<http://www.kimony.co.za/index-m=2.html>> [Accessed 26 February 2021].

3.4 RESEARCH PARADIGM AND PHILOSOPHY

This is a social constructivism study; it is about how travel agents have come to understand their encounters with technology and the perceptions of tourists when choosing between online and traditional booking methods. Social constructivism is an interpretative framework through which individuals seek to understand their environment and create their own specific meanings which correspond to their own experience (Creswell, 2014). Such significances within each person are not engraved or inherent but rather, these significances are created through contact with others (Creswell, 2014).

Since the research adopted a qualitative approach, the researcher used interpretivism research paradigm with an intention to critically analyse and interpret the subjective experiences of travel agents involved in bookings and the perceptions of domestic tourists in the Richards Bay area. The rationale for choosing the interpretivism research paradigm was premised on the fact that it enabled the gathering of detailed information concerning the impact of the 4th industrial revolution on traditional booking methods in the tourism industry; how have these travel agents adapted to the ever-changing technology? What are their plans in

dealing with the 4th industrial revolution? What are the perceptions of tourist when making their bookings through online or traditional booking methods? According to Babbie & Mouton, (2014) interpretivism emphasises that a person views the facts of their social reality and interprets them according to their economic views. Therefore knowledge is often directly learned, rather than artificially gained or forced. Hence the above questions can only be answered by the targeted respondents as they have lived, learned and experienced technological revolution in their daily lives.

The present study positioned the interpretivism research design in connection with epistemology and ontology philosophies. A research philosophy is a belief about the way in which data about a phenomenon should be collected, evaluated and implemented (Babbie & Mouton, 2014). These two philosophies believe that reality and truth is “socially constructed”. Ontology is the philosophical discipline that centres on the essence of existence and within truth; this allowed the researcher to understand what the travel agents make of their existence since the introduction of technological revolution and how have they adapted. Epistemology is the field of philosophy which revolves around knowledge and how to achieve it. This has enabled the researcher to make sense of the epistemological reality of travel agents, what is known about the impact of the industrial revolution, what traveller’s perceptions of the 4IR are and if these travel agencies are prepared for the 4th wave of the technological revolution.

3.5 RESEARCH APPROACH

For this study, a qualitative research approach was chosen as this approach seeks a more ethical science based on probabilities, which would be more suitable for this analysis (Welman *et al.*, 2013). The primary goal of qualitative research is to “describe and understand” rather than to explain the phenomena studied. The methodology for quantitative and qualitative research is fundamentally different. Quantitative reasoning is deductive and focuses on the questions / hypotheses of current theory and experience (Creswell, 2014). In contrast, qualitative analysis is inductive, hypotheses are created, methods are flexible, samples are small, and the researcher is viewed as an instrument of study (Creswell, 2014).

The researcher chose to follow a qualitative research process in order to explore the experiences of travel agents when dealing with the ever-growing competition brought about by technological revolution. Through this approach, it was possible for the researcher to deeply engage and interact with travel agents and tourists through structured interviews and data was generated on the subjective experiences of the traditional travel agents during the introduction of the 4th industrial revolution.

The researcher wanted to understand how conventional travel agents would be influenced by the introduction of the 4th industrial revolution, and whether such agents are ready from an insider perspective for such effects. The qualitative method therefore allowed the researcher to retain a neutral and unbiased view of the facts and thus keep the analysis process free of bias (Welman *et al.*, 2013). Using the qualitative approach has allowed the researcher to describe and understand how the introduction of the 4thIR has impacted on traditional travel agents, their daily operations, their employment rate and their ability to retain or attract new clients.

3.6 TARGET POPULATION AND SAMPLING PROCEDURES

According to Cooper and Schindler (2014), target population refers to a collection of units or an aggregation of people with the same attributes characteristics that are of interest to the researcher. This description is further expanded by Saunders *et al.* (2016) who note that the population includes the entire collection of cases in which a sample can be collected. Zikmund *et al* (2013) posits that it is of utmost importance that data is gathered from relevant sources in order for the research questions to be addressed adequately.

This study's target population are separated into two groups; the first group are traditional travel agents who are responsible for making bookings for flights and accommodation as they have already been exposed to online and traditional booking systems. They will therefore be able to reflect easily on those experiences deemed to be positive or negative throughout their work career. The second group are domestic tourists at the Richards Bay airport as they have gone through the process of making bookings either through a travel agent or online. This will help the researcher to get the clients perspective, lived experience and perceptions of online versus traditional booking methods.

This study was conducted in Richards Bay, a small town on the north of KZN in the City of Umhlathuze local municipality. Richards Bay has specific major economic sectors under that include mining, manufacturing, forestry, commercial farming, tourism, and an industrial zone. The city boasts a busy regional airport which services most towns and destinations to the north of KZN. Richards Bay Airport's capacity will soon be extended to accommodate more facilities in a new location suitable for commercial use and leisure travellers.

3.7 SAMPLING PROCEDURE

Sampling is a science that involves identifying respondents from a whole population who will represent those who will have been left out of the research participation process (Pascoe, 2014). Mutinta (2013) further identifies two main classes of sampling namely probability and non-probability sampling. Probability sampling refers to sampling methods that are used to give each item or persons in a target population an equal chance of being selected (McMillan & Schumacher, 2016). Whereas non-probability sampling implies the specification of population in an irregular way, most of the time, according to the opinion of the researcher (McMillan & Schumacher, 2016). Furthermore, non-probability samplings do not select their research respondent by chance or using random methods but mainly uses the discretion and expert judgement of a researcher who is in the field (Cooper & Schindler, 2014).

This study employed non-probability sampling as it is a common technique in qualitative research (Pascoe, 2014). There are different types of sampling methods under non- probability sampling, such as; Haphazard/ Convenience Sampling, Purposive Sampling, Quota Sampling, Snowball Sampling and Maximum Variation Sampling. Since the target population of this study are two groups, travel agents and domestic tourist, the researcher has made use of two sampling methods, purposive sampling for travel agents and convenience sampling for domestic tourists.

Purposive sampling is a sampling method whereby the researcher targets a certain group of people with certain experiences, knowledge or attributes that the researcher deems to be of greater relevance towards contributing to the research objectives (Taylor *et al.*, 2016). Purposive sampling operates by targeting information rich

cases that are deemed to provide detailed information that will contribute to the research findings. In this research, bookings and managerial staff operating in four travel agencies in Richards Bay were selected through purposive sampling as they were found to be the best source of rich and valuable information regarding their experiences in the travel industry. A sample of six travel agency employees who were responsible for bookings was selected through purposive sampling as they were deemed to have more intimate knowledge about the agencies readiness towards the 4thIR and its impact thereof. Taylor *et al.* (2016) noted that purposive sampling makes it easier to make generalizations about your sample. On the other hand, it is vulnerable to errors and judgment by the researcher (Pascoe, 2014).

Convenience sampling is a method whereby a researcher appoints a respondent who is easy and near to him or her (Leddy & Ormrod, 2013). Eight domestic tourists at the Richards Bay airport were chosen through convenience sampling as it made it easy to grab participants as and when they come through the arrivals terminal. This then brought the total research sample to fourteen, including both travel agents and domestic tourists. Taylor *et al.* (2016) posit that convenience sampling is affordable, efficient, and simple to implement. However, the sample may lack clear generalizability (Leddy & Ormrod, 2013).

3.8 DATA COLLECTION

Data collection is the process of collecting and measuring information on interesting variables in a defined systematic manner that enables one to answer specified research questions, test hypotheses and assess results (Ghauri & Grønhaug, 2015).

3.8.1 Data collection instrument

The initial plan for this study was to use structured face –to-face interviews as a method of collecting data. Unfortunately, due to the COVID-19 pandemic, the researcher could not keep to this plan, traveling was minimal, businesses had to shut down and, those that could, moved their services online.

The study then adopted telephonic interviews and an online survey as a form of data collection. Surveys are easier to create because you already have a set definition of what you would like to define or quantify as they require less preparation, take less

time, and can be used for larger samples, they are easier to administer (Kielmann *et al.*, 2012). It is important to note, though, that these strategies are relatively inflexible because of the degree of structure imposed by you. Sometimes, they are limited to documenting a single dimension of a complex concept (Kielmann *et al.*, 2012). Though many empirical studies point to the operational conveniences and other functional benefits of telephone interviews, including increased access to interviewees who are geographically scattered, decreased costs, confidentiality and increased protection of interviewees (Cachia & Millward; 2011, Stephens, 2007). (Holt, 2010; Smith, 2005 voiced that the inability to respond to body language and the possible loss of contextual data are some of the most frequently voiced concerns regarding telephone interviews).

Interviews are the most commonly used research strategies in qualitative and quantitative research designs (Wilson, 2010; Sarstedt & Mooi, 2019). Interviews involve gathering information from respondents through mainly structured, semi structured and unstructured ways. An interview is a verbal conversation between two people with the objective of collecting relevant information for the purpose of research and is particularly useful for getting the story behind a participant's experiences (Mason, 2012).

An online survey was posted on google docs and the link sent Rennie's travel agents and The Flight Centre requesting that they forward the link existing clients. Thus the online survey was conducted for all of the traveller participants from the Richards Bay Airport and minority of travel agents employees. The online survey was closed when the researcher had received ten responses, which consisted of two travel agents and eight tourists. The remaining four travel agents respondents were interviewed through telephonic interviews. Telephonic interviews were conducted for the majority of travel agents employees. An email requesting permission to conduct interviews via telephone along with informed consent letter was sent to four travel agencies in Richards Bay followed by phone calls to confirm receipt. For this study, the survey and telephone interviews yielded rich data, as participants were able to raise their views without the influence of the researcher.

3.8.2 Secondary data collection

In gathering data, the researcher requested access to documents relating to the selected organizations, their plans, studies, newsletters and advice to understand the organization's position and responsibilities and how it operates, what achievements and difficulties they face in the delivery of services. Creswell (2014) argues that a researcher can “collect qualitative records, which may include public documents such as official reports, minutes of meetings, newspapers, articles and other publications”. In gathering Secondary data, the researcher also consulted various online databases, such as JSTOR, Emerald and Sage, books, relevant websites and online journals.

3.9 DATA ANALYSIS

Ritchie & Spencer (2010); Stockemer *et al.* (2019) explain the importance of information analysis by saying that it is a procedure that transforms data into information and learning. Therefore, an engaging and interpretative examination of the data was similarly conducted. Qualitative data analysis can be defined as a process that involves the transformation of raw data collected from the field to convey a meaning or interpretation that is useful to users of the research findings (Patton, 2015). Zikmund (2013) defines qualitative data analysis as referring to procedures for organising and sorting data that enables a researcher to convert unprocessed data into processed data that brings about a refined outcome.

Thematic data analysis was used for this study using NVIVO version 12. Thematic analysis is the process of identifying patterns or themes within qualitative data (Braun & Clarke, 2014; Fugard & Potts, 2015). This definition concurred with Vaismoradi *et al.* (2015) who described thematic analysis as a method that involves identifying, analysing, and reporting patterns (themes) within data. Bernard *et al.* (2017) asserted that the primary goal of a thematic analysis is to identify themes that are patterns in the data that are important or interesting in order to make sense out of the data, and use these themes to address the research.

Data was scrutinised for subjects or emergent themes in the information collected. Patton (2015) pointed out that a theme can be identified as anything of importance that is dominantly emerging as important and related to the study focus. The aim of

conducting thematic analysis was to recognize meaningful trends across the dataset that provide a response to the question being discussed in the study.

Thematic analysis was adopted because of several reasons; one of the advantages of thematic analysis is that it's practically flexible (Tuckett, 2015). This made it possible to be used within this research framework to provide meanings to answer the research questions. Another rationale for adopting thematic analysis is the fact that it suits questions not only related to people's experiences but also people's views and perceptions. Patterns were identified through a process of data familiarisation, theme development and revision. Since the data was of a qualitative nature, quotes from the interviews and surveys were used to support or emphasise specific notions (Lewis, 2015).

3.10 PRINCIPLES OF TRUSTWORTHINESS AND AUTHENTICITY

The two main factors are reliability and authenticity when measuring a calculation (Saunders & Lewis, 2012; Zikmund *et al.* 2013). Reliability refers to the reliability of a calculation where it can be replicated over various intervals and reliable outcomes can be returned. Validity refers to the precision factor of whether the calculation fulfils the goal of the intended measure (Zikmund *et al.* 2013). The concept of qualitative analysis indicates that there is a chance of evidence being corrupted by interviewer or translator bias (Saunders *et al.*, 2016). The fruits of qualitative analysis are often widely understood to be contextual.

This subjectivity may pose questions about the quality and consistency of the collected data (Zikmund *et al.*, 2013). (Creswel, 2014) recommends using validity methods to achieve findings that can be seen as authentic and trustworthy to alleviate these issues. The author sought an independent group to join in the analysis to mitigate the questions regarding validity and reliability. Snippets of the data were exchanged with this individual during the data processing process and the results of the researcher were checked against those of the outside group.

Trustworthiness and authenticity of data is an important imperative when conducting research because users of the study findings needs reasonable assurance about the

credibility, transferability, dependability, conformability and authenticity of the research (Leedy & Ormrod, 2014).

Overall, the following Principles of Trustworthiness and Authenticity were taken into account at all times during the data collection:

3.10.1 Credibility: refers to the degree to which research findings are deemed as being plausible and appropriate as guided by the level of agreement or disagreement between participants and the researcher (Terre- Blanche *et al.*, 2014). Credibility was achieved by following standardised rigorous procedures for conducting qualitative research and data collection and by interviewing bonafide respondents currently employed by travel agencies in Richards Bay and travellers at the Richards Bay airport;

3.10.2 Transferability: Terre- Blanche *et al.* (2014) defined transferability as referring to the extent to which the findings can be compared to other findings from similar studies conducted under similar circumstances. Transferability was ensured by thoroughly providing a detailed description of the context of the surrounding socio-cultural environment that the research study is framed around;

3.10.3 Dependability: Morse *et al.* (2012), Stockemer *et al.* (2019) defined dependability as referring to the reliability and degree of consistency in terms of how the research procedures generate findings that are predictable and repeatable if the process is done by other researchers using the same respondents and questions. Dependability in this research will make it possible for other people outside the study to follow, audit, and critique the research process and by triangulation of study findings with existing literature and theory;

3.10.4 Confirmability: refers to the degree to which the conclusions could be confirmed or backed up by other sources (Maree, 2012). A data audit was undertaken to ensure conformability, which reviewed the data processing and evaluation processes and resulting in assumptions on the potential for bias or manipulation;

3.10.5 Authenticity: Rolfe (2013) defined authenticity in qualitative research as referring to the extent to which the research findings possesses integrity and are derived from honest and genuine responses which are free from exaggerations. Royce (2016) suggested that other strategies to get authentic data involve spending a lot of time with respondents so as to establish rapport and trust, triangulation (across sources, methods, and researchers). This research ensured authenticity by explaining the objectives of the study to the respondents, providing contact details on the survey, the objective was to help eliminate suspicions and mistrust which might result in respondents withholding some of honest opinions to questions posed.

3.10.6 Assumptions: The researcher expected that all respondents will give legitimate and honest responses, which would make users of the research findings to have a sensible presumption that all parts of the review are believable given the populace, the factual test and the examination plan.

3.11 ETHICAL CONSIDERATIONS

Ethics in research are very critical as they lay down the standards or norms for conduct that differentiate between “right and wrong conducts” in a research. Ethical standards guard against the construction of false data and thus, promote the pursuit of truth and knowledge which is the primary goal of research (Bryman *et al.*, 2014).

It was appropriate for the researcher to seek ethical approval from the research and ethics committee prior to the data collection stage. Once this was granted, the researcher set out to gather the data. An interview guide, the link to the online survey and an informed consent form (Appendix C) were sent to travel agencies and informed consent was requested for all participants who completed the online survey. In terms of both their identity and that of their company, all participants were granted confidentiality and anonymity (Volpe & Bloomberg, 2012). No corporate information has been released and the respondents' identities have not been disclosed. Participants were recruited voluntarily. A survey was posted online on google docs and interviews conducted through telephone formed the basis of this study. Selected travel agents were contacted, and the method of data collection was discussed and agreed upon. Respondents in the online survey were given the option to opt out at any time during the survey if they did not wish to continue.

Overall, the following ethical considerations were taken into account at all times during the data collection:

Ensuring that authorisation is acquired: According to Plooy- Cilliers *et al.* (2014) the researchers must not do things as they please but must get some written permission from authorities or organisations being studied so as to avoid litigation since the absent of this will be regarded as a criminal offence. A written letter requesting to research was emailed to the office of the Management at the airport and to each travel agency so as to get written permission to go ahead with the study.

Ensuring that informed consent is obtained: Ghauri & Gronhaug (2015) stated that the study procedures must be agreed on by parties so that they can decide whether they want to consent to participation by filling in the consent form and then append their signatures. Ghauri & Gronhaug (2015) alluded that the objectives of the research as well as the aims must be clearly explained to the respondent so that they can also make proper decisions with all the information necessary at hand. The research must respect the decisions of the respondent if ever they want to pull off from the research participations or if they cannot deliver. No hidden clauses must be available so that the respondent may feel free to provide their views with an open-mind (Brewer & Hunter, 2015). Informed consent was implemented in this study by drafting a consent letter that was attached to the online survey and those respondents that were interviewed via telephone were asked for consent to be interviewed and the process was explained to them.

Ensuring no harm comes to participants: According to Bhattacharjee (2013) and , Stockemer *et al.* (2019) the researcher must make sure that the respondents are always safe from physical, emotional and psychological harm. This research ensured that respondents are free from harm as interviews were conducted telephonically and the survey was done electronically; **Ensuring Confidentiality and Anonymity:** Creswell (2014) postulated that confidentiality refers to an act of safeguarding privileged information gathered from respondents from access by unauthorised persons. Confidentiality will be safeguarded by locking all research documents in secluded places to prevent unauthorised persons from accessing the documents. Anonymity on the other hand refers to an act of not revealing the identities of respondents to third parties (Bhattacharyya, 2014). Anonymity as ensured in this

study by not requiring respondents to provide their identification particulars like names, phone numbers, office contact numbers or any other personal information.

3.12 LIMITATIONS OF THE STUDY

As stated, this study's qualitative nature indicates that the data obtained would most likely be biased. Moreover, only fifteen respondents were chosen for this study as it is practically impossible to include the whole population for this analysis. To mitigate this shortcoming, this researcher sought to resolve this including various travel agents and domestic travellers at Richards Bay airport in the sample. The results of this study cannot be generalised across all businesses based on the small sample of fifteen participants who were engaged in this study. Yet this can serve as a starting point for further research. Furthermore, the time and resources allocated for this study limited the number of research participants which might limit the amount of information gathered.

Moreover, this study was conducted during the Coronavirus pandemic, also known as COVID-19, which made it even harder for the researcher to gather data and meet with the participants since COVID-19 is spread through human contact. This Pandemic caused businesses to shut down and among those businesses were local travel agencies in Richards Bay. This further put a strain on the data collection process for this study and resulting in this researcher gathering data through conducting telephonic interviews and an online survey.

3.13 DELIMITATIONS

The researcher pursued to engage traditional travel agents and domestic travellers at the Richards Bay airport for the purpose of this study. It was believed that the experience of this sample will offer deep understandings into the views about the impact of the 4thIR on traditional booking methods in the tourism industry thereof.

3.14 ELIMINATION OF BIAS

According to Bhattacharjee (2013) elimination of bias is one of the most important considerations that a researcher must consider when undertaking research. Welman *et al.* (2014) stated bias in research occurs when the type of questions included in the research instrument contains aspects that reflects stereotyping of other races,

ethnic groups, gender or cultures whilst exalting other races, ethnic groups, gender or cultures.

Use of gender neutral words; According to Darr and Kibbey (2016) a research study should ensure that it is free of bias and should utilise words that are not gender nor racial insensitive. The study ensured that bias was eliminated in the study through ensuring that gender neutral words were utilised and words such as male pronouns were avoided in favour of gender neutral words like people, they, their or themselves, employees, staff and so on.; **Identifying people by race or ethnic group unless it is relevant;** Pauwels and Winter (2016) stated bias in research occurs when the type of questions included in the research instrument contains aspects that reflects stereotyping of other races, ethnic groups, gender or cultures whilst exalting other races, ethnic groups, gender or cultures. *Welman et al. (2014)* thus recommended that all forms of discrimination, stereotyping should be eliminated in any research so as to avoid potential conflict and or costly litigation. Thus, the research ensured that people were only referred to by race or ethnic orientation where it is deemed necessary or found to be relevant.

Avoid language racial group as superior or inferior that suggests evaluation or reinforces stereotypes; Darr and Kibbey (2016) posited that words that infers male sexism, racial prejudice, ethnic prejudice or which reinforces the belief that that one gender, group or ethnic formation is inferior over another needs to be avoided as such language stereotypes other people. Darr and Kibbey (2016) further posited that such words which contain stereotypes are not only offensive or demeaning but has the potential to dissuade other people from participating in the research. Such words were avoided in this research. **Making assumptions about various age groups;** Lee and Lings (2015) implored that researchers need not make assumptions that implies that certain age categories have a problem or issues that others do not have but should use language that are non-discriminatory or stereotypes on the basis of age. Such words were avoided in this research.

3.15 CHAPTER SUMMARY

This chapter focused on the research design, research strategies and discussed justifications for the selected methodology. A qualitative explanatory research design

was selected, and it was deemed crucial that the method maintains the credibility and objectiveness of the data as far as was possible. The sampling strategy, data collection instrument and data analysis were explained.

The purpose of this chapter was to explain and introduce the research methodology used in this study. The research methods used were adopted as to reach the main objectives of this study as specified in chapter one. A survey was posted on google docs, the link was shared with travel agents and requested that they post on their websites and forward to their clients so as to obtain responses from travellers around Richards Bay.

The aim of the interviews was to determine travel agencies and traveller's perceptions on the impact of the 4thIR on traditional booking methods in the tourism industry. The following chapter discusses the results of this study.

CHAPTER FOUR: RESEARCH RESULTS AND ANALYSIS

4.1 INTRODUCTION

The purpose of this chapter is to present the analysis and interpretation of the responses of the participants to questions asked from the interview guide. The research compared the responses of the participants with the literature review with an aim to examine views of respondents in this study. The chapter comprises of two sections: Section A discusses results from the structured interviews that involved travellers at the Richards Bay airport (**Annexure A**) and Section B discusses results from the structured interviews that involved employees of traditional travel agencies in Richards bay (**Annexure B**). In order to establish correlations and distinctions between this study and previous studies and literature, the results are also examined in light of previous research findings and available literature, a detailed explanation of the research methods where given in chapter three.

4.2 BIOGRAPHIC DATA OF PARTICIPANTS

Participant number	Gender	Occupation	Experience in years	Province
1	Female	Bookings Clerk	6	KZN
2	Male	Lawyer	4	Western Cape
3	Female	Bookings Manager	7	KZN
4	Female	Legal Administrator	1	KZN
5	Female	Bookings Manager	4	Gauteng
6	Male	Travel agent	3	KZN
7	Female	Bookings Manager	1	KZN
8	Female	Museum manager	4	KZN
9	Female	Businesswoman	0	Gauteng
10	Male	travel agent	2	KZN
11	Male	travel advisor	8	KZN
12	Female	Bookings Clerk	6	KZN
13	Male	Scholar	1	Free state
14	Female	Bookings Manager	4	KZN
15	Female	Business owner	5	KZN

4.3 DISCUSSION OF THEMES FROM THE DATA

During the conceptual phase of this study, qualitative data was collected in the form of interviews and an online survey that involved Travel Agency employees and travellers at the Richards Bay airport in order to define the impact of the 4th industrial revolution on traditional booking methods in the tourism industry.

The research design aimed at understanding the impact of the 4th industrial revolution on traditional booking methods in the tourism industry. This posed the challenge of gathering and analysing the information in such a manner that would accurately classify themes that significantly answer the research questions. The use of thematic analysis allowed themes to be identified from data and literature gathered, with semantic or explicit approach being used to achieve this aim.

Through the use of NVIVO version 12, themes were identified that helped to answer the research questions. The NVIVO software 12 was used to identify themes based on data collected from interviews and an online survey. Following a data collection process in which interviews were conducted, interview and survey transcripts were imported into the NVIVO 12, a qualitative data analysis programme from which seven (7) themes emerged from the data. These themes include:

- **Convenience and ease of using online booking methods:** this theme addresses the comparison between travel agents and online booking methods enabled by technological revolution. The first three industrial revolutions have enabled the development of technologies that promote online booking methods in the tourism industry and thus taking business away from traditional travel agents.
- **Trust and personal contact with a travel agent:** This theme addresses what tourists make of their experience with a traditional travel. When one visits a traditional travel agent, they receive tailored service which promotes trust and loyalty, furthermore, face to face consultations makes it possible to customers to open up about their doubts and thus a travel agent can address these issues.

- **Impact of technology on traditional travel agents:** This theme will address how technology and its evolution have impacted on traditional travel agents and their daily business.
- **Travel agent experience:** This theme addresses the expertise of traditional travel agents; some customers prefer to deal with someone who has experience in the field as opposed to self-service.
- **Internet allows and facilitates convenient travel research:** Technological revolution has brought about convenience and ease for tourists in terms of making bookings at the comfort of their home on a smart phone or laptop.
- **Competition:** The revolution in technology has brought with it a lot of competition for traditional travel agents by introducing online booking sites that allow a tourist to make their own bookings for everything one would need in a trip, from flights, accommodation, car hire and even entertainment.
- **Service quality:** The quality of the service offered by both online agencies and traditional travel agencies may vary in many ways and this is one of that factors that motivate a tourist to choose between online and traditional.

4.4 FINDINGS

Below are interview results obtained from travellers at the Richards Bay airport beginning with demographics so as to better understand the sample respondents.

4.4.1 Theme one: Convenience and ease of using online booking methods

These issues included concerns about the perception of online reservation services to save time while looking for information, whether it is viewed as “simple” to find relevant information online, whether the information collected is reliable and whether there is the ease of making online travel arrangements at any time of the day. Some online booking systems allow travellers to view images or give feedback of attractions online, adding to the tech's usability portion (Janssen *et al.*, 2019). This also concerns the freedom of travellers and their confidence in making their own

travel plans for international flight bookings; however some respondents suggested that they book international flights via a travel agency, while about a third of respondents opted to book online. A small numbers of participants made direct international flight bookings with the airline. For example, one of the respondents noted that:

Respondent 15: *“Basically, the 4th industrial revolution will bring about change in the tourism sector. All the bookings and payment have to be done online. Tourism sectors including accommodation, transportation and events must adopt the use of technology”*

The original, conventional approach of delivering travel goods or services to customers is that of a wholesaler selling a service or product to a travel agent serving as a distributor in the process. This strategy is characterized by good relationship-building activities on the part of both the wholesaler and the travel agent to give the traveller the right commodity at the best price (Khaitan & McCalley, 2015). The opinion of participants on the reasons for deciding to book with a conventional travel agent, *“Travel agents have special, negotiated airline/hotel prices, saving me cash.”* Surprisingly, most respondents acknowledged that special rates are provided by travel agents, culminating in savings.

Technology's potential to save time is the foundation in today's era. Tourists frequently have to wait for months, save for a holiday, and don't really have time to research or book their own travel plans. It is also important to notice that respondents agree that the online intermediary saves them time when looking for information and booking online. At the same time, some may argue that it is easy to locate detailed travel details online. The convergence of the Internet being able to save time in terms of browsing and booking and confirming that seeking information is considered *“simple”* suggests that technology plays a key role in the selection of an intermediary (Travel agency systems, 2021).

Technology has helped to grow the travel industry and traditional travel agencies are able to advertise and offer their services online. Technology has provided a platform for online travel agencies to grow and therefore creating more competition for

traditional travel agencies and has also provided new software and equipment for traditional travel agencies to exploit.

The emergence of the Internet as an alternate delivery mechanism now allows the conventional travel agency to be re-evaluated and its existence at the storefront (Al-Mamary *et al.*, 2014). IT, a great advantage to travel agents for a long time, is now proving to be a big challenge to their economic viability. The core practices in the travel industry are database processing and the use of their combined skills and experience to plan travel plans for a wide variety of customers. The pressures of maintaining a large inventory of airline seats, hotel space, and rental vehicles contributed to information management from such services suppliers (Gretzel *et al.*, 2015).

In fact, the use of automated booking systems for airlines was an early and advanced application of computer technology (Gretzel *et al.*, 2015). At the service end of the travel business, travel agencies were interconnected to their vendors' computer systems to ease booking processing. The previously mutually advantageous relationship between the travel agencies and their vendors has become progressively combative. Led by airlines, travel providers have decreased their distribution costs by reducing fees paid to travel agents and sidestepping agents as they sell directly to the public.

4.4.2 Theme two: Trust and personal contact with a travel agent

Examination of findings strongly showed that the two intermediaries had particular components concerned with the problem of trust. The travel agency depends heavily on human participation in the decision-making stage. The opportunity to deliver additional services is an indication of the human dimension that the travel agent adds to the partnership aspect. The Respondents claimed that the travel agent provided complimentary services, such as support in receiving foreign exchange, which encouraged them to book via a travel agent. It is doubtful that the Internet would be able to put ancillary networks together in a comparable manner. The majority of respondents to this study decided that the backup and assistance of a travel agent was essential to them. One respondent noted that:

Respondent 1: *“It's all about the ease for people who use a travel agency, you tell your agent where you want to go and what type of travel you want then you sit back and relax and then get on a plane.”*

Without a doubt, travel agencies are the lifeblood of the tourism industry. Travel agencies provide services such as organising sightseeing tours and package tours, offering travel information, and acting as a middleman for hotel and transportation bookings, distributing airline tickets, and arranging car rental (Travel agency systems, 2021). The promotion of excellence leading to respective adoption, as well as the quest for sustainable prospects by higher quality goods for visitors, are major issues for both public and private companies that wish to optimize the value chain of the tourist experience.

4.4.3 Theme three: Impact of technology on travel agents

The manner in which travel services are supplied and marketed to customers is evolving as fast as technology is. Although it was virtually inconceivable to be able to schedule your own trips online 40 years ago, today it is a common thing. Successively, the development of such technologies has led to further advances in the efforts of both the online service and the conventional travel agent to provide travellers with the most convenient and technologically sophisticated way of making travel arrangements.

Majority of respondents voiced that technology has indeed had a grave impact on traditional travel agencies, like the following response:

Respondent 2 *“We are heading to a full paper-less system, so yes, because the traditional travel agencies depend more on human control it will really hit us hard because tech is taking over from the traditional ways of doing things.”*

Whereas some disagreed with this notion:

Respondent 10: *“No because although technology is taking over there are still some areas lacking in technology. Some they have network problems, no data and even no knowledge of technology.”*

Figure 6: Richards Bay Airport



Bay, R., 2021. *Car Rental Richards Bay Airport, FREE to Cancel | Rhinocarhire.co.za*. [online] Rhinocarhire.co.za. Available at: <<https://www.rhinocarhire.co.za/Car-Hire-Richards-Bay-Airport.aspx#/searchcars>> [Accessed 6 March 2021].

The majority of travel agency staff respondents firmly agreed with the argument that travel agents provide ancillary services solely for booking flights or hotels, which allows passengers to negotiate with travel agents unlike online booking systems. The willingness of travel agencies to deliver services, such as assistance with visa applications, is an attribute of trust and convenience (Dangor, 2018). The method of applying for a visa is also a nerve-wracking activity. A travel agent's confidence and expertise in the routine handling of visa applications may turn a potential online customer to a travel agent's booking. Backup and support are essential in the event of any travel-related emergency, whether it is a flight delay or a medical condition. Respondents suggested that in such a situation, physical contact and backup by a travel agent might influence travellers to make travel bookings the traditional way.

4.4.4 Theme four: Travel agent experience and challenges

Travellers show a great degree of faith in the expertise and competence of a traditional travel agent, and they believe that agents provide greater understanding and professional assistance as opposed to online booking systems. The consequence applies to the travel agents willingness to obtain the trust of the tourist from an experience point of view. Tourists love the concept of being able to

communicate with a human being to exchange travel thoughts and feedback. In addition, Macintosh (2008) and Gretzel *et al.*, (2015) claim that the familiarity of a travel agent is a crucial strategic advantage as opposed to the Internet, where an excess of information appears to overwhelm passengers.

Respondent 8: *“Technology has contributed towards TTA growth and also posed challenges.”*

Respondent 2: *“It definitely poses challenges for them to such an extent they are forced to migrate into the new era of tech that most people who travel are now friends with user friendly apps that does all in one.”*

4.4.5 Theme five: Internet facilitates and allows convenient travel research

A major benefit the Internet has over travel agents is that it is available 24 hours a day, This element of convenience is noted and stressed in the studies by Ahmad & Juhdi (2009) and Onyango & Keso (2018) and supported by the findings of this study, with respondents accepting that the convenience of researching and making travel bookings online at any time is an important factor in determining whether to book online or via a traditional travel agent.

In several ways, the evolution of technology has led to a fixed desktop computer being replaced with a compact laptop computer or smart phone, making it more convenient to be able to browse for flights or make reservations from places other than the office or home. Various connecting technologies and options, such as 3G and Wi-Fi, add to the simplicity of portability. The Internet makes it easy for travellers to browse vacation options, read reviews and post pictures of holiday destinations.

Respondent 10: *“everything is now done online no one wants to que to book a ticket or reserve a holiday”*

4.4.6 Theme six: Competition

Traditional and online are two segments of the same market which means that they compete for the same client. Consumers who have used the internet before are getting more accustomed to convenience and self-service, leading them to demand

and anticipate outstanding service efficiency (Davutoglu, *et al.*, (2017). Competition between online travel service suppliers and traditional travel agents not only relates to price but also the issue of service quality as well. One respondent answered that:

Respondent 3: *“with tech evolution, travel agencies are under pressure as the competition has expanded to online agents as well and they are now employing less and less staff.”*

Although online bookings systems have taken most of their client base in the past years, traditional travel agents are still up and running and have found ways to get new clients. However, renowned travel agencies started taking direct online bookings from customers for airfare, hotel accommodations, tours, and packages. Some travel agencies closed down as customers were able to study and book travel goods directly online, while others found new prospects for growth (Smallbusiness.chron.com.2019).

Respondents voiced that technology has had both good and bad impact on travel agencies meaning that even though technology has made way for their biggest competitors to grow, it has also made way for travel agencies to expand their business to online platforms where they can advertise their services.

Respondent 4: *“Travel agents need to be able to compete online as well as in the traditional way so we can use technology to our advantage”.*

4.4.7 Theme seven: Service quality

Quality is something that nearly every person and organisation thinks they possess, but only a few individuals can describe it. When we use superlatives to describe consistency, we have a propensity to compare. As a result, operating a *“priced”* travel agency that offers package tours at average prices and to average visitors will be difficult. Furthermore, the vast majority of visitors will be unable to access quality. Of definition, this is not the case. In the service industry, definitions of service quality focus on meeting customers' needs and requirements, and how well the service delivered meets the customers' expectations (Lewis & Booms, 1983, Gretzel *et al.*, 2015). Service quality can thus be defined as the difference between customer

expectations of service and perceived service (Davutoglu *et al.*, (2017). One of the respondents, who is a travel agent, voiced that:

Respondent 8: *“Service quality is important for travel agent to be in competition, it is a key factor in distinguishing service products and building an economical advantage in the tourism sector.”*

Consumers, in general, are becoming more aware of a high-quality product which is not always accessible. Marketing strategies are now being powered by such demand (Davutoglu *et al.*, (2017). While some believe that quality is defined as *“the best, finest, greatest, expensive, or most superior”*, others correctly define quality as *“doing the right things right”*. Doing the right thing in a service-oriented company essentially means matching the three sets of standards in the agency: internal customer/associates external customer preferences.

Managers aim to reduce errors by overall quality systems and improve the understanding of product quality by guests (Kotler *et al.*, 2005). Marketers should also ensure that the correct standards are created. They will fulfil their current buyers but struggle to draw enough buyers if they set expectations too low. Because service cannot be delivered in advance, the standard of service should surpass the standards of customers

4.5 CHAPTER SUMMARY

This chapter is centred on the results of this study which was conducted in order to investigate how the introduction of online booking technologies would have impacted on traditional booking methods in the tourism industry. The results of the interview based research have been collected, analysed and recorded in this chapter. What follows in the next chapter are conclusions and recommendations of the study.

CHAPTER FIVE: SUMMARY AND CONCLUSIONS

5.1 INTRODUCTION

The aim of this study was to examine how the introduction of the 4th industrial revolution has impacted on traditional booking methods in the tourism industry. This investigation has helped in identifying factors that influence travellers to exploit online booking systems and the effects of these systems on traditional travel agencies in order for them to improve their services, gain customers and formulate strategies to build loyalty in customers by knowing their customer preferences and providing easy access to essential services. This study was conducted the Richards Bay, having observed that the town of Richards Bay is small but its travel agents service tourists that travel further North of KZN such as, among others, ST Lucia, Hluhluwe Game Reserve, Sodwana Bay, how ready are these travel agents for the 4th industrial revolution and how will their businesses be impacted by it.

The research's results, conclusions, and recommendations of this study are addressed in this final chapter. The results are presented in relation to the study's aim and objectives. The findings were analysed in conjunction with the study's objectives that have been stated above in chapter one. This chapter summarises and concludes the key research findings and presents suitable recommendations that could be beneficial for further research within the field of tourism studies.

5.2 FINDINGS AND DISCUSSIONS

The findings of this study will be presented under each of the stipulated objectives, as follows:

5.2.1 To examine whether traditional travel agencies have been affected by the advancement in technology and the anticipated 4th industrial revolution.

The findings of this study revealed that majority of the respondents had a very good knowledge of the 4thIR and how it has impacted on traditional travel agents. Since travel agents are a representation of a mature industry that offers commodity-like goods; the travel sector has faced a substantial transformation as a result of a change in supply chains that represents the influence of technology. It is clear that business and leisure travellers are becoming more aware of the numerous traveling

options that are available to them, and they prefer user-friendly platforms that offer easy access to pertinent information (Gretzel *et al.*, 2015). Travel companies, such as airlines, have a strong interest in directing travellers into their own products, which provides sufficient reason for travel agencies' continued existence.

The findings of this study revealed that the advent of the 4thIR may very well have posed a danger to travel agencies, leading some to say that if they are to thrive at present levels, they would dramatically need to alter their business strategies. This is supported by the study by (O'Brien, 1998), which involved exploratory interviews with travel industry leaders, advised on a number of warning signs for the travel agencies which they are to be mindful of as they conduct their businesses. Such as, firstly, simple bookings are expected to be made on the Internet; secondly, decline in the number of travel agencies, thirdly, customers tend to research on the Internet and then book through a travel agent and lastly, niche marketing will become progressively essential via the Web.

Participants who are currently employed as travel agents voiced that the 4thIR has had good and bad impact on the companies they work for. Some suggested that technology has helped them grow into offering their services online. While others feel that the technological revolution has made room for their competitors to grow and led their clients to be more independent in making their travel bookings, thus not needing their services. Participants suggested that travel agents can also offer value-added products to recreational travellers and corporate customers by combining the desires of service providers with those of their customers, and they are in a position to create value-added services for both.

Competition was one of the most mentioned concerns when it came to the impact of the 4thIR on traditional travel agents. It seems that the technological revolution has made it possible for online booking systems to take clientele away from traditional travel agents, due to this; some travel agencies have had to close completely. The competitiveness of the tourism industry, combined with decreasing airline revenues, may have resulted in widespread travel agency restructuring (Firat & Firat 2017). The evolving challenge, as in other sectors, is to use IT to leverage the travel agent's services and support the ability to turn readily accessible data into useful information

that offers a market advantage by generating new knowledge. The result will be subject to travel agencies' capabilities to make use of the market's loyalty, ensure access to travel information while providing value-added services, and cultivate winning product strategies that are sustained by IT and thus harnessing the 4thIR and using it to their advantage.

5.2.2 To determine the preparedness of traditional travel agencies and the tourism industry at large in anticipation of the introduction of the 4th industrial revolution.

The findings of this study revealed that travel agencies are able to harness the technological revolution in their favour. This study was conducted during the COVID-19 pandemic, travel was minimal and at some point, not allowed at all. This posed an even bigger challenge for business in the tourism industry. Participants in this study indicated that traditional travel agencies had to close their businesses. When travel was slowly being opened, travel agencies made use of technology to offer their services online so as to cut costs of running a physical office as only certain travel was allowed, such as for business or other emergencies.

The results of this study also revealed that one of the ways that travel agents use technology to their advantage is by building a different kind of partnership between themselves and their customers. Through social media and taking advantage of improved connectivity, travel agencies have expanded the ways in which they can connect not only with clients, but also with their business network and affiliate services. Information is available in a matter of seconds and is accessible to all, converting an activity that may have taken hours into an instantaneous one, increasing efficiency and eliminating downtime.

As a key distributor between the customer and the retailer, travel agencies have always played an important role in economic development of the tourism industry. They not only sell goods, but they also have experience to customers by offering travel advice. Clients seem to be increasingly using the internet to schedule, study, and book virtually every packed tour. Furthermore, the internet presents itself as a convenient and specialized sales network. Today's travel agents are confronted with

a variety of threats. Not only has customer behaviour shifted, but major mega-travel companies have since entered the market.

In addition, several entrants from third-party online retailers are competing for their market. Nonetheless, the 4thIR has advantages. It enables cost-effective direct and automated transfers between the retailer and the customer. Koo et al, (2017) go on to say that the internet is an important medium for travel agents to market last-minute and discounted flight tickets, drawing many more buyers. The benefit of information technology is that it not only helps to minimize gap and gaps, but it also helps to sustain the global economic cycle, which is reshaping the whole market.

There has been a lot of scare mongering over the prospects of unemployment and how the 4th industrial revolution is putting jobs at risk. Instead of fearing the fourth IR, tourism employers should welcome it. Jobs in occupations such as manufacturing, office management, forestry, food processing, construction, logging, transportation, installation, and maintenance are at the greatest risk of automation, Accenture (2018). As a result, tourism employment will continue to be significant, and the tourism sector will serve as a buffer for other sectors whose jobs will be lost to automation.

Fluctuations in leisure can support the tourism sector by resulting in increased tourism consumption as a result of more leisure time. New technologies have since aided in the reduction of costs related to tourism use, resulting in an increase in those seeking to partake in tourism. E-tourism, according to First & First, (2017), entails the digitalization of all procedures and business models in tourism, transport, and hospitality sectors, as well as e-commerce and the use of Information Communication Technologies (ICTs) to help businesses increase their productivity and effectiveness First & First, (2017).

Technology has transformed the face of the travel & tourism sector in two ways, the first is the implementation of emerging technologies, such as Global Distribution Systems like Galileo, and the second is the development of new devices, which would open new distribution channels Buhalis (2003). It has also changed the way

travel firms interact with their customers and how corporations interact with one another.

5.2.3 To outline factors introduced by the 4th industrial revolution that motivates travellers to use the online booking methods rather than traditional travel agencies.

The findings of this objective revealed that there are a number of factors that propel tourists to use online booking system instead of traditional travel agents. Tourists participants of this study indicated the following as push and pull factors for their decisions:

- Convenience and ease
- Time saving
- No middleman
- Better prices
- Availability

Majority of the tourist participants voiced that even though online booking systems make things easier for them, it is safer to book through a travel agent as your details are always protected as opposed to online systems.

Both intermediaries possess special quality and have the power to encourage passengers to use each other. The fact is that the tourists use both mediators when making bookings for different reasons, as stated in the results of this study. Some tourists use the Internet to collect info about the trip and book via a travel agent alone. Other tourists are in contact with an agent but prefer to book online. Traveling is a perceptual problem, and the expectation of a travel intermediary differs among people.

The beauty of the Internet is that it is available 24 hours a day without any disturbances. The usability aspect concerns the use and adoption of technologies closely, but not entirely. It is clear from the results of this study that qualities such as the potential to save time, ease of use and type of knowledge are driving positive attitudes towards technology adoption. Software allows travellers to read web

reviews, take interactive trips, arrange and transact on destinations. The Internet's ability to transcend space and resolve transactional obstacles is part of convenience. The study shows that technological acceptance is taking place rapidly. Software is not just the online intermediary's effective weapon but also gives travel agents an enticing prospect.

Global distribution systems (GDS) are computer software aimed specifically for travel agencies. These platforms have also been considerably developed. In a short space of time, it enables tour operators to search through various airlines. GDSs are often linked to flight booking systems and produce greater confidence in price and availability control and validation. Some of the results from this study are fascinating and can be used by travel managers practically.

5.2.4 To determine the impact of the 4th industrial revolution on the economic development of the tourism industry.

This objective has revealed that there is a rising need for consumer orientation, and international competitiveness in the tourism industry due to changing customer needs toward personalisation. Respondents felt that tourism has continued to develop and diversify over the past decades, being one of the world's biggest and fastest growing economic sectors. Thus, a growing number of destinations have opened their doors and invested in tourism growth, transforming modern tourism into a core engine of socioeconomic change.

Participants who are travel agents indicated that they use global distributions systems, made possible by technology, to service their clients. All of this by making the task of planning a trip easier and more enjoyable for both tourist and agent. The results of this study indicate that it's crucial for travel agents to learn how the travel industry can meet the demands of a new kind of traveller who is more concerned with sustainability and has more tech experience, by designing goods, functions, and services that make exploring the world simpler for everyone.

The past inventions continue to have a huge effect on today's technologies, but future technologies cannot and will not be dependent on today's technology and its advancement. Computers were created in the Third Industrial Revolution so that

individuals could interact with computers; now, in the 4thIR, technologies are being developed to communicate with humans and other machines, which is disruptive. The tourism industry, which was once based on brute force, is now entering a new era. The tourism industry and its associated facilities must reinvent itself in order to thrive in this current scenario.

As such, priority must be given to the production of the citizens required to help 4thIR (Oztemel & Gursev, 2018). For this reason, a digital development approach would be needed in order to provide advanced expertise to provide knowledge staff for 4thIR. The tourism sector is currently leading the way in 4thIR (Dangor, 2018). Travellers are always linked, always looking for facts, always posting their experiences on social media, and always expecting their needs to be met immediately.

Through using technologies to improve the traveller experience, tourism stakeholders have been able to capitalize on this trend. Biometric technology is being used in airports all over the world to recognise passengers and make their journey as smooth as possible (Loss, 2021). Artificial intelligence enables hotels and travel agencies to provide their customers with more personalized and customized experiences.

5.3 RECOMMENDATIONS

Based on the findings of this study, the following recommendations are made,

5.3.1 Recommendation 1

Build rapport: Travel agents must make customers feel at ease and secure at all times, all details must be taken seriously by not making assumptions, maintaining the clients dignity and also their needs must be met at all times in order to build customer loyalty.

5.3.2 Recommendation 2

Make use of available information platforms: The Internet and E-mail have opened opportunities to people and also facilitate the ways of communication for the travel industry, there is an abundance of information on the net and travel agents

should consider joining some organisations which do online marketing for businesses and attend some of their trade shows.

5.3.3 Recommendation 3

Know the client: In order to assess a client's particular needs, the travel agency must provide a list of personal questions to ask them. Travel agents must get to know their clients and find particular individuals within their organization who can treat clients with special needs, concentrating on who can spend time to educate themselves, perform accessibility studies, and develop community contacts. Agents must be polite, meticulous, and able to put in long hours and follow through.

5.3.4 Recommendation 4

Use IT to their advantage: Travel agencies should make use of Information technology as it provides a varied range of tools and a mechanism for information interchange and tourism product distribution. IT has provided a platform that allows travel agencies to construct complicated travel itineraries, while providing up-to-date schedules.

5.3.5 Recommendation 5

Offer sustainable products and Services: Since travel agencies and tour operators play such an important role in the provision and selling of leisure services, they must ensure that they are promoted in a sustainable manner.

5.4 CHAPTER SUMMARY

The objectives of this research have been identified and the findings of the data collected discussed, this chapter is a summary of the research findings and recommendations made considering the findings.

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APPENDICES

Annexure A

Interview guide travellers at the Richards Bay airport

1. 1. Gender.....
2. 2. Occupation.....
3. Province.....

4. Do you have an idea what is meant by 4th industrial revolution ?

5. How often do you travel?

6. Do you prefer making your bookings online or through a traditional travel agent?

7. Why do your prefer booking with the above?

8. Which do you find convenient between online travel agencies and traditional travel agencies?

9. Would you say that technology has had influence on traditional travel agencies?

Thank you for your cooperation

Annexture B

Interview Guide for travel agents

1. Gender.....
2. Occupation.....
3. Experience in years.....

4. Do you have an idea what the 4thIR is?
5. What do you think about its inception?
6. Would you say the 4thIR will have any impact on traditional travel agencies?
7. Would you say traditional travel agencies are ready for the inception of the 4thIR?
8. In your experience, would you say traditional travel agencies are becoming obsolete due to the evolution in technology?
9. Has your client base grown or declined in the past 5 years?
10. Would you say that technology poses challenges for traditional travel agencies or has it contributed towards their growth?
11. What is the impact of existing management techniques undertaken by management to manage the effects of the evolution in technology in this organisation?

Thank you for your cooperation

Annexture C
Informed consent letter

Nkonjane Reserve
Kwa-Dlangezwa
3886

15 October 2020

Dear Sir/Madam

I, Phindile P Maseko am a student at The University of Zululand (UNIZULU) studying for my Master's Degree in Development studies. I am conducting research on the topic "The impact of the 4th industrial revolution on traditional booking methods in the tourism industry: Richards Bay Airport".

The aim of this study is to investigate how the introduction of the 4th industrial revolution will impact traditional booking methods in the tourism industry. Your participation through cooperation regarding participation in this study will be sincerely appreciated. However, it must be noted that participation in this research will not result in any financial benefit to either party. Participation in this research is purely voluntary, confidential and non-committal and the respondent exercise the right to withdraw from the proceedings of the interview at any stage during the interview.

Should you have any concerns or questions about the interview, kindly contact the researcher, on 081 384 2991 email phindiledube2@gmail.com

Yours sincerely,
Phindile P Maseko

Researcher's Signature

.....

Annexure D
Survey informed consent

Survey on the impact of the 4th industrial revolution on traditional booking methods in the tourism industry

Dear Participants

This voluntary survey is part of a research study led by a student from the University of Zululand. The purpose of this research is to determine impact of the 4th industrial revolution on traditional booking methods in the tourism industry. Your data shall be processed for this research purpose only. Your participation will significantly aid our research. This survey will take about 5 minutes.

- Ethical clearance was granted by the University of Zululand Research and Ethics Committee (UZREC).
- The study will be conducted online
- In order to ensure that you cannot identify you and to keep your responses anonymous, no personal data from you.
- Published results will be aggregated and will not identify you individually or your responses.
- Anonymity will be implemented by ensuring that all completed data collection tool will be kept safe at all times.
- Your Voluntary participation is respected and you can stop and/or withdraw from completing the survey at any time.
- If you choose not to participate and/or withdraw from completing the questionnaire there will be no negative consequences for you, as this is purely voluntary.

If you have questions about the study, please contact: phindiledube2@gmail.com