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The undersigned certify that they have read and recommend to the Midlands State University for acceptance; a dissertation entitled: SERVICE AUTOMATION AND COMPETITIVENESS IN THE LUXURY TRAVEL COACHES IN ZIMBABWE. A CASE STUDY OF PATHFINDER LUXURY COACHES submitted by R112074Q in partial fulfilment of the requirements for the degree in Marketing Management.

SUPERVISOR

PROGRAMME/SUBJECT COORDINATOR

EXTERNAL EXAMINER

DATE: ..................................................
DEDICATIONS

I would like to dedicate this dissertation to God Almighty for the wisdom he imparted in me, his guidance and endless love he has bestowed in me throughout the years. Lastly I devote my dissertation to my parents for their never ending support at all times.
ACKNOWLEDGEMENTS

This study exemplifies the culmination of my formal scholastic journey. Along the way many people assisted me from the commencement to the completion of this dissertation. I have benefited greatly from the lecturers in the marketing department, my friends and fellow colleagues I thank them for their support and inspiration. My deepest heart felt gratitude goes to my dissertation supervisor for his orientation, encouragement, guidance and seemingly limitless patience throughout the research. Without his support this project would not have flourished.

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ABSTRACT

The research study was aimed at assessing the impact of service automation and company competitiveness of firms using Pathfinder Luxury Coaches as a case study. The main objectives of the study were to establish if there is an association between online reservation and increase in customer traffic, to distinguish if on-board facilities have an association with enhancing passenger experience in the luxury coaches and to assess if automated payment system has an association with sales volume. The research also covered relevant literature from different authors on service automation with special emphasis given to automated fare payment system, online reservation and onboard coach facilities. A sample size of 155 respondents compromising Pathfinder management, employees and customers were used. The study was prompted largely by the influx of automation in the transport service industry and the drop in sales volumes. The causal and explanatory research designs were used to gather the data from various respondents that were mentioned in order to study if there is a relationship between the two variables. The researcher also collected data necessary to answer the research problem using self-administered questionnaires with the respondents selected using the probability and non-probability sampling techniques. The assessment revealed that service automation has a greater impact on company competitiveness in terms of customer traffic, sales volume and passenger experience. This revelation was noted through analyzing the key elements of service automation that is automated fare payment, online reservation and onboard facilities and the hypothesis testing results. The hypothesis testing results showed the existence of a relationship between online reservations and customer traffic, automated fare payment and sales volume and onboard coach facilities and passenger experience. Pathfinder is recommended to invest in acquiring the latest coaches, advertise the services they offer, engage in employee refresher courses as well as introduce loyalty cards to remain competitive in the market.
# Table of Contents

RELEASE FORM ........................................................................................................... i
APPROVAL FORM ........................................................................................................... ii
DEDICATIONS .................................................................................................................. iii
ACKNOWLEDGEMENTS ............................................................................................... iv
ABSTRACT ...................................................................................................................... v
CHAPTER ONE ................................................................................................................. 1
GENERAL INTRODUCTION ........................................................................................... 1
1.0 Introduction .............................................................................................................. 1
1.1 Background of the study ......................................................................................... 1
1.2 Statement of the problem ....................................................................................... 4
1.3 Research objectives ............................................................................................... 4
1.4 Hypotheses statements ......................................................................................... 5
1.5 Significance of the study ....................................................................................... 5
1.5.1 Significance of the research .............................................................................. 5
1.5.2 Significance to the organisation ....................................................................... 5
1.5.3 Significance to the clients ............................................................................... 6
1.6 Assumptions .......................................................................................................... 6
1.8 Delimitations .......................................................................................................... 6
1.9 Limitations ............................................................................................................. 6
Summary ....................................................................................................................... 7
CHAPTER 2 ................................................................................................................... 8
LITERATURE REVIEW ................................................................................................. 8
2.0 Introduction ............................................................................................................. 8
2.1 Service definition .................................................................................................. 8
2.1.1 Automation .......................................................................................................................... 9
2.1.2 The concept of Service automation...................................................................................... 9
2.1.3 Competitive Advantage ...................................................................................................... 10
2.2 Enhancing Competitiveness through service Automation...................................................... 11
2.3 Service Automation and Customer Self-Service Service ...................................................... 12
2.4 Service automation and costs.................................................................................................. 13
2.5 The internet and competitiveness............................................................................................ 13
2.6 The connection between online reservations and customer traffic ...................................... 14
2.6.1 Online reservations benefits............................................................................................... 14
2.6.3 Internet and the Travel and Tourism Industry ................................................................. 15
2.6.5 Theory of Planned Behaviour ........................................................................................... 17
2.6.6 Technology Acceptance Model .......................................................................................... 18
2.7 Automated fare collection system and sales volume ............................................................ 19
2.7.1 How service fee (ticket booking) automation impacts on luxury Coaches productivity and competitiveness ......................................................................................................................... 19
2.7.2 The e-wallet ....................................................................................................................... 21
2.7.3 The smart -visa ................................................................................................................ 21
2.8 On-board facilities as a means of enhancing passenger experience. .................................... 22
2.8.1 Benefits of on-board facilities........................................................................................... 22
2.8.2 Real-Time Arrival Information ......................................................................................... 22
2.8.3 Effects of Real-time Arrival Information on Passengers .................................................. 23
2.8.4 Usability and Accessibility ................................................................................................ 24
2.8.5 Concept of customer experience ....................................................................................... 25
2.9 Chapter Summary .................................................................................................................. 26

CHAPTER THREE ......................................................................................................................... 27

RESEARCH METHODOLOGY ...................................................................................................... 27

3.0 Introduction ............................................................................................................................. 27
3.1 Research Design..............................................................................................................27
3.2 Target population ..........................................................................................................28
3.2.1 Sample frame and sampling procedures .................................................................28
3.3 Sampling methods and techniques ................................................................................28
3.3.1 Sample size ................................................................................................................29
3.4 Sources of data ...............................................................................................................30
3.4.1 Secondary data ............................................................................................................30
3.4.2 Primary data ................................................................................................................30
3.5 Research instruments ....................................................................................................31
3.5.1 Questionnaires ............................................................................................................31
3.6 Data collection procedure and administration ...............................................................31
3.7 Validity and Reliability of research results ..................................................................32
3.8 Ethical considerations ....................................................................................................32
3.9 Data presentation and analysis .....................................................................................33
3.9.1 Tables ..........................................................................................................................33
3.9.2 Bar graphs ....................................................................................................................33
3.10 Data Analysis .................................................................................................................33
Summary ............................................................................................................................34
CHAPTER FOUR ...................................................................................................................35
DATA ANALYSES, PRESENTATION AND DISCUSSION OF FINDINGS .......................35
4.0 Introduction ....................................................................................................................35
4.1 Response rate ................................................................................................................35
4.1.1 Response rate by age .................................................................................................36
4.1.2 Response rate by gender ...........................................................................................37
4.2 The impact of online reservations and an increase in customer traffic.........................37
4.3 The impact of automated fare payment system in increasing sales volume..................39
4.4 The impact of on-board coache facilities in enhancing passenger experience .............41
4.3 Research hypothesis ..................................................................................................................42

4.3.1 The impact of online reservations and an increase in customer traffic .....................43

Table 4.4 The Chi-square table showing the frequencies of online reservations in increasing customer traffic at Pathfinder. ..............................................................................................................43

4.3.2 The impact of automated fare payment system and increase in sales volume ..........44

4.3.3 The impact of on-board facilities in enhancing passenger experience .....................44

Summary .......................................................................................................................................45

CHAPTER 5 ....................................................................................................................................47

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS ................................................................47

5.0 Summary .................................................................................................................................47

5.1 Conclusions ............................................................................................................................48

5.1.1 The effect of online reservation and customer traffic ................................................48

5.1.2 The effect of automated payment system and an increase in sales volume .............49

5.1.3 The impact of on-board coache facilities in enhancing passenger experience ..........49

5.2 Recommendations ..................................................................................................................49

Further research ............................................................................................................................50

REFERENCES ..............................................................................................................................51
LIST OF FIGURES

Figure 2.1 Theory of Reasoned Action Model
Figure 2.2 Theory of Planned Behaviour Model
Figure 2.3 Technology Acceptance Model
Figure 4.1 Results on the influence online reservation in increasing customer
Figure 4.2 Respondents opinion on automated fare payment system
Figure 4.3 Respondents opinion on onboard facilities as a strategy of enhancing travel experience.
LIST OF TABLES

Table 1.1 Financial statement adopted from company reports
Table 3.1 Sample size
Table 4.1 Respondents results from different research participants
Table 4.2 Respondents age range
Table 4.3 Gender response rate
Table 4.4 Chi-square table showing respondents’ online reservation and customer traffic frequencies.
Table 4.5 Chi-square table showing respondents automated fare payment system and sales volume frequencies.
Table 4.6 Chi-square table showing respondents’ onboard facilities in enhancing passenger experience frequencies.
LIST OF APPENDICES

Appendix A: Customer questionnaire

Appendix B: Employee questionnaire

Appendix C: Management questionnaire
# LIST OF ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADA</td>
<td>Americans Disability Act</td>
</tr>
<tr>
<td>CRS</td>
<td>Central Reservations System</td>
</tr>
<tr>
<td>GDS</td>
<td>Global Distribution System</td>
</tr>
<tr>
<td>IDS</td>
<td>Internet Distribution System</td>
</tr>
<tr>
<td>IT</td>
<td>Information Technology</td>
</tr>
<tr>
<td>TMA</td>
<td>Theory of Model Acceptance</td>
</tr>
<tr>
<td>TAM</td>
<td>Technology Acceptance Model</td>
</tr>
<tr>
<td>TPB</td>
<td>Theory of Planned Behavior</td>
</tr>
</tbody>
</table>
CHAPTER ONE

GENERAL INTRODUCTION

1.0 Introduction

It is an undisputable fact that service automation wave has swept over the business environment due to rapid globalization particularly the service aspect which forms the backbone of competitiveness among companies. The researcher looked at the service automation as a means of increasing competitiveness. Technological advancements have rapidly changed the business operating landscape and firms which fail to move with the times will go into extinction. The researcher looked at the background to the study, highlighting the problem statement leading to this research as well as spell out the research objectives, research hypothesis, the significance of the study, assumptions, delimitations, limitations, literature review, research methodology, data presentation and analysis of the data was made to come out with results which can be adopted by businesses to increase their competitiveness.

1.1 Background of the study

Motivation for this study is driven by two drifts in the marketing and technology environment. The first one is the growing necessity and acceptance in business for marketing and IT to work closely together to deliver value to the organisation and the customer (Rust & Espinoza, 2006). According to Peppers and Rogers (1993) the second element is the growing importance of market orientation and relationship marketing in particular as an operational organisational business strategy. Beckett et al (2000) state that with rapid development of the internet, e-commerce, self-service and customer support there are increased expectations from customers for improved, personalized service and immediacy. This has encouraged marketing practitioners to use technology to apprehend and use customer information in order to better meet customer needs (Peters and Fletcher, 2004). Anita Bhappu and Ulrike Schultze (2006) in their research to discover if there is an interaction between a customer and service provider whether they would adopt self-service technology, they found out that customers associate operational performance gains and relational performance losses with a prospective self-service technology. In a research carried out by Gupta et al (2001) in assessing if technology creates or maintains competitive advantage to service providers and helps improve customer service their results show that information management practices have the
potential to impact customer service. According to Cash et al (2004) previous researches have reported that embedding more technology in the product and services has profoundly changed many industries standard of competition in producing goods and services. The topic of service automation has been widely researched on and various conclusions on its importance being drawn with more emphasis being on increasing competitiveness of firms. Companies worldwide invest a great deal of time and money in designing progressive systems and products to increase the competitive edge of firms. This study thus seeks to establish if there is an association between service automation and company competitiveness in the luxury travel sector.

The research was premised around Pathfinder Luxury Coaches a Zimbabwean registered luxury coach service company which has become a stronger force within the passenger services sector. Pathfinder offers daily passenger transportation services between Harare and Victoria Falls passing through Gweru and Bulawayo. The company also hires out its coaches to schools and colleges for educational trips, private coach hire and tour packages. Founded on the 10th of September 2009, Pathfinder has successfully entered into the passenger transport industry in a different style forming strategic alliances with African Sun Leisure Group where it has access to their hotel infrastructure for making bookings and passenger pick up and drop points which is different from the traditional bus terminus pickup and drop off points. The company has its head office in Harare and two major offices situated in Bulawayo and Victoria Falls which are also used as pick up and drop off point for passengers. The company boasts of state of the art Double Decker coaches from Scania G6, the first ever of its kind in Sahara region. The company runs a fleet of six coaches with three coaches on the road at any given time. Three coaches are set on standby in case of any breakdowns along the way. The business model is properly planned to constantly offer a seamless service.

The definition of luxury travel has generated much interest in the transport industry as well as the customers’ mind. The great need to reshape travelling long distances using public transport into more pleasurable experiences in Zimbabwe date back to the days when Blue Arrow was formed in 1994 by Unifreight Group. This was made more popular when Pioneer also introduced their coaches offering the same services daily services from Harare to Bulawayo. The main idea behind was introducing luxury travel and experiences similar to that offered by air line services onto the roads and bringing personal contact offered by hosts and hostesses who serve passengers throughout the journey. This feature has brought the difference
between ‘buses’ and ‘coaches’ with the later offering improved features, facilities and services resulting in improved customer relationship. The demand for luxury service had been on a steady increase since 2007 mainly due to unreliability of air and rail transport services in Zimbabwe. The company faces stiff competition from other luxury coaches such as Bravo ad City Link. Due to the competition Pathfinder provides high quality travel services as there is an existence of substitutes to satisfy the market for survival. Therefore the nature and quality of their services they offer is what wins the heart of the customers. These include three major services which are reservations, ticketing and on-board coache facilities this therefore makes automation of services crucial to the company.

On-board facilities at Pathfinder are designed to enhance the customer travelling experience. These features include spacious and comfortable sleeper seats with more leg room, foot rests and the bottom deck seats are suitable for physically challenged passengers. On board entertainment, WIFI, refreshments, radio services and on-deck screening of movies, music, documentaries and frequency modulation (FM) as a means of entertaining the passengers during the course of the journey. There is an on-board convenience room, a refrigerator, microwave oven, a coffee machine, plug in points for laptops and phone chargers and tracking system, which. The tracking system also assists operations in knowing the expected time of arrival and in the case of a breakdown they know the exact location of the breakdown. The coach doors are automated and censored and the coaches are governed to the speed limit of 100 kilometers per hour. The coache tyres are self-inflating tyres meaning they automatically monitor the tyre pressure, reducing rate of accidents. The above facilities increases passenger perception of premium levels of service.

On-line booking system is another automated service at Pathfinder used for ticketing. Unlike public transport operators where one can only buy tickets only upon boarding, reservations can be done way before travelling day. There is no customer inconvenience due to double booking errors as all agents have the same access to the same booking system. If a seat has been purchased in Harare from Victoria Falls to Bulawayo all agents will automatically receive the information if they are logged into the system. Passengers have the privilege to select their preferred seats when making reservations and they are guaranteed that exact seat. Customers can purchase tickets for someone in another town without any inconvenience.

Pathfinder customers can now make their fare payment electronically through Ecocash, visa, Zimswitch and MasterCard. It provides fast, cashless interface for the passenger and reduces
dwell times and increases passenger convenience. Bookings can now be done from any town without necessary having to come to the Pathfinder office by simply sending the payment through the Pathfinder Ecocash merchant codes and the agent will do the ticketing and send the ticket number and check-in time using the bulk messages platform.

Table 1.1 Financial Statement adopted from Company annual reports

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>$600,476</td>
<td>$1,100,320</td>
<td>$1,000,946</td>
<td>$1,681,222</td>
<td>$1,001,003</td>
</tr>
<tr>
<td>Expenses</td>
<td>$411,250</td>
<td>$500,111</td>
<td>$700,100</td>
<td>$800,000</td>
<td>$1,100,500</td>
</tr>
<tr>
<td>Profit/ Loss</td>
<td>$189,226</td>
<td>$300,846</td>
<td>$600,209</td>
<td>$881,222</td>
<td>$(99,497)</td>
</tr>
</tbody>
</table>

**Source: Pathfinder annual report (2009 to 2013)**

The sales revenue of Pathfinder from the beginning of its operation seemed to be consistently increasing with the introduction of more advanced coaches but as from 2013 the company incurred a decrease in its sales volume. The researcher thus sought to assess if the current automated services are ineffectual in increasing competitiveness of Pathfinder as luxury travel customers demand more in terms of technological aspect of services which the researcher witnessed during work related, hence motivating the researcher to conduct this research on service automation and company competitiveness.

**1.2 Statement of the problem**

Given today's competitive business environment, is automization of services an appropriate strategy in increasing firm competitiveness in terms of sales aptitude, passenger gratification and traffic flow of clients?

**1.3 Research objectives**

- To establish if there is an association between online reservations and increase in customer traffic at Pathfinder.
- To distinguish if on-board facilities have an association with enhancing passenger experience.
- To assess if automated fare payment system has an association to increase in sales volume at Pathfinder.
1.4 Hypotheses statements

H₀ – There is no association between online reservations and increase in customer traffic at Pathfinder.

H₁ - There is an association between online reservations and increase in customer traffic at Pathfinder.

H₀ - Automated fare payment system does not increase sales volume at Pathfinder.

H₂ - Automated fare payment system increases sales volume at Pathfinder.

H₀ – On-board facilities do not enhance passenger experience in the luxury bus coaches.

H₃ - On-board facilities enhance passenger experience in the luxury bus coaches.

1.5 Significance of the study

The study is of paramount benefit to the researcher, Midlands State University, Pathfinder Luxury Coaches, clients and other organisations in this sector of the economy.

1.5.1 Significance of the research

• This research is being carried out in partial fulfillment of the requirements of the researcher’s Bachelors of Commerce Honours Degree in Marketing Management.

• Of more significance is that the successful completion of this research will lead to the transformation of the researcher in terms of scholarly research skills and knowledge in this subject area.

1.5.2 Significance to the organisation

• The research intends to benefit Pathfinder Luxury Coaches through strategies to increase revenue and research ideas.
• The impact of technology in formulating effective service delivery and maintaining customer loyalty may benefit Pathfinder as a service provider by improving service automation.

• Establishing new service automation strategies to better serve and interact with customers.

1.5.3 Significance to the clients

• Reduced friction between them and the service provider through knowledgeable information attained from this research.

• The research may establish an end to relationship management solution that will be needed to manage the chain of networks linking customers, workers, suppliers and distributors.

1.6 Assumptions

• Service automation would increase company competitiveness in the luxury travel industry.

• There would be cooperation from target respondents.

• Respondents would respond truthfully and give reasonable answers.

• Researcher assumed that Pathfinder customers understand English language.

1.8 Delimitations

• Research was carried out at Pathfinder Luxury Coaches in Harare.

• The study subjects of the research were customers, staff and management of Pathfinder Luxury Coaches.

• The researcher focused on the influence of automation of operations and firm competitiveness.

• The study used an analysis of sales from the period of September 2009 to May 2014.

1.9 Limitations

• The sample size and the number of actual respondents might not give a generalized view for the whole population of study. To avoid this, the researcher adopted approved models in drawing sample size in order to yield adequate results.
- The research approach is mainly quantitative which might not produce the same results if a qualitative approach is used.
- Research relied on a causal research design hence results might not be the same if a similar research is done using a different research design such as the experimental research design.

Summary

Direction of the research is outlined in this chapter; as stated in the background of the study the organisation being investigated is Pathfinder Luxury Coaches Zimbabwe. The problems that are being faced by the organisation are discussed in the statement of the problem. The research objectives are stated for proper analysis of facts. The research gap was identified thus bringing out the importance of the study; limitations as well as delimitations were also stated. The following chapter looks at the literature review where views and arguments of various authors concerning service automation is reviewed.
CHAPTER 2
LITERATURE REVIEW

2.0 Introduction

In this section the researcher’s aim is to critically evaluate the literature on service automation and company competitiveness in the luxury coaches in Zimbabwe. Comparisons and evaluation of where the scholars and authorities argue was carried out since literature is not always in agreement. In this section, the researcher also went on further to conceptualize literature, making it relevant to the problem, summarise major findings and trends, establish gaps in knowledge and brought out the role of current research.

2.1 Service definition

Kotler et al (1999) view service as any act or performance that a part can offer to another that is essentially intangible and does not result in the ownership of anything. Lovelock (2004) further adds on that its products may or may not be tied to a physical product. Palmer (2005) is in agreement with the above authors in that a service is the production of an essentially intangible benefit either in its own right or as a significant element of a tangible product which through some form of an exchange satisfies an identified need. Furthermore Gronroos (1990) identifies a service as an activity or series of activities of a more or less intangible nature that normally but not necessarily, and the author also state that it takes place in interaction between the customer and service employees and or physical resources or goods and or systems of the service provider which are provided as solutions to customer problems. Zeitmal and Beitner (1996) claim that in the simplest terms services are deeds, processes and performances. The authors state that services include all economic activities whose output is not a physical product, is generally consumed at the time it is produced and provides added value in forms that are essentially intangible concerns of the purchaser. Gummerson (2006) defines a service as ‘anything that cannot be dropped on your foot’. The above scholars’ definition of service acknowledges the fact that most products are a combination of goods and service elements.
2.1.1 Automation

Chialastri (2005) defines automation as the “use of control systems and information technologies to reduce the need for human work and in the production of goods and services. Automation is a technique of controlling apparatus, processes or systems by means of electronic or mechanical devices that replace human organism in sensing, decision making and deliberate output (Webster 1981). The oxford dictionary (1989) defines automation as 1) automatic control of the manufacturing of products through successive stages 2) automatic control application to any industry 3) the use of electronic and mechanical devices in replacing human labour. Kongoli (2012) views automation as the replacement of routine parts of human labor with machines and the author also states that the use of automation increases quality of products together with productivity beyond what humans could achieve manually. Parasuraman and Riley (1997) define automation as the independent accomplishment of functions by devices and systems that were formerly carried out by humans. Kumar (2001) defines automation as a technology which deals with mechatronics and competence applications for the production of goods and services.

2.1.2 The concept of Service automation

The business dictionary defines service automation as an application of information technology to the typical clerical and secretarial tasks such as communication, correspondent processes, documenting and filling (businessdictionary.com). According to Hochstein et al (2008) service automaton aims at, “developing methods and tools for enabling businesses to automate the value, co-create between consumer (B2C) between business to business (B2B) and businesses within business.” Automation helps organizations to make informed decisions, accelerate service delivery, lower costs through the replacement of humans by machines and it improves end user experience. Organizations can replace redundant production processes and fragmented service systems with applications that utilize a single data model (Riley 1997). In this regard it is imperative to note that the broad concept of service automation is an important tool in improving sales and service delivery in luxury coaches. Gronross (1990) supported by Kotler et al (1999) stresses the fact that service automation service automation has to a larger extent significantly improved passenger experience and satisfaction. On the other hand Ancher (2000) disagrees with the above authors as the author views that service computerization and upgrading in most cases where
clients are not aware of the new improvements can complicate their normal routine. The researcher agrees with the above authors contributions on service automation and therefore wishes to assess the extent to which service automation can be integrated in firms to increase competitiveness. However the limitation of the above stated authors is failure to intricate how service automation can be fully utilised in service industries therefore the researcher pursues to assess applicability of service automation as a competitive strategy in the luxury transport sector of Zimbabwe.

2.1.3 Competitive Advantage

Doyle (2002) states that competitive advantage is the capability to target customers with an offer that they perceive as providing superior value to offers of competitors. Fahey (1984) is in agreement with Doyle as the author also views competitive advantage as the ability gained through attributes and resources to perform at a higher level than others in the same industry or market. Competitive advantage is a company’s capability acquired though attributes and resources to accomplish more than the others in the same business line (Christensen and Fahey 1984, Kay 1994, Porter 1980 cited by Chacarbaghi and Lynch1999). Barney 1991 cited by Clulow et al (2003) agrees with the above authors as he believes a firm is in a competitive advantage when its current strategy implementation are not simultaneously being practised by potential competitors. Passemard and Calantone (2000) if the strategies are implemented successfully the performance of the company heightens thereby outperforming current and potential players. Reed and Fihipi 1990 cited by Rijamampiana (2003) suggest that to acquire competitive advantage organizations need to manipulate company resources it has control over and the manipulated resource of the firm generates a competitive advantage for the firm. Wesley et al (1998) views that a reflection of competitive advantage is through superior performance outcomes and production resources. In a study carried out by Kogut and Zander (2006): Sullivan (2000) economists and management researchers were in disagreement with the above findings as they view the means of generating economic success as key intellectual challenge. The researcher agrees with the above stated authors’ strategies for generating competitive advantage nevertheless feels an existence of a gap on how automation can be a means of enhancing attractiveness of firms thus the researcher focused this study on service automation as an effective approach for firm competitiveness.
2.2 Enhancing Competitiveness through service Automation

Palmer (2005) more Hong Kong companies are looking to introduce automated service delivery as a way to boost competitiveness, reduce their reliance on manual labour and cut wage costs. Derek Louie, General Manager, Automation Service of the Hong Kong Productivity Council believes that, despite only having limited capital, luxury coach enterprises should consider automating certain specific services to enhance their competitiveness and cost effectiveness (Hall, 2010).

According to Libby (2010) travelling executives must find ways to streamline operations. One of the best ways is through service automation. However, not only can automation enable continuous uptime globally, it can enable travel firms to run more efficient operations and quickly scale up IT infrastructure as the business grows and becomes more complex. To be sure they are running the most efficient operations; Heddy (2011) is of the view that IT professionals must examine whether service automation is keeping pace with the dynamic, real-time nature of business, and how next-generation service automation technologies can cut hidden costs. It may seem surprising, but about 70 percent of all business processes enabled by IT processing is scheduled, not done in real time. Hasen (2003) states that having the automation to effectively schedule ever-growing services is essential. The author further states that the ability to handle service provision more efficiently yields many benefits, freeing up resources to bring new applications online as needs dictate, and deploying resources to meet increasing user demand. Schiavone (2011) points out that without service automation, it’s very difficult for a growing traveling business to manage new and diverse applications, platforms and services.

Keller (2008) suggests that it is imperative to note that time-based schedulers are giving way to event-driven schedulers that respond in real time to business events such as an online ticket booking. The author also views that these schedulers are evolving with features that include automatic dynamic resource management, which helps ensure travel resources are available even during unexpected spikes in demand. The author further states that to be truly effective, automation must occur across the enterprise. Gray (2006) postulates that service automation solutions impact traveling businesses just as automated manufacturing lines impact factories and it is mainly the way firms can increase efficiency throughout and quality without piling up additional costs.
2.3 Service Automation and Customer Self-Service Service

Goodin (2003) states that automation involves the removal of human intervention in a series of distinct steps just as manufacturing automation, luxury coaches use online reservations, service automation uses pre-defined scripts that can be applied to all. Gregory (2005) is in agreement with the above author and the author goes on to add that to make the customer relationship more interactive, luxury coach enterprises can offer an automated method of communications that takes advantage of the internet and international telephone services. Thus, call centres and in-office contacts might be supplemented by help desk support available via the Internet. Such support is classified as interactive non-voice communications as supported by James (2006) the customer might not know who is providing the support, but the customer does get support. Assuming the customer is comfortable with typing and computers as networked telecommunications devices, automation can provide important benefits to the enterprise, supplementing local staff, reducing costs, and gaining access to technical skills in large, scalable quantities as an enterprise’s sales and competitiveness ramp up. Davilla (2009) argues that luxury coach customers inclined to reputational risks of dealing directly with foreign service providers might be best serviced by offering Internet-based online support.

In light of the above reviewed discussion service automation in luxury coach businesses can improve service delivery by minimizing delays triggered by volumes of service requests. Deegan (2002) added that travellers have access to an online service catalogue, enabling them to obtain services that are important to them. Reast (2005) is of the view that most Luxury coach users and help desk personnel are more productive when the travellers can find the information they need on their own. Travellers request services and monitor their status, freeing personnel from processing those requests. Deagon (2009) added that this level of automation requires integration of all tools into a single platform, which offers easy access to travellers. However it can be noted that specifically, the automation system should provide an easy-to-use, self-service interface for travellers, a strong underlying automation engine and a comprehensive suite of integrated automation tools. According to Lovelock (2004) Client self-service has resulted in a redefinition of industries, such as travel agencies, where a substantial number of travellers has been funnelled into self-service arrangements.
2.4 Service automation and costs

According to Ringberg & Gupta, (2003) cost savings will vary from company to company, but it’s clear that when travellers can make inquiries and solve their own problems via self-service, the financial benefits can be substantial. Further, personnel are freed to engage in more strategic endeavours. In this regard by masking complexity and automating services, service automation is the key to operations, improving productivity and reducing costs.

2.5 The internet and competitiveness

Gurviez and Korchia, (2002) stated that with the internet, the former travel marketplace has been totally changed. The authors went on to say that it allows travel providers to directly reach their possible customers through their own websites and cut back on the commission paid by having the ability to direct source as well as a direct market. Gurviez and Korchia also state that the internet allows real-time price changes. Smith (2002) is in disagreement with the above authors, he argues that this threatens the traditional travel agency’s business model and makes it harder for them to consistently offer lower prices. Recent research conducted by Burst Media (2011) shows that the internet is more and more used as the main travel planning resource. This means that online travel agencies compete with traditional travel agencies with regard to the products sold but also the services they provide. Manager of Market Research, Burst said, “Travellers have flocked to the Internet actively using it as an information resource and a place to make travel purchases”. In 2007, online booking travel represented more than 30% of all travel booked in Europe. Forrester (2007) suggest that amongst the European travellers who research their leisure trips via the Internet, 40% book their trip online and 27% buy from offline points of sale. Randall (2000) is in agreement with Forrester regarding the increased use of the internet for planning leisure trips, the author further states that the internet is an effective marketing strategy for firms. Barnett and Standing (2001) are in agreement with the above authors and further suggests that it is because of the internet that travel consumers have access to more information and the customers can exchange this information more easily and therefore have a much greater influence over the online and offline content. Christian (2001) asserts that the way travel agencies deal with their suppliers and direct competitors will be defined by their ability to react to these expectations and meet the needs of this new generation of sophisticated consumers. Kapferer (2001) argues with Christian assertion that the abundance of information can create confusion for customers and the more they access a lot of information.
that is prices, travel suppliers' terms and conditions, type of packages; the more they will need advice to make a choice. The author further states the flourishing of the internet and the easy access to information could be to the advantage of the travel agent who is the best person to find the right information and give unbiased consultancy. The competitive advantage of the travel agent will be to provide expertise and experienced consultancy to meet the needs of a specific traveller. The researcher therefore seeks to assess how the internet can be effectively used to create and enhance awareness of the transportation service thus the research seeks to evaluate how online reservation system can be well designed to meet the customers’ expectations.

2.6 The connection between online reservations and customer traffic.

2.6.1 Online reservations benefits

Airline reservation system according to Gupta (1999) stores flights, airlines, reservations, price information, actual departure or arrival schedules of flights as well as customers’ historical travel history. Ekdal et al (1999) defines online reservation as real time and interactive application which immediately verifies the reservation status when choosing certain departures.

Reservations it is a computerized system used to store and retrieve information and conduct transactions related to travel. It was designed and operated by airline operations but it has now spread to road transportation companies. The first Airline Reservation System was launched in the 1950’s when the American Airlines installed automated reservation system. Other airlines copied the American Airlines idea and launched their own system which is now called Central Reservations Systems (CRS). The central reservation system later became the Global Distribution System which is defined by the business dictionary as worldwide computerized reservation network implemented as a single point of access for reserving seats, rental cars, hotel rooms by travel agents, online reservation as well as large corporations. Due to the enormous internet spreads GDS turned into IDS internet distribution system which according to the Hospitality Performance Group(2012) “offers technology that allows customers to build complete trips that combine flights, hotels and other lodging, transportation to research, plan and book their travel needs from a broad selection of partners.” This makes the system visible to everyone, anywhere 24/7 which is a continuous
marketing strategy which provides the customers the opportunity to make bookings without having to wait for the reservation department’s opening hours. Csehy (2012) defines IDS as “the group of online reservation system and travel portals that utilize the internet to connect travel related business such as bus tickets with those individuals and companies seeking to buy from them.

Ho (1997) viewed websites as an aspect of content; he utilized a framework in evaluating websites from a value added perspective of customers. Ho identified three main purposes of commercial website that is provision of information, promotion of services and product and the processing of business transaction as cited in Zafiropoulos (2010). The author agrees on Ho’s statement as it does not complicate the mission and helps to keep business focused. Provision of information is significant as it includes basic company information for a travel agency such as contact numbers, email address, operating hours and the company address. It usually consists of company policies which may include terms and conditions of carriage, ticket cancellation procedures, payment conditions, additional charges and taxes.

Sheldon et al. (2001) suggest that when launching company website emphasis should be placed on promotion of products and services, the websites can show coach interiors and exteriors it promotes the service the bus company has, it also gives details about what to expect, corporate colours and the design of the coach. Buhalis (2000) states that the processing of the business transaction allows the travel agents to utilize their own company website to generate increase in customer traffic by installing online reservation system which customers can be able to easily use to transact their booking and payment. The researcher believes that a well designed and developed, professional website influences decision making process of customers as it creates images and feelings in potential passengers even before they travel and therefore seeks to evaluate how the website for luxury coaches can be designed.

2.6.3 Internet and the Travel and Tourism Industry

The rapid growth of the travel industry requires advanced information technologies to be able to manage the increasing volume and the quality of tourism traffic. Christian 2001: Lubetkin 1999 indicated that there is high demand of high quality of services, products, information and value for money. The rapid increases in tourism demand and emergence of new tourism services and products has led to the adoption of information technology. The tourism researchers emphasized the significance of the internet as it provides a platform for them to
sell products globally to the potential travellers. Law (2000) stated that the internet displays service and product information at an electronic speed. Furthermore, Olmeda and Sheldon (2001) state that the internet helps communicate directly with the suppliers to enquire and purchase services anytime anywhere.

2.6.4 Theory of Reasoned Action

![Fig: 2.1 Theory of Reasoned Action model](image)

**Source:** (Ajzen and Fishbein, 2000)

Theory of reasoned action is widely used in the adoption of technology research; it was developed by Martin Fishbein and Icek Ajzen to identify if relationship exists between attitude and the behaviour of people (Ajzen and Fishbein 1975). The above authors identified three factors which guide behavioural intention which include attitude, behavioural intention and subjective norms. Miller (2005) defines them as: attitude-Belief about a particular behaviour, subjective norms-The influence the social environment has on people and behavioural intention-The combination of attitudes and subjective norms in predicting actual behaviour. The theory depends solely on individuals and situations where these three factors are not weighted in equal. Hale et al (2003) states that, “the theory was born largely out of frustration with traditional attitude-behaviour research much of which resulted in weak correlations between attitude measures and performance of volitional behaviours.” Miller (2005) agrees with Hales’ assertion that the theory is a function of both the attitude towards a behaviour and the subjective norm toward that particular behaviour, the persons’ behavioural intention can be used to predict the actual behaviour of the person. From the above
definitions TRA is the voluntary behaviour of people is predicted by the person’s attitude towards the behaviour, attitude and subjective norms form behaviour intention. Ajzen and Martin (1975) state that the attitudes and norms may not be weighted equally in the prediction of the behaviour and Miller (2005) is in agreement that behavioural intention differs with individuals and situations thus a weight is allocated to these factors. Sheppard et al (1988) disagrees with the theory as he identified limiting conditions on the three factors identified by Martin and Ajzen that is 1) The use of attitude-There is a difference between goal intention and a behavioural intention 2) subjective norms-The choice among the alternatives changes the nature of performance 3) The use of intentions-What a person intends to do may not be what they actually do. Hale et al (2002) identifies gaps in the model because it excludes wide range of behavioural factors like habitual, impulsive and spontaneous (Langer 1989).

2.6.5 Theory of Planned Behaviour

![Theory of Planned Behaviour model](image)

**Fig 2.2: Theory of Planned Behaviour model**

**Source:** Ajzen. I (1991)
It is a theory which explains and predicts the intention of the used (Ajzen, 2005). The theory was created to encompass conditions where individuals had no complete control over their behaviour. Ajzen (1991) extended the theory of reasoned action by the addition of behavioural control (Leelayouthayotin, 2004). In this theory the user is also affected by three factors that is personal factors, social influence factors and control factor. According to Leelayouthayotin (2004) views attitude as the users feelings towards a behaviour and social influence factor was deliberated as the influential factor that encourages intention.

2.6.6 Technology Acceptance Model

![Diagram of Technology Acceptance Model]

**Source:** Davis et. al. (1989); Venkatesh et. al. (2003)

Davis (1986) stated that the Technology Acceptance Model is another model used in adoption of information system researches. Researchers that include Aganwal and Prasad (1997) and Venkatesh and Davis (2000) utilized the theory in their studies of technology adoption and diffusion at different levels. Davis et al (2000) states that the theory traces the impact external factors have on the customers’ internal beliefs, attitude and intention. According to the theory the behavioural intention to utilize technology depends on the ease of use and usefulness of information. The perceived usefulness is the benefits an individual perceives of acquiring from using an information system. Perceived ease of use as defined by Davis et al (1989) is, “the degree to which the prospective user expects the target system will be free of effort.” According to Davis perceived usefulness effect the ease of the usage of the system. According to the theory the actual use of the system is determined by the behavioural...
intention which is influenced by perceived ease of use and perceived usefulness. Chan (1996) identifies TAM an influential research model in the determinants of information adoption and diffusion. According to Blas et al (2008) online flight reservation information dependency can be heightened by trust.

According to Pavlou (2003) trust is a belief that other people will keep their promise. E-commerce researches have carried out studies on understanding the trust component and trust antecedents. Choudhury et al (2002) stated that trust beliefs are comprehensive of online customers’ beliefs and expectations of the online sellers on the characteristics of trust. Online customers expect honesty and capability in delivering products and services as promised by the seller. Quelch and Klein (1996) mention trust as a critical factor in stimulating purchases done on the internet and Gefen (2000) observed that trust and product or service familiarity present a strong relationship regarding the intention of customers to purchase or use the online reservation system. In a study carried out by Jarvenpaa (1999) results showed that perceived reputation had a significant impact on the customers’ trust and cultural antecedents of trust were not observed. The websites design, its ease of use, aesthetics and languages used has a positive impact in the system. In another study by Gefen et al (2003) utilized the TAM in explaining development of trust among online customers in online shopping. The above authors observed perceived ease of online site use escalates the users trust towards the online retailer and simultaneously increase perceptions of usefulness of the site. Results also showed that online repeat purchase increases if customers view the online site as safe.

2.7 Automated fare collection system and sales volume

2.7.1 How service fee (ticket booking) automation impacts on luxury Coaches productivity and competitiveness

Peters (2006) states that by using automated fee payment system, management of automated service fees enables luxury coaches and travel agencies to maintain and eventually increase their fee revenue by 28%. In addition, Waycman (2002), postulates that it allows travel agencies to eliminate errors in fee calculation, which for a medium-sized enterprise, can mean average additional revenues of US$12,000 per year. It also optimises an enterprises’ productivity by reducing its fee application processing time by 67%, thus reducing the overall booking processing time by 12%. Saunders et al (2003). When analysing the impact sophisticated fee schemes may have on revenues, consultants observed that Travel agencies
can generate a 28% increase in service fee revenue by means of optimised service fee schemes, Smith (2001).

According to Schiavone (1999) fare payment technology has come a long way from the mechanical "drop box." As bus fares approached an amount of one dollar in the late 1970s, travel agencies then turned to electronic registering fare boxes to process cash payments, tickets and tokens; and to record trip-related data such as zone and passenger type. The first designed electronic fare boxes were troublesome due to poor design and lack of electronically skilled maintenance personnel. Pearson (1994) states that today, reliability of automated fare payment has improved and electronics has expanded the role of fare collection to include several new technologies that is smart cards, e-wallet and credit and debit cards. Gormley and Schink (1994) asserts that application of electronics has the potential of offering agencies a variety of fare objectives which may include: 1) A pricing structure based on distance travelled, time of day, and type of passenger 2) The reduction and eventual elimination of cash fares to improve security and lower handling costs; 3) Automation of the settlement process with financial institutions to lower costs; and 4) The creation of multi-modal networks that are seamless to the passenger, but operationally and organizationally sound for the agencies involved.

The automated fare system is a general term used to describe any type of payment that is made online, for an online good that is then shipped or transferred to the buyer or an online service. E-payments are one of the principal features that make all e-commerce possible and many different forms exist. Knights et al (2001) state that e-payments are relatively a new method of payment and they have downsides that businesses are working to mitigate, improving the experience for all consumers. Ondrus and Pigneur (2006) An electronic commerce site uses electronic payment where the payment refers to paperless monetary transactions between buyer and seller. It has revolutionized the business process by reduction in paper work, transaction and labour costs. It is less time consuming than manual processing which assists business organization to expand its market reach and thereby increasing sales volume of the business. Modes of electronic payment are e-wallet and smart cards.
2.7.2 The e-wallet

Ondus and Pigneu (2006) view mobile payments as a technology innovation and phases in the diffusion process are evaluated to make the decision about adopting technology to be used in organizations, (Cooper and Zmud 1990) they also argue that it provides additional value to merchants through the facilitation of payment in remote proximal transactions. According to Karnonskos (2004) mobile commerce is a form of electronic commerce where at least part of the transaction is conducted via a mobile device. A mobile payment is initiated by sending an SMS (Sending Message Service) to a premium service number. Mallat et al (2004) states that the purchase price is then charged on the bill of the mobile subscriber, deducted from prepaid airtime, charged through a separate mobile payment account. The e-wallet is used to make online shopping easier. It's a file that you store on your hard drive containing all the personal information relevant to an online purchase, including your credit card number, billing address and expiration date. Mobile phones can now be used to purchase tickets the same way as with contactless smartcards. Mobile ticketing system is based on the passengers’ mobile phone for payment of travel cost. Gerdes Senior Economist, Board of Governors of the Federal Reserve System says the e-wallet makes online shopping easier because it fills in the fields in an online order form automatically, saving the user the hustle of doing it themselves. This is also a great advantage for online

2.7.3 The smart -visa

According to Shelfer and Procaccino (2002), this technology was published in 1968 by two German inventors Dethloff and Grottnppthey developed the plastic card concept containing microchip. Blythe (2004) argues that the significance of the smart card emerged in 1990 due to the exponential internet growth and increased mobile communication technologies sophistication. Transit agencies now use the smart card as a viable option of payment to replace traditional magnetic card and tickets, (Blythe 2004). Trepanier et al (2001) perceives this system as a secure user validation and fare payment method. It saves the driver the hustle of collecting fares. Dempsey (2008) furthermore agrees that it improves data quality, gives a modern look and provide opportunities for innovation and flexible fond structuring. The smart visa is a general term used to describe any type of payment that is made online, for an online good that is then shipped or transferred to the buyer or an online service. E-payments are one of the principal features that make all e-commerce possible and many different forms exist. E-payments are also a relatively new method of payment and they have downsides that
businesses are working to mitigate, improving the experience. Smart visas are also flexible. Many payment schedules allow for later billing or payment instalments using a third-party vendor. Business websites typically give several options for customers to buy or purchase using a credit card, debit card or even a direct transfer from a bank account. This also allows several types of transactions that are only available online, such as peer-to-peer electronic transfers and travel payments.

**Key benefits of automated ticketing**

According to Sabre Travel network, (2014) automated ticketing drives agency productivity, delivers superior customer service through automation of the majority of the fulfilment processes including corporate quality control features, file finishing, service fees, ticketing and invoicing processes that today require human intervention, enables agencies to spend more time on true value-add services and client building opportunities, provides cost reductions and greater efficiencies and gives agencies the power to configure the application to meet their unique needs.

2.8 On-board facilities as a means of enhancing passenger experience.

2.8.1 Benefits of on-board facilities.

Research was undertaken by John J. Schiavone (1999) to provide a basic level of understanding concerning the advanced electronics and applications of transit buses, how bus components have improved functionality to provide greater benefits. The authors’ results of research showed that bus electronics enhances the travel experience of passengers as they are able to enjoy additional value through the use of facilities such as WIFI, air conditioning system, lighting system and entertainment. The author also argues that the more advanced the bus electronic functions available, the greater the number of potential and existing customers as the customer travel experience would have been increased.

2.8.2 Real-Time Arrival Information

While static schedules and timetables are an important base for passenger information, the reality is that transit vehicles do not always run on time. Traffic congestion, weather, accidents and passenger incidents: there are a number of reasons why a transit vehicle might not meet its schedule. As such, many recent transit traveller information system
improvements have focused on providing real-time arrival information. It is increasingly in use by U.S transit agencies as argued by Bukkapatnum (2006) real-time arrival information using fixed signage is a relatively accepted means to increase passenger experience by reducing passenger anxiety, increasing the perception of reliability and presenting an image of a modern transit system (Parker 2008).

Many transit agencies adopt real-time arrival prediction and vehicle tracking systems primarily to improve the agency’s own management of its transit fleet. According to Parker (2008) real-time vehicle tracking can lead to more efficient operations and also enhanced sense of safety for transit operators (Moreira 2008). In terms of efficiency, studies have found that agencies must build a fair amount of slack time into their schedules to allow for delayed buses. Slack time is the padding agencies add to their schedule above and beyond the minimal travel time for a route. Dessouky et al (1999) states the ratio of slack time in the schedule versus scheduled travel time can be as high as 25%. However, with real-time tracking, agencies can adopt a headway based approach. According to Casey (2003) supervisors use real time transit data to maintain a certain amount of time between buses, rather than attempting to maintain a schedule, thereby allowing free running time and saving slack time. This savings in running time can allow an agency to provide the same level of service on a transit route at reduced cost, or provide higher frequency at the same cost (Center for urban transportation research 2002).

2.8.3 Effects of Real-time Arrival Information on Passengers

Analytical modeling and surveying hinted that providing real-time arrival information leads to improved passenger measures such as the travel time according to Hickman and Wilson (1995), Levine and Reed (1997) support this declaration by encouraging a mode-shift for adhoc trips they have enough real-time systems deployed such that thorough evaluations concerning the effects of real-time on passengers can be conducted. A research carried by Dziekan and Kottenhoff (2007) showed a 20% reduction in perceived wait time with the additional fixed real-time arrival signage. Researches carried out by Dziekan and Vermeulen (2006): Clifton (2008) has largely proven that real time arrival informations positive influence on passenger perceived waiting time, feelings of security and public ease of use. However, Schweiger (2003) disagrees with those results as the results are not confirmed in an initial Seattle deployment over seven years ago, where no rise in passenger fulfilment was achieved.
In most transit service development industry, 10 minutes has long been considered the barrier between schedule-based and headway-based service. A recent study carried out by Parker (2008) found that at 11 minutes, passengers start coordinating their arrivals rather than arriving randomly. This is constant with earlier studies supporting random versus synchronised arrivals. Passengers therefore want a schedule to coordinate their arrival times. However, with the introduction of real-time arrival information systems, such as One Way Bus has shown that users commonly refer to real time information than to schedules to define when to wait at the bus stop.

### 2.8.4 Usability and Accessibility

The subject of usability and design when it comes to transit traveller information systems is a sensitive issue which ought to be dealt with extreme precaution. Lane and Masoodian (2003) have shown that there is a slight preference among passengers for textual travel itineraries over graphical itineraries. Caulfield and O’Mahony (2007) have attempted to outline the general information requirements for a transit traveller information system at the various stages of the transit process (Grotenhuis 2007).

Buchholz (1997) states that in terms of usability, accessibility issues are of critical importance when considering the design of a transit traveller information system as the passengers with visual, auditory, cognitive and mobility impairments as those most dependent on public transit. Pearson (1997) suggests that the public transit industry itself has capitalized a lot of properties into identifying and addressing areas demanding convenience improvements for passengers, for instance Americans with Disabilities Act (ADA) requirements. Iannuzziello (2001) states that transportation literature has measured a variety of transit accessibility options, covering the stop announcement that is audio and visual announcements, tactile maps, passenger orientation and movement training as well as agency sensitivity training. The author further states that companies faced with limited budgets try to find solutions that can improve the usability of bus for all passengers while precisely benefiting the passengers with impairments. Coady and Minifie (2009) points out that other specific challenges have been identified in the area of para-transit where timeliness, service-denial, and cost are major factors limiting access to passengers who need it most.
Agencies and researchers have increasingly looked up to technology as a potentially cost-effective solution to some accessibility challenges. For blind users in particular, a number of options have been explored. Bentzen et al. (2001) identifies one system that uses infrared beacons to help blind users more easily identify bus stop locations. Coady and Minifie (2009) provide transit accessibility issues with specific design guidelines for mobile web accessibility. Braille keyboards can be used to communicate transit information for blind and deaf-blind passengers have been explored in research carried out by Azenkot et al. (2011) and in commercial systems as well as supported by Sendero Group (2010).

2.8.5 Concept of customer experience.

Pine and Gilmore (1999) argues that economic value has evolved in phases from producing commodities to producing goods, services and finally experience. Richardson (2010) agrees with this assertion as the author examines the commercial value of creating and managing the customer experience in different perspectives. The author goes on to say that the underlying premise is that business must move beyond and spread out to involve their customers with show business mentality. LaSalle and Britton in their book focus on the value side of the experience faced by the customers, the authors suggest that there is need to fully understand customers so that in the process of delivering value they will have a satisfying experience. Gartner (2004) suggests customer experience as the practice of crafty and responding to customer interactions to meet or surpass customer anticipations and accordingly increases customer satisfaction, loyalty and advocacy. Customer profiles should be treated and maintained, interactions with customers should be personalized and it is crucial to get the right customers’ details always. Customer experience strengthen brand preference of potential and existing customers when it offers differentiated experiences this therefore boosts the revenue through incremental of sales from new customers generated from word of mouth and existing customers.

Schmitt (2003) argues that customer experience represents discipline, methodology or processes used to comprehensively manage customers’ cross channel exposure, interaction and transaction with a company, product, brand or service. Allen et al. (2005) noted that 80% of business state that they offer a great customer experience. The author asserts that businesses should implement the three Ds these are 1) Designing the correct incentive for the correctly identified consumer being offered in an enticing environment 2) Delivery refers to
the capacity of the company to focus the whole team that is all departments to deliver proposed experience, (Keller, 2003). The vision of the company should be well communicated so that everyone in the organization works towards the same goal. Satisfying the customer in turn increases the likelihood of satisfying the customers with the proposed experience 3) Development measures the company’s success with the aim of consistent development in execution. Companies need to constantly develop to match with the ever changing market demands in order to survive. Reast (2005) suggested that businesses survive when customers experience exceptional customer experience therefore there is need to continuously teach, train and develop to match the growing needs of customers. The author goes on to say despite how much planning and control is implemented in business there are certain aspects which cannot be controlled. Customer perceptions, emotions and their way of doing things alter customers experience (Richardson 2010). If customers incur a bad service experience during the consumption of the service complaints are prone to raise and propagate either through online or word of mouth. The researcher therefore seeks to evaluate how firms in the luxury transport sector can enhance passenger experience through their onboard coach facilities.

2.9 Chapter Summary

The chapter dealt with literature that has been published by other scholars on service automation in luxury coaches. Different scholar views on how service automation affects competitiveness was examined, theories and conceptual frameworks were also scrutinized. Arguments and agreements brought about by diverse school of thoughts concerning on-board facilities as a means of enhancing passenger experience. Major gaps noted include the failure to mention benefits and challenges of automating services in the transport sector. An in depth understanding of the connection between online reservations and customer traffic was also examined in detail.
CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

The previous chapter involved the reviewing of literature. This chapter looks at the research design, which in this case relates to the plan the researcher followed. Clarification of data collected refers to the instruments used for the collection of data and lastly the chapter attempts to explain the manner in which collected data was processed, organized and presented. The chapter outlines the procedures that were taken by the researcher in carrying out this study. The research design, research methods and data collection instruments used as well as validity and reliability of data is also be outlined.

3.1 Research Design

Saunders et al (1997), defines research design as a framework or plan for a study that guides the collection and analysis of data. It serves as a systematic plan, blueprint or set of instructions for conducting a study. It is a blue print that is followed in completing a study. There are three types of research designs available for research these are exploratory research, descriptive research and casual research. In this study causal research and explanatory research design was used. The causal research explores the effect of one variable on another. The causal research design measures the impact a specific change will have on existing automated services and allows the researcher to predict hypothetical scenarios which a company can implement. Hair et al (2002), postulates that the main objective of exploratory research designs is generating information that the researcher can use to attain a clearer understanding of a problem; define or redefine the initial problem, separating the symptom variables from the independent and dependent factors; develop the problem and the objective; or categorize the specific information requirements for instance facts, estimations, forecasts and variable relationships. The researcher used this technique because it gives an opportunity to get more information about service automation and competitive strategies that are currently practised. The researcher used a case study for this research undertaking. A case study research is defined by Hartley (2005) as a detailed investigation of phenomena within a certain context, usually with data collected over a period of time. The effectiveness of the
approach is that it enables the problem to be studied in its natural setting and this enabled the researcher to demarcate the population under study into manageable proportions.

3.2 Target population

According to Cooper and Schindler (2003) population is the total collection of elements about which a researcher wishes to make some inferences. For this research the luxury travel sector is the target population with particular focus on Pathfinder Luxury Coaches. A population defines the aggregate which encompass all elements from where information is to be derived. Sekarani (2003) highlighted that target population is a segment of the population to which the study is based. The estimated target population size is 219. The target population comprises of all Pathfinder managerial staff, employees and customers who make reservations to those who were boarding the coaches. This is so because the management are the ones who set the type of technology being utilized, employees are the ones who implement these strategies and the customers are the ones who hold the perception of the service standards at Pathfinder.

3.2.1 Sample frame and sampling procedures

A sampling frame is defined by Saunders et al (2000) as a complete list including all the cases in the target population from which a sample will be drawn. The sampling frame for this study comprises all representative managers of all the respective departments in the Harare branch, the staff members and the Pathfinder customers.

3.3 Sampling methods and techniques

There are basically two sampling methods that can be used when conducting a research namely probability and non-probability sampling methods. Probability method is one in which every element has an equal chance of being chosen (Churchill 2006). Non-probability relies on the judgment of the researcher. Therefore this research was conducted using non-probability as it allows the researcher to use her own skills of determining the most effective target population. For the purpose of this study the researcher employed a combination of two sampling techniques categorized under non-probability methods so as to maximize on validity and reliability. The sampling techniques that were implemented include judgmental and purposive sampling. Judgmental sampling is a non-probability sampling technique where the researcher selected units to be sampled based on their knowledge and professional
judgment particularly on selecting managers. This sampling involves selecting those respondents who are more knowledgeable concerning technological delivery in increasing competitiveness. Marshall and Rossman (1999) note that valuable information is acquired from people selected basing on their positions they hold in administrative realms of their institutions. This is a non-probability sampling method whereby the researcher chooses the population members who have knowledge of the research being undertaken and respondents who are willing to participate in the survey who have some experience in strategic decision making. Purposive sampling allows the researcher to choose respondents who are more willing to contribute relevant and depth data. Distortion of service automation data was minimized due to knowledgeable respondents on the subject matter. Purposive sampling method was utilized in selecting management respondents at Pathfinder.

3.3.1 Sample size

Churchill (2000) defines sample size as a “portion of a population used to carry out a research.” The sample size is going to be based on the relevant subgroups of the population and proportional allocation of the subgroups was carried out to get a true and fair representation of the population. According to Krejcie and Morgan (1970) for the population of 219 respondents the researcher used a sample size of 155 respondents. The researcher used the following formula to determine sampling size:

\[
S = \frac{X^2NP(1-P)}{d^2(N-1)} + X^2P(1-P)
\]

S = required sample size

X2 = the table value of chi-square for one degree of freedom at 95% confidence level

N = the population size

P = the population proportion (assumed to be 0.5 since this will provide the maximum sample size)

d = e degree of accuracy expressed as a proportion (0.05)
Table 3.1: Sample size table

<table>
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<th>Sample size</th>
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<tr>
<td>Total</td>
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</tbody>
</table>

3.4 Sources of data

These include the various areas where the researcher acquired the needed information to complete the research at hand. These sources include primary and secondary sources of information. To ensure the variety of adequate information on Pathfinder Luxury Coaches is collected both primary and secondary instruments of data collection were used.

3.4.1 Secondary data

Secondary data is data that has been collected before. Secondary data is found in textbooks, company journals, electronic books, newspapers, and performance feedback reports by supervisors, customer complaints booklet, media and press cuttings, company ratings as well as journals and industrial literature publications with information related to the problems at hand. The researcher preferred to use secondary data because it is easy to obtain since the published records are already complied and they are limited costs. Secondary data was also of advantage as it is easy to interpret and faster for the researcher to collect although the data is not designed specifically to meet the current research needs.

3.4.2 Primary data

This is information or data the researcher finds in the field directly for the purpose of the research at hand. Collins et al (2000) said that in order to know the way humans feel, their experiences, things they remember about their lives, their emotions and motives, we should ask them directly. In this research, primary data was data collected through questionnaires and the data gave direct responses to the objectives at hand. Primary data was of advantage as
the data was up to date, gave a balanced view of the competitiveness of service automation at Pathfinder from the employees, customers and management and there was greater control over the relevance and accuracy of data to be collected. In the collection of primary data, the researcher used quantitative questionnaires to make sure all the necessary information was collected from all the participants. Primary data is illustrated as qualitative and quantitative. The research was carried out using quantitative research instrument with closed-ended questions to enable quantification.

3.5 Research instruments

A research instrument is a tool used to collect data, Kervin (1999). This research adopted questionnaires as the data collection instrument as it greatly complements hypothesis where clarity lacks and they are more reliable sources of information.

3.5.1 Questionnaires

A questionnaire consists of a set of questions presented to respondents for their answers (Kotler 2002). The respondents read the questions, interpreted what is expected and then wrote down the answers themselves. To incorporate both qualitative and quantitative perspectives of answers to the research questions, various ideas and techniques were employed in designing the questionnaires. Therefore the type of questionnaires that was used is a structured quantitative questionnaire consisting of only closed-ended questions. The questions on the questionnaires were designed in line with the objectives. The researcher preferred the questionnaires as they are relatively fast, efficient as well as a cheap method of collecting quantitative data. The recording of data is systematic and the questionnaire can be kept as records for future references. The questionnaires enabled maintenance of uniformity and flow of information. The researcher utilized simple wording to make sure the respondents understood the questions asked on the questionnaires and gave accurate information as well as express themselves honestly.

3.6 Data collection procedure and administration

These are the steps that were undertaken throughout the research process. The researcher made appointments with management to conduct questionnaires which were collected on the same day. The researcher physically went to the organisation to gain approval to collect data and explain the purpose of the study. Most of the fieldwork involved the use of
questionnaires using structured questions with various categories of respondents from Pathfinder. Documents were also collected from the organisation’s resource center (e.g. journals, analyst briefing articles and training packages) that were made available for the purpose of the research. To allow for adequate and thorough answering of the questionnaires, the researcher liaised with the respondents on the amount of time that they required to answer the questionnaires.

3.7 Validity and Reliability of research results

- To ensure validity of data collected the researcher relied on the academic supervisor assigned to her to check the research instruments before they were distributed to the targeted population. Research instruments were amended as per the supervisor’s advice.
- The survey was not taken without a pre-test. The trial run of the questionnaire was simulated as closely as possible the actual research conditions under which it was administered. Pre-test respondents were taken from the population of interest. A pre-test was conducted in the same survey mode as the actual survey.
- The researcher used short, simple unambiguous questions to ensure that the respondents understand easily.
- Researcher used methodology triangulation in acquiring information for this research that is the explanatory and causal research design. Triangulation was employed as a way of reducing the likelihood of misinterpretation, redundancy of data gathering and procedural challenges.

3.8 Ethical considerations

- Both scholarly and non-scholarly sources were fully cited and referenced using the Harvard system of referencing.
- Respondents were assured of confidentiality and privacy.
- Research findings were used for academic purposes only.
- The research was premised on a high level of objectivity in data collection, analysis and presentation of data and findings.
- The University guidelines on research ethics were used as a guide and ethical compass of this research.
3.9 Data presentation and analysis

For data presentation, the researcher created graphs that included pie charts and bar graphs. The use of graphical presentations enabled the researcher to display data to enable comparison of the data and make interpretation easier.

3.9.1 Tables

According to Tuttle (1999) as quoted in Gupta (2008), “a statistical table is the logical listing of related quantitative data in vertical columns and horizontal rows of numbers with sufficient qualifying words, phrases or statements in the form of titles, headings and notes to make clear the full meaning of data and their origin.” Data was arranged in rows and columns under various headings. Tables were used to show the compilation of all the data collected.

3.9.2 Bar graphs

Some of the collected quantitative data was presented in the form of horizontal and vertical bar graphs. Bar graphs allow for easy interpretation, comparison and analysis of data.

3.10 Data Analysis

Both qualitative and quantitative techniques were used to analyse the data gathered in the administration of the research instruments pointed above. Qualitative analysis was used on the data collected through secondary data gathering. On the other hand, there was quantitative analysis of questionnaire responses through the use of descriptive statistics, as well as variables such as frequencies, averages and ranges. Quantitative data analysis was used to statistically uncover associations from the findings, trends and patterns. The use of tables and charts with percentages were used with the help of Microsoft Excel Software to enable wide data to be condensed into few manageable tables for further analysis. This facilitated comparability, where necessary, with recommendations for good practice and comparison with available statistics used at Pathfinder Luxury Coaches.
Summary

This chapter gives a clearer understanding on how the research was carried out and activities that the researcher performed during the research process. It outlines the research design, target population, sampling techniques and the data collection procedures. Results were coded, edited and analysed to clearly present the information. This chapter also summarises the results of the investigations that were carried out within the luxury travel industry particularly Pathfinder Luxury coaches. It endeavors to answer the research questions that are posed in the first chapter using questions and answers obtained from questionnaires. The chapter that follows next looks at the data analyses, presentation and discussion of findings.
CHAPTER FOUR
DATA ANALYSES, PRESENTATION AND DISCUSSION OF FINDINGS

4.0 Introduction

The chapter deals with the presentation, interpretation and analysis of research findings gathered through the use of questionnaires. Analysis of the research results was done using the quantitative approach. Emphasis was made on transforming the data quantities and a model of statistics was also used for measuring and analysing the data. The computations of the gathered data were done where statistical tools such as bar graphs, frequencies, histograms and pie charts were mainly used to present quantitative data.

4.1 Response rate

A total of 155 questionnaires were distributed to different groups of respondents in which 136 questionnaires were administered to customers, 16 to the employees and 3 to the management. A summary of the response rate from the different research participants are presented in the table below.

**Table 4.1 Showing respondents from different research participants.**

<table>
<thead>
<tr>
<th>Category of respondents</th>
<th>Number of questionnaires administered</th>
<th>Number of questionnaires returned</th>
<th>Response rate ( %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customers</td>
<td>136</td>
<td>100</td>
<td>73.5</td>
</tr>
<tr>
<td>Employees</td>
<td>16</td>
<td>15</td>
<td>93.8</td>
</tr>
<tr>
<td>Management</td>
<td>3</td>
<td>3</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>155</td>
<td>118</td>
<td>76.1</td>
</tr>
</tbody>
</table>

The above table shows that out of the total sample size of 155 copies of questionnaires, the general response rate was 76.1%. 155 questionnaires were hand delivered and 118 were answered and returned. The non-response rate of 23.9% was probably due to work commitments on the side of the respondents. The response rate was good enough to render the research results as valid as supported by Saunders (2000) who stated that a response rate
of more than 60% is rendered as valid. The high response rate can be attributed to the data administration and procedure used where the researcher collected the questionnaires on the same day and can also be due to the possibility that the research was seen as interesting by the respondents.

### 4.1.1 Response rate by age

Respondents were asked to state their age, this was to evaluate if age had any relationship with the customers attitudes and perceptions towards service automation. This allowed the researcher to make an analysis on whether attitudes are related to the age of respondents’.

**Table 4.2**

<table>
<thead>
<tr>
<th>Age range</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 25</td>
<td>38</td>
<td>38</td>
</tr>
<tr>
<td>25-40</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>40-60</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>60+</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Out of the 100 customer responses 38% were aged less than 25, 20% were aged between 25 and 40 years, 30% between 40 and 60 and 12% for more than 60 years customers. This indicates that the youthful age groups’ acceptance of new technology is relatively higher than the older age groups due to knowledge and interest in the modern technological advances and the percentage rate of 40-60 years may indicate that they prefer the bus because of the delightful travelling experience.
4.1.2 Response rate by gender

Table 4.3 Showing the gender response rate.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>53</td>
<td>52.5</td>
</tr>
<tr>
<td>Male</td>
<td>47</td>
<td>46.5</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

From the table above, the majority of the respondents were females with a percentage of 53% and 47% were male. The results show that the female gender dominates the use of the luxury coache.

4.2 The impact of online reservations and an increase in customer traffic.

One of the objective of this study was to analyse the effect of online reservations and an increase in customer traffic. In line with this objective, the researcher sought to determine the influence the booking system had on the customers and the employees, the findings are presented in figure 4.1 below.

![Fig 4.1 Showing rated results on the influence of online reservations in increasing customer traffic.](image-url)
As shown in the figure 4.1 above respondents percentages are as follows: rebooking procedures 56% strongly agreed, 31% agreed, 3% were indifferent, 6% disagreed and 4% strongly disagreed. The 56% of the respondents who mentioned strongly agree towards the rebooking procedures implemented at Pathfinder expressed the view that the procedures were not too long and easy to follow and straight to the point. Their view was that the rebooking procedures were not complex but favourable which in the case of existing customers will retain them and in the case of potential customers will influence them to do repeat purchases. On the other hand 3% of the respondents were indifferent and they expressed the view that they have not yet encountered a rebooking situation 6% of the respondents disagreed and 4% strongly disagreed the rebooking procedures influenced their repeat purchase of the service. They expressed the view that the rebooking procedures were not well designed and structured to lure them to do repeat purchases as there are additional costs incurred when canceling a ticket less than 24hours of the travel date.

Respondents were asked to rate the speed of the booking transactions that is the time taken to do a booking and the ticketing, 49% strongly agreed, 30% of the respondents agreed, 8% are indifferent, 11% disagree and 2% strongly disagree that the speed of the transaction is not above average. The 49% of the respondents who mentioned that the speed of the transactions influences their decision of coming back to Pathfinder services expressed the view that the booking transaction period was not too long but is fast enough to attract them to do repeat purchases. 30% expressed the view that the speed of the transaction is above average meaning that the current speed doing a transaction does not entirely meet their expectations. 11% disagree and 2% strongly disagreed that the period taken to do transaction was inefficient; these respondents expressed the view that the speed of the transaction discourages them from doing future business with Pathfinder.

Damage control and feedback system is another variable that was asked to the respondents as a strategy to retain customers in case of cancelled trips and delayed trips. 63% of the respondents strongly agree that the strategies implemented at Pathfinder are excellent, 24% agreed, 7% were indifferent, 3% disagreed and 3% strongly disagreed. The 63% of respondents expressed the view that current damage control and feedback system applied by Pathfinder are efficient and effective. Their view was that they would continue boarding the luxury coache because of the customer care they get from the company. 7% of the respondents were indifferent and they expressed the view that they have never encountered a situation which needed any damage control before. 3% disagreed strategies of handling
breakdowns and delays is not feasible in retaining them, they believe there is unclear communication between them and the company.

Respondents were asked to rate the accessibility of the online booking system and 71% strongly agreed, 22% agreed, 1% were indifferent, 3% disagreed and 3% strongly disagreed. 71% of the respondents expressed the view that the system has simple procedures which are user friendly. Their view was that the accessibility of the online booking system is favourable and reduces dwell times of customers. 22% agree the system is not hard to access, 1% are indifferent and expressed the view that they might have used the manual ticketing or they were not the ones who made the booking and 3% disagreed that the system is accessible and 3% strongly disagreed that the system is not complicated and expressed the view that the booking system should be upgraded with applications which make it easily accessible. In general the responses by the respondents are good which means customers are bound to do repeat purchases of Pathfinder services.

4.3 The impact of automated fare payment system in increasing sales volume.

The second objective of this research was to distinguish if there is a relationship between automated payment system and an increase in sales volume at Pathfinder. Respondents were asked how they viewed the use of automated means in paying their bus fares. The figure below summarises their responses.
The above bar graph summarises responses on the automated payment system that pathfinder is currently using in increasing the company sales volume. Respondents were asked to rate the convenience of this system and 57% of the respondents strongly agreed that automated system of payment convenient, 37% agreed, 0% were indifferent, 4% disagreed and 2% strongly disagreed. The 57% of the respondents who mentioned that the automated fare payment system is convenient expressed the view that the system is available anytime and at any place. Their view was that it fits in well with the customers’ needs and involves little effort. 4% disagreed and 2% strongly disagreed that the payment system is convenient; these respondents expressed the view that the process of doing a payment is complicated which will result in a reduction of sales.

Respondents indicated that the system is reliable and fast as most of the responses were strongly agreeing with a percentage of 51% and they expressed the view that the automated fare system as a strategy to increase sales is an effective system, 34% agreed, 14% were indifferent and they expressed the view that they may not have yet experienced the automated fare payment system. 1% disagreed and 0% strongly disagreed experienced the view that automated systems were risky and slow. These results show that the respondents prefer using automated payment as it serves them time and money of visiting the bank to withdraw money and make a payment.

39% strongly agreed, 31% agreed, 24 % were indifferent, 4% disagreed and 2% strongly disagreed the view that automated fare payment system increases efficiency. 39% of the respondents expressed the view that automated means of payment increases efficiency and are less costly. Their view was that paying automatically saved them time and energy of having to withdraw the money and pay for the bus fare manually at the Pathfinder offices, 31% agreed the system was competent enough for them to continue purchasing through this system, 24% were undecided as they may not be familiar with the automated payment method being implanted by Pathfinder that is the use of Ecocash, visa cards, MasterCard and debit cards. 4% disagreed and 2% strongly disagreed about the efficiency of the system and they expressed the view that the automated payment system needed upgrading to improve its performance levels.

User friendly procedures is one of the variables that was being measured, 48% of the respondents strongly agreed, 32 % agreed, 10 were indifferent, 3% disagreed and 7% strongly
disagreed that the procedures undertaken when paying through the automated means were user friendly. 48% of the respondents expressed the view that the procedures undertaken when paying through the automated system were simple and straight forward, that the procedures were short and precise whilst 3% disagreed and 7% strongly disagreed and expressed the view that the system was complicated and might affect their repurchase using automated ticket payment system and resort to the manual ticketing procedure.

4.4 The impact of on-board coache facilities in enhancing passenger experience.

The third objective of the research was to assess if there is a relationship between on-board coache facilities that passengers utilize during the course of the journey if they heighten their experience on the Pathfinder coaches. The figure below shows the respondents’ responses.

![Bar chart showing customers perceptions on bus facilities](image)

**Fig 4.3 Showing results on customers perceptions’ on the bus facilities.**

The figure above shows that the majority of service users feel that the facilities meet their service expectations with a percentage of 52% strongly agreeing and expressing the view that coache features enhances their travel experience, 29% of the respondents agreed and expressed the view that their expectations were meet by these facilities and that their travelling experience was enhanced, 3% are indifferent, 10% disagree and 6% strongly disagree that their expectations are met by the on-board coache facilities and they expressed the view that coache facilities do not enhance their experience when travelling on Pathfinder.
Uniqueness of the coaches was rated by the respondents with a 63% which expressed the view that Pathfinder coache features were different from the competitors. The respondents view was that they board the bus because of its exclusivity. 25% agreed to this assertion, 0% were indifferent, 10% disagree and 2% strongly disagreed that the coaches are different with the rest and expressed the view that uniqueness of the coache had no effect in enhancing their experience on board.

Respondents were asked if they board the coache because of its facilities and 56% strongly agreed it’s the reason they board the coache, 28% agreed it is because of the facilities, 5 were indifferent, 7% disagreed and 4% strongly disagreed. The 56% of the respondents expressed the view that they board Pathfinder coaches for its coache facilities that they get to enjoy during the courses of the journey and 28% also agree to this. 5% were indifferent to the effect coache facilities had on their travel experience as other people are not keen about augmented products but just the core product offered by the company. 7% disagreed and 4% strongly disagreed and expressed the view that coache facilities do not increase their travelling experience.

Respondents were asked if they would recommend Pathfinder to their friends and family and 67% of the respondents strongly agreed they would, 21% agreed, 5% were indifferent, 4% disagreed and 3% strongly disagreed. The 67% of the respondents who strongly agree that they would recommend Pathfinder expressed the view that they are content with the current strategies implemented by the company as they meet their expectations. 3% strongly disagreed recommending the company service expressed the view that they are not happy with the service.

4.3 Research hypothesis

Testing using the chi-square method, the research aims at viewing if there is a relationship between service automation and company competitiveness. According to Creswell (1994) hypothesis is a statement used to present expected relationship between an independent variable and dependent variable. The hypothesis testing was calculated using the chi-square quantitative method. The chi-square is used to measure if there is a relationship between variables.

\[ x^2 = \sum_{i=1}^{n} \frac{(O_i - E_i)^2}{E_i} \]
n= Number of outcomes

O= Observed frequency

E= Expected frequency

Degrees of freedom= (column-1) (row-1)

If chi-square calculated \( (x^2_{\text{cal}}) \) is less than the critical value, the researcher accepts the Null hypothesis (\( H_0 \)) and reject the Alternative hypothesis (\( H_1 \))

4.3.1 The impact of online reservations and an increase in customer traffic.

\( H_0 \)- There is no association between online reservations and an increase in customer traffic.

\( H_1 \)-There is an association between online reservations and an increase in customer traffic.

Table 4.4 The Chi-square table showing the frequencies of online reservations in increasing customer traffic at Pathfinder.

<table>
<thead>
<tr>
<th>Responses</th>
<th>Observed frequency</th>
<th>Expected frequency</th>
<th>(Observed-Expected)</th>
<th>(Observed-Expected)²</th>
<th>( \frac{(O - E)^2}{E} )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
<td>68</td>
<td>23</td>
<td>45</td>
<td>2025</td>
<td>88.04</td>
</tr>
<tr>
<td>Agree</td>
<td>31</td>
<td>23</td>
<td>8</td>
<td>64</td>
<td>2.78</td>
</tr>
<tr>
<td>Indifferent</td>
<td>5</td>
<td>23</td>
<td>-18</td>
<td>324</td>
<td>14.09</td>
</tr>
<tr>
<td>Disagree</td>
<td>7</td>
<td>23</td>
<td>-16</td>
<td>169</td>
<td>11.13</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>4</td>
<td>23</td>
<td>-19</td>
<td>361</td>
<td>15.70</td>
</tr>
</tbody>
</table>

Degrees of freedom= (5-1) (4-1) = 12

At a significance level of 5% and critical value is 21.026.

Since chi-square calculated \( (x^2_{\text{cal}}) \) 131.74 is greater than 21.026, the researcher therefore rejects the null hypothesis (\( H_0 \)) and accept the alternative (\( H_1 \)).
4.3.2 The impact of automated fare payment system and increase in sales volume.

H₀ - Automated fare payment system does not increase sales volume at Pathfinder.

H₂ - Automated fare collection system increases sales volume at Pathfinder.

Table 4.5 The chi-square table showing frequencies for automated fare payment system and sales volume.

<table>
<thead>
<tr>
<th>Responses</th>
<th>Observed frequency</th>
<th>Expected frequency</th>
<th>(Observed-expected)</th>
<th>Observed expected)²</th>
<th>(O-E)²/E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
<td>56</td>
<td>23</td>
<td>33</td>
<td>1089</td>
<td>47.35</td>
</tr>
<tr>
<td>Agree</td>
<td>38</td>
<td>23</td>
<td>15</td>
<td>225</td>
<td>9.75</td>
</tr>
<tr>
<td>Indifferent</td>
<td>14</td>
<td>23</td>
<td>-9</td>
<td>81</td>
<td>3.52</td>
</tr>
<tr>
<td>Disagree</td>
<td>4</td>
<td>23</td>
<td>-19</td>
<td>361</td>
<td>15.70</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>3</td>
<td>23</td>
<td>-20</td>
<td>400</td>
<td>17.39</td>
</tr>
</tbody>
</table>

Degrees of freedom= (5-1) (4-1) = 12

At 5% significance level the critical value is 21.026.

Since chi-square calculated (χ² cal) 93.74 is greater than 21.026, the researcher therefore rejects the null hypothesis (H₀) and accept the alternative hypothesis (H₂).

4.3.3 The impact of on-board facilities in enhancing passenger experience.

H₀ - On-board coach facilities do not enhance passenger experience in the luxury bus coaches.

H₃ - On-board coach facilities enhance passenger experience in the luxury bus coaches.

Table 4.6 The chi-square table showing responses for onboard facilities in heightening passenger experience frequencies.

<table>
<thead>
<tr>
<th>Responses</th>
<th>Observed frequency</th>
<th>Expected frequency</th>
<th>(Observed-expected)</th>
<th>Observed expected)²</th>
<th>(O-E)²/E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
<td>56</td>
<td>23</td>
<td>33</td>
<td>1089</td>
<td>47.35</td>
</tr>
<tr>
<td>Agree</td>
<td>38</td>
<td>23</td>
<td>15</td>
<td>225</td>
<td>9.75</td>
</tr>
<tr>
<td>Indifferent</td>
<td>14</td>
<td>23</td>
<td>-9</td>
<td>81</td>
<td>3.52</td>
</tr>
<tr>
<td>Disagree</td>
<td>4</td>
<td>23</td>
<td>-19</td>
<td>361</td>
<td>15.70</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>3</td>
<td>23</td>
<td>-20</td>
<td>400</td>
<td>17.39</td>
</tr>
</tbody>
</table>

Degrees of freedom= (5-1) (4-1) = 12

At 5% significance level the critical value is 21.026.

Since chi-square calculated (χ² cal) 93.74 is greater than 21.026, the researcher therefore rejects the null hypothesis (H₀) and accept the alternative hypothesis (H₂).
### Summary

Analyses was carried out in quantitative terms using the SPSS statistical program and a hypothesis testing was conducted to measure if there were a relationship between service automation and company competitiveness. Quantitative data was presented in tables and bar graphs using raw data and percentages. The analyses produced the following results:

- Since the calculated chi-square value for online reservations and increase in customer traffic is 131.74 which is greater than the 0.5 probability level it means that the results are statistically significant, which means that there is an association between the two variables that is change in one variable will simultaneously cause a change the other. The respondents generally view the online system as a competitive strategy as it encourages them to do repeat purchases.

- Form the hypothesis calculation we reject $H_0$ and we accept $H_2$ as its calculated chi-squared is 93.74 which is greater than the 0.5 probability level which deems the results as statistically significant which means that there is a relationship between automated payment system and an increase in sales volume.
• There is a relationship between on-board coach facilities and enhanced passenger experience as the chi-square calculated is 132.04 which is greater than the 0.5 probability level which means the results are statistically significant meaning that passenger experience is enhanced by the facilities on-board therefore we reject $H_0$ and accept $H_3$ as supported by Schiavone (2011) that onboard coach facilities have a positive impact on enhancing passenger experience.

The next chapter looks at the summary, conclusions and recommendations.
CHAPTER 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Summary

This research was undertaken to investigate if Pathfinder, a luxury coach company, can increase its competitiveness through service automation. This research was motivated by the strategies that Pathfinder is currently implementing, which include on-board coach facilities, automated payment systems, and online reservations. Additionally, the research aimed at determining if service automation increases company competitiveness. Published journals, textbooks, research papers, and online resources were utilized in reviewing literature from a wide variety of authors in the field of service automation. The research approach encompassed the exploratory and causal research design. Both primary and secondary sources of data were used for data collection from the respondents. The research used both probability and non-probability sampling techniques to arrive at a sample size of 155 respondents, which were used to get the research findings that have been shown. Quantitative approach was used in analysing data that is the chi-test. The results that were deduced from the research findings are as follows:

- Since the calculated chi-square value for online reservations and increase in customer traffic is 131.74, which is greater than the 0.5 probability level, it means that the results are statistically significant, which means that there is an association between the two variables that is change in one variable will simultaneously cause a change in the other. The respondents generally view the online system as a competitive strategy as it encourages them to do repeat purchases. As 56 of the respondents strongly agreed that rebooking procedures influenced their repurchase of the service, 49% viewed the speed of transactions as favourable. 63% of the respondents strongly agreed that the damage control and feedback system of Pathfinder was efficient and effective, and 71% viewed the system as accessible.

- From the hypothesis calculation, the researcher rejects $H_0$ and accepts $H_2$ as its calculated chi-squared is 93.74, which is greater than the 0.5 probability level, which deems the results as statistically significant, which means that there is a relationship...
between automated payment system and an increase in sales volume. The majority of the respondents viewed the automated fare system as convenient, reliable and fast, efficiency and less costly and user friendly procedures with 57%, 51%, 39% and 48% respectively.

- There is a relationship between on-board coache facilities and enhanced passenger experience as the chi-square calculated is 132.04 which is greater than the 0.5 probability level which means the results are statistically significant meaning that passenger experience is enhanced by the facilities on-board therefore the researcher rejects $H_0$ and accept $H_3$. Respondents viewed that coache facilities enhanced their travel experience as 52% of the respondents’ expectations are met, 63% deem the coache as unique in its making and 56% boarded the coache because of its facilities which enhances their experience.

5.1 Conclusions

The research results above have allowed researcher to make the following conclusions:

5.1.1 The effect of online reservation and customer traffic

The study found out that the online reservation strategy as a strategy for increasing traffic of customers at Pathfinder resulted in a positive view as the hypothesis testing indicated an association between online reservations and customer traffic. This study therefore concludes that customer traffic is dependent on the online reservations. Online reservations are convenient and informative therefore existing customers are bound to do repeat purchase and potential customers are bound to try the service. An increase in customer traffic through the use of online reservations is a sign of company competitiveness through automated services as supported by the respondents responses as favourable in terms of its rebooking procedures, speed of transactions, damage control and feedback system with 56%, 49%, 63% and 79% respectively are strongly agree.
5.1.2 The effect of automated payment system and an increase in sales volume

Basing on the hypothesis testing, this study concludes that automated payment methods increases sales volume meaning that the use of the system encourages customers to do repeat purchases, thereby increasing the sales of the company. By increasing the company sales, the company competitiveness also increases which shows that there is a relationship between service automation and company competitiveness. The majority of the respondents view the automated payment system as convenient, reliable and fast, efficient and cheap and user friendly with the following percentages 57%, 51%, 39% and 48% respectively.

5.1.3 The impact of on-board coache facilities in enhancing passenger experience.

Most of the respondents expressed the view that onboard coache facilities enhances their travel experience as supported by how they view the facilities in terms of expectations, uniqueness, preference reasons and recommendations with the following percentages 52%, 63%, 56% and 67% respectively. Basing on the above findings and the hypothesis testing of on-board coache facilities and passenger experience this study concludes that there is a relationship between the two variables. This means that passengers enjoy the journey more because of these facilities, which means Pathfinder can increase its competitiveness by meeting the passengers’ expectations on board by making sure the facilities are functioning well to avoid dissatisfaction from customers.

5.2 Recommendations

The following recommendations reached emanated from the conclusions of the study and these include:

- Pathfinder should introduce loyalty cards as a strategy to increase repurchase of their service. These cards would provide background information on clients travel history and enables them to feel recognized. These cards would be linked with their respective banking system and a shorter reservation booking procedure. It will also indicate when the customer is due for a discount or a complimentary ticket instead of asking for previous tickets as proof of travel.
• There is need for informative advertising on the services offered by Pathfinder with much emphasis being made on its automated system which include on-board coach facilities, payment system and reservation system. As a means of increasing awareness by clearly highlighting its’ benefits of convenience, comfort and exceptional passenger satisfaction experience. This can be done through the use of the social network that is whatsapp, twitter, facebook, newspapers, press releases, radio, television, website, magazines and fliers.

• Since some of the clients are tourists who may have experience world class travel experience in other countries, the company should invest in buying the latest coaches with services and features that will raise the local travel standards. There is also need for management to invest more in system upgrade to improve their competitive edge in the market because when it comes to luxury travel service there should be no substitute for quality as clients would have paid extra and will be expecting the best quality.

• Trainings, refresher courses and workshops which have to do with technology should be practised to increase employee involvement so that they can be able to come up and contribute creative ideas that can further advance the competitive advantage of Pathfinder through its service offerings.

Further research

The research study was investigating if service automation strategy increases the competitiveness of firms, therefore further research can be carried out on other firms sectors and organisations to assess service automation and company competitiveness.
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Appendix A: Questionnaires for customers.

My name is Vimbai Nancy Maunze. I am a 4th year student at Midlands State University. I am carrying out a research on Service automation and company competitiveness in the luxury travel coaches in Zimbabwe in partial fulfillment of the requirements of a Bachelors’ Honours’ Degree in Marketing Management. I would be grateful if you spare a moment and complete this questionnaire. Your response will be confidential and it is being solicited for academic purposes only.

PLEASE FILL IN YOUR RESPONSES IN THE SPACES PROVIDED AND PUT AN X OR A TICK IN THE APPROPRIATE BOX.

1. Please indicate your gender
   i. Male
   ii. Female

2. What is your age range
   i. Less than 20
   ii. Between 20 and 40
   iii. Between 40 and 60
   iv. Over 60 years

3. Which class or deck do you prefer?
   i. Deluxe (top deck) VIP
   ii. (Bottom deck) VVIP

4. For how long have you been using a Pathfinder Coaches?
   i. less than 1 year
   ii. between 1-2 years
   iii. between 2-3 years
   iv. 3 years and above

5. Use the following rating scale to respond to the automated fare payment statements below. Where:
   5- Strongly Agree   4- Agree   3- Indifferent   2- Disagree   1-Strongly Disagree

<table>
<thead>
<tr>
<th></th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automated fare collection</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
procedures are user friendly.

Paying my bus fare through automated fare payment system at Pathfinder is convenient.

Automated fare collection system is fast and reliable.

Paying through automated systems increases efficiency and cheap.

6. Do the following online reservation features influence your decisions to do business with Pathfinder again? Use the rating scale to show your response.

5- Strongly agree 4- Agree 3- Indifferent 2- Disagree 1- Strongly disagree

<table>
<thead>
<tr>
<th>Pathfinders’ rebooking procedures are acceptable.</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed of transactions.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Damage control and feedback system.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Easy interpretation of timetables and fares.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. Do the following onboard facilities enhance your travel experience? Using the following rating scale, indicate your rate of satisfaction.

5- Strongly agree 4- Agree 3- Indifferent 2- Disagree 1- Strongly disagree

<table>
<thead>
<tr>
<th>The onboard coach facilities meet my expectations.</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pathfinder coaches are unique.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
I board Pathfinder because of its onboard facilities.

I would recommend Pathfinder coach to my friends and family.

Thank you very much for taking the time to complete the questionnaire. Your views and comments are greatly appreciated.
Appendix B: Questionnaires for employees

My name is Vimbai Nancy Maunze. I am a 4th year student at Midlands State University. I am carrying out a research on Service automation and company competitiveness in the luxury travel coaches in Zimbabwe in partial fulfillment of the requirements of a Bachelors’ Honours’ Degree in Marketing Management. I would be grateful if you spare a moment and complete this questionnaire. Your response will be confidential and it is being solicited for academic purposes only.

PLEASE FILL IN YOUR RESPONSES IN THE SPACES PROVIDED AND PUT AN X OR A TICK IN THE APPROPRIATE BOX.

1. Please indicate your gender.
   a. Male  
   b. Female

2. Which department do you belong to?
   a. Marketing and Public Relations
   b. Operations
   c. Accounting
   d. Reservations and Information Technology

3. How long have you been working for Pathfinder?
   a. Less than 1 year
   b. 1 – 2 years
   c. 2 – 3 years
   d. 3 years +

4. Please indicate your highest qualification?
   a. Masters
   b. First degree
   c. Diploma
   d. Other, specify ………………………....

5. Use the following rating scale to respond to the automated fare payment statements implemented at your workplace. Where :
The automated fare collection procedures are easy to follow to both sides, to the customer and the reservation agent.

Pathfinder customers view the automated payment system as convenient in paying for their bus fares.

The use of automated fare collection system is fast and reliable to both the customer and the reservation agent.

Automated payment systems increases efficiency at the workplace and customers consider it as cheaper than paying with cash.

### 6. Do the following online reservation features have any influence on passengers’ decisions to do business with Pathfinder again? Use the rating scale to show your response.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Rating Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>The rebooking procedures applied at Pathfinder are acceptable and implementable.</td>
<td>5- Strongly agree 4- Agree 3- Indifferent 2- Disagree 1-Strongly disagree</td>
</tr>
<tr>
<td>The period taken to do the booking and ticketing transaction is short.</td>
<td></td>
</tr>
</tbody>
</table>
7. Do you think that the following onboard facilities enhance passenger travel experience? Using the following rating scale, please indicate your opinion.

<table>
<thead>
<tr>
<th>Statement</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>The onboard coache facilities meet the customers’ expectations when they travel on Pathfinder.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customers view Pathfinder coaches unique.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pathfinder customers board the coache because of its onboard facilities.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I think that Pathfinder customers will recommend the coache to their friends and family because of the onboard travel experience.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Thank you very much for taking the time to complete the questionnaire. Your views and comments are greatly appreciated.
Appendix C: Questionnaires for management.

My name is Vimbai Nancy Mauze. I am a 4th year student at Midlands State University. I am carrying out a research on Service automation and company competitiveness in the luxury travel coaches in Zimbabwe in partial fulfillment of the requirements of a Bachelors’ Honours’ Degree in Marketing Management. I would be grateful if you spare a moment and complete this questionnaire. Your response will be confidential and it is being solicited for academic purposes only.

PLEASE FILL IN YOUR RESPONSES IN THE SPACES PROVIDED AND PUT AN X OR A TICK IN THE APPROPRIATE BOX.

1. Please indicate your gender.
   a. Female □
   b. Male □

2. Which department do you manage?
   c. Marketing and Public Relations □
   d. Operations □
   e. Accounting □
   f. Reservations and Information Technology □

3. Do you encourage creativity and innovation?
   a. Yes □
   b. No □

4. How has been the performance of the company since the inception of automation strategies? Please tick where appropriate.

<table>
<thead>
<tr>
<th>Performance</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales volume has increased</td>
<td></td>
</tr>
<tr>
<td>Enhanced passenger experience</td>
<td></td>
</tr>
<tr>
<td>Increase in profitability</td>
<td></td>
</tr>
<tr>
<td>Increased customer traffic</td>
<td></td>
</tr>
<tr>
<td>Improved customer relationship</td>
<td></td>
</tr>
</tbody>
</table>

5. What is your opinion towards the services provided by yours employees?

Please tick where appropriate.

<table>
<thead>
<tr>
<th>Service element</th>
<th>Poor</th>
<th>Good</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance of physical facilities,</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
equipment, employees, written materials

Customer handling
Responsiveness to complaints
Efficiency and helpfulness
Speed of transactions
Good communication and customer understanding skills

6. Please rate the frequency of complaints you receive from customers? Please indicate with a tick or an X where appropriate.

<table>
<thead>
<tr>
<th></th>
<th>Less frequent</th>
<th>Frequent</th>
<th>Most frequent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accuracy of reservation transactions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Speed of transactions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network problems when using automated payment system</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-functioning on-board facilities</td>
<td></td>
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</tbody>
</table>

7. Which other strategies can you implement to the company to improve its competitiveness in the industry?

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Thank you very much for taking the time to complete the questionnaire. Your views and comments are greatly appreciated.