STRATEGIES FOR NEW TECHNOLOGIES IN IMPROVING SERVICE QUALITY: REFLECTIONS ON THE AIRLINES OWNED BY SOUTH AFRICA

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ABSTRACT

The 4th industrial revolution has made significant in-roads and expanded the way business is conducted today. Airlines are part of the service industry, and they should design their service offerings based on ICT's and new technologies to continue to retain millennials and other techno-savvy passengers who frequently travel with their airlines. It can be an effective competitive strategy to grow the segment of airline customers and remain sustainable. This research is on South African owned airlines. The key aim is to identify the perceptions of South African airline passengers concerning ICT's and new technologies employed by the airline and their implication on the service offerings and its Quality. The research surveyed passengers that travel on South African owned airlines. This research is quantitative, leaning on a survey-based research design method. The researchers used Likert-scale type designed to collect quantitatively-based primary data. Using the non-probability "convenient" sampling method, researchers collected from a sample of 684 passengers. The results indicated that South African owned airlines needed to improve their service offering by using ICT's and new technologies. Participants in the research were techno-savvy, the research's findings indicate that South African owned airlines have a strategic obligation to adopt new technologies as they may potentially improve service quality.

Keywords: New Technologies, Airline Industry, ICT's, Quality of Service, South Africa, Strategy

INTRODUCTION

It is interesting to note that new technologies and ICT's has revolutionized the way airlines conduct their business. South African owned airlines are using ICT's, new technologies, social media and the internet to engage with their passengers and potential clients. Service quality is enhanced by the airline using new technologies and ICT's. Since service quality depends on passengers' perceptions, many passengers are techno-savvy and enjoy using technology to check airline flights, bookings and ticket purchases, and seasonal promotions. This paper will explore airlines service quality and how ICT's and new technology aid in adding value to the airlines' service quality.

RESEARCH OBJECTIVES

The research investigates the implication of new technologies on AOSA service quality.

HYPOTHESIS

H1: New technologies directly affect airline passengers' service quality in providing services to AOSA passengers.

LITERATURE REVIEW

In the literature review, different theorists' views on service quality, service quality in the SA airline industry, ICT's, and new technology in the airline industry will be explored and discussed. Naidoo (2017) argues that service quality or the notion of quality is a deep, complex and indefinite concept. This makes the issue surrounding the area of quality challenging to interpret or quantify because it is context-specific and has different meanings. "Quality is an elusive and indistinct construct" (Rootman et al., 2006; Beedassy, 2002). Quality and customer satisfaction focus on managing each service encounter between the firm's representatives and customers.

The pioneer scholars in service quality research were Zeithaml, Berry and Parasuraman. According to Zeithaml, et al., (2009), they pioneered and advanced on the SERVQUAL Model. They indicated that this model could measure customer satisfaction within the five dimensions of service quality. The SERVQUAL model aimed to identify and tests the five dimensions of quality. The five dimensions of quality introduced by Zeithaml, Berry and Parasuraman were tangibles, reliability, responsiveness, empathy and assurance (Kasper et al., 2006), in their research, recommended the following crucial benefits that organizations with high-quality service can achieve:

Firstly, they create a competitive advantage by insulating customers from competitors. In service quality studies, this aspect refers to customer inertia. If the service is perceived to be of equal or higher quality than that of competitors, customers have no motivation to defect, regardless of the tactics by competitors in the same Industry. Bhattacharjee (2010) comment that high service quality can immunize a service organization or make it less vulnerable to price wars. In the airline industry, price wars can make or break an airline. Service firms known for providing high-quality services to their passengers or clients are at an advantage by providing additional differentiating attributes that differentiate its' service offering from other competitors in the same Industry. In addition, they can afford to charge a higher price as they offer more benefits than the competition. Their clients or customers are willing to pay the extra price or Premium price because they value the quality of their service.

Service Quality Reflections on the Airline Industry in South Africa

In comparison to first world countries, South Africa has a relatively young service sector. (Lovelock et al., 2004) posit that the air travel industry is a progressively expanding service sector in the airline industry. Brown & Bitner (2007) indicate that in both developing and undeveloped countries, service quality has developed at an accelerated speed, thus entrusting greater attention to service encounters as they form a crucial component to an organizations' competitive advantage. Yang, et al., (2015) argue that many factors play a role and influence a passenger's decision to travel with a particular airline. One such deciding factor is the airline's superior service quality, which directly influences satisfied passengers. From a strategic perspective, airlines with superior service quality are in a favourable position to compete with other airlines companies and win over passengers from other low-quality airlines and maintain a superior competitive advantage. Airline companies adopting diverse strategies to outmanoeuvre one another are in a favourable position of power in the marketplace (Chen, 2013). Shanka (2012) believes that the survival and growth of airlines depend on their ability to provide excellent quality of service to passengers. Andotra, et al., (2008) argue that the debate on airline service quality is essential for the Industry, and some common ground should be explored for measuring the expectations of airline passengers. However, the researchers believe that this is often difficult as the Industry is highly competitive and customer expectations are complex to understand and quantify in a general manner. The diversity of passenger expectations makes it challenging to design one specific service offering to many diverse

culturally dynamic passenger segments with unique service encounters. Statistics South Africa (2015) has reported that in South Africa, service quality research within the airline industry appears almost virgin the territory; this is why the researchers envisaged great significance in researching this area. There is scarce literature in the airline industry that relates to service quality, as the focus of most studies conducted in the airline industry has focused on the South African economy, which is also relatively new. Due to apartheid and segregation laws, the country only recently in 1994, after the new South African government of democracy was established, joined the global economic arena. Despite the rapid growth in the South African economy, it has yet to achieve equality as those of other well developed, healthy economies of the world. Nikbin, et al., (2015) argue that there are great challenges for executive management, who face challenges in allocating financial resources that are streamlined towards planning and delivering superior services to airline passengers since passenger expectations and demands are unpredictable and difficult to quantify. Mantey & Naidoo (2017) argue that service quality in the airline industry is a complex phenomenon that is often difficult to unpack. It is due to the diversity and complexity of passenger's expectations that often differ. However, it is crucial to the survival and progress of this Industry to shed more light on passengers' expectations towards service quality, so that management can be in a better position to service their customer's needs. Excellent service quality can have an impact on ensuring that passengers receive value for money. It will lead to loyal passengers that continue using the airline's services for their destination of travel.

New Technologies, the Internet and Social Media

ICT's, new technologies, the internet, and social media platforms are essential and influential catalysts that can create a chain reaction in the service offering and, therefore, influence and improve the service encounter quality in the service industry domain. Information and Communications Technology (ICT) is an essential ingredient in unpacking the customer experience and its' impact on the actual creation of the customer experience (Edvardsson et al., 2011). Furthermore, Gelderman, et al., (2011) argue that advances in Information and Communication Technologies (ICTs) that emerged during the fourth industrial revolution serve as a valuable interface between the customer and the service provider. It happens as a result of the introduction of new technologies. In order to improve the service experience and quality, both customers and the service provider should work together to use ICT. According to Janawade, et al., (2015), utilizing technologies and their relevant allied novelties would only heighten passengers' expectations. Passengers would quickly embrace such technological innovations if they benefited from the related service offering. The disadvantage is that customers may become dissatisfied with the service experience if the technology fails to provide the required service. To ensure effective manipulation of ICT, researchers (Geum et al., 2011) argue that managers must change their strategy by deploying effective strategies to deliver services while concurrently using real-time applications for servicing customers. The accelerated pace of technology in the airline industry may compel AOSA to join in and develop improved ICT systems that can add value and streamline the improvement of the service experience. According to Lock, et al., (2010), management has an obligation and concern to safeguard the airline's future achievements and sustainability, highly reliant on the airline's capability to practice developing technologies in all of their services.

It would deliver quick and efficient service offerings with an outcome of a positive excellent customer experience. Such experiences may go further in assisting in stimulating loyalty with the passengers. The internet has changed the way passengers can purchase their tickets. Potential passengers can use the internet, select the best airfare from various options online, and purchase an online ticket without leaving the safety and comfort of their homes. The internet has made online airline ticket purchases very convenient for passengers. Previously, passengers relied solely on

travel agents when booking or making a ticket purchase. Often met with airline passengers incurring an additional cost. Cutting our travel agents meant cost savings to airline passengers. Laudon & Laudon (2006) add that the internet and the utilization of e-commerce platforms have transformed commerce and trade in general. The researchers believe that the advancements in the internet, social media, and new technologies have also influenced how service quality is being delivered to airline passengers within the Industry in South Africa. AOSA has revolutionized their business operations and has embraced the internet and other E-commerce platforms to serve the needs of its various passenger segments. Geum, et al., (2011) posit that airlines also use e-ticketing, which processes transactions *via* the Internet and E-commerce platforms. Its' positive impact has registered in reducing operations charges to the carriers. Further, e-ticketing has made this offering very convenient for the passengers. Some passengers choose to use conventional travel agents for making their respective travel bookings and ticket purchases. Advances made in technology has changed the face of business. The internet has enabled speedy and efficient online communication between service companies and their clients (Menne & Halova, 2013). There is a clear distinction between Web1.0 and Web2.0. Web 1.0, communication and the stream of information can be seen and interpreted as one-sided, namely, accelerated by the service firm to the client. There is no instructive feedback from the customers (Menne & Halova, 2013). Under Web 2.0, online communication is performed in a bilateral sequence communication. The company can provide a better service experience since customer feedback is timeously received (Fuchs et al., 2010). Social media platforms work employing Web2.0. Clients and customers very effectively communicate with a company or an individual.

In this service encounter, both the client and the company can effectively communicate for two ways response (Fuchs et al., 2010:41). We note that the most popular social media platforms passengers can use to acquire information and promotions and special deals provided by airlines are on Facebook, Linkedln, Wikipedia, Twitter, Pinterest and GooglePlus, to name but a few. Scholars. The studies by (Esu & Anyadighibe, 2010: Edosomwan et al., 2011) cite different approaches in which trendy Social media is triggering in-roads into the carrier's services marketing arena in offering customer satisfaction passengers in the Nigerian airline business. Social Customer Relationship Management (SCRM) is a new concept that has emerged due to technological advancements. The term "SCRM," according to Menne & Halova (2013), is a relatively new concept. Its creators were Mohan, Choi & Min (2008), who define SCRM as an essential part of Web 2.0 and social networking that includes the airline company's current SCRM architecture to help provide clients with higher levels of service quality.

RESEARCH METHODOLOGY

A descriptive approach focusing on cross-sectional analysis (sample survey) was employed (Zhang, 2012; Sekaran &Bougie, 2013; Hofstee, 2010; Creswell, 2009). A five Point LIKERT scale questionnaire was designed to collect primary data from the field (AOSA passengers). To answer the research questions proposed in the research "convenient" sampling method, Battaglia & Lavrakas (2013) data were directly collected from some 684 passengers from two South African airports out of a target population of 17 400 000 passengers passing through the two airports (ACSA Annual Report, 2014). The response rate for the completion and returning of the administered questionnaire was (97.7%). The Cronbach's alpha test on the data showed that the Cronbach alpha scores were more outstanding than 0.81, indicating good reliability of the instrument used to collect the data.

DISCUSSION OF RESULTS

Both descriptive and inferential statistics will is discussed from the empirical research in detail below. The results showed that most of the sample (71%) travelers fall in the younger age category (18-40 years). These are often people who use technology regularly and enjoy their service offerings since they are techno-savvy. This sample segment was young and middle-aged passengers of AOSA who more often than not own a Smartphone, computer or tablet. Providing services electronically to this group of passengers would enrich their travelling experience. The demographic data collected in this research demonstrates that AOSA passengers are younger and are" techno savvy" and often engage in technological gadgets. Passengers were asked their method of ticket purchase and which method was most convenient to them. Some 58% of the participants reported using online/Internet facilities for purchasing tickets, while 32% used a travel agent. These two methods were convenient for them. 7% of the respondents bought tickets from the front-desk staff at the airline terminals, while 3% used other means of buying a ticket. Respondents valued the use of technology as the majority of respondents purchased tickets online or *via* Internet facilities. Esu & Anyadighibe (2014) concur with the research and indicate that social media and mobile smartphone technologies are modern and convenient in disseminating information to passengers. This avenue is proving more advanced and satisfying to members in society.

Inferential statistics discussion on table 1 will be put forward below.

Table 1
NEW TECHNOLOGY IN DELIVERY OF SERVICES TO PASSENGERS

Correlations

			Q 3.5	Gap of ICT
Kendall's Tau_b	Q 3.5	Correlation Coefficient	1	-0.222
		Sig. (2-tailed)	.	0
		N	684	684
	Gap of ICT	Correlation Coefficient	-0.222	1
		Sig. (2-tailed)	0	.
		N	684	684

Correlation is significant at the 0.01 level (2-tailed).

The correlation analysis showed that a negative correlation exists between service quality and ICT. The results indicate a negative gap score for ICT ($r=-0.222$, $p<0.01$), which implies that ICT is not properly employed by South African airlines to deliver their service encounter. This could be due to old, outdated systems. The negative gap scores are indicative of dissatisfied passengers of the airline. In literature, it is clear that new technologies important in improving a service encounter and thus ensuring customer satisfaction. In this research, new technologies have not been taken advantage of to streamline efficient service offers, and this has caused dissatisfaction in the quality of the service offering provided by the airline.

As a result, the hypothesis is accepted. According to Esu & Anyadighibe (2014)'s research, traditional marketing in the twenty-first century should include critical elements of knowledge-based economies, social-media technologies, and micro-marketing to meet passengers' service expectations. Elkhani, et al., (2013) contribute to the debate by stating that sufficient evidence has been provided on how evolving technologies may progress service quality conveyance. According to the findings of this research, AOSA should restructure its services, embedding them with new ICT applications, specifically new technologies, in order to provide services to all passengers

IMPLICATIONS AND RECOMMENDATIONS TO MANAGEMENT

This research has highlighted the importance of ICT new and innovative technologies in delivering excellent service quality by AOSA. It is the responsibility of AOSA management to consider deploying these new technologies. While, seemingly, AOSA uses ICT to deliver services to passengers, some of these systems are old systems and may need the current state of the art upgrading. This research reflects that respondents would like to see AOSA using new technologies in serving them more efficiently and effectively. In the survey, the general comments from the passengers were that AOSA should use new technologies to transmit information relating to passengers' flight bookings, flight departures and arrival. Additionally, this research further highlights ICT capabilities. AOSA should take advantage of the numerous technologies available in delivering excellent service quality to its passengers. The ability of the AOSA to adapt to change assisted by new technologies will determine its level of competitiveness in the airline industry and add to its growth and future sustainability in this service sector industry. In keeping abreast of the 4th industrial revolution, the authors posit that innovative technologies are being entrenched in society for the foreseeable future; a proliferation of new technologies, including mobile and smartphones, has become part of modern society. Therefore, AOSA, in order to keep abreast of the current times, must adapt to change. The only way to commit to this new strategic initiative is for the airline to move forward by proactively adopting and investing in modern top of art new technologies to meet passengers' service expectation demands. This is an excellent way forward to improve the overall service quality of the airline industry and keep its passengers happy. A happy customer is loyal and will continue in his/her patronage to the airline. This satisfied and loyal customer by word of mouth can also spread favorable commentary about the airline to friends and family, and this could spark the possible sale of airline tickets to them as well.

FUTURE RESEARCH

Investigation into specific ICT systems and applications of local South African airlines would help deliver superior service to their passengers. More future studies on the extent to which young passengers or millennials must be approached through all social media platforms and mobile technologies. Research like this on millennials would provide the South African airline industry with new information on designing their communication strategy on online platforms and social media to add to their brand and increase customer loyalty in this up-and-coming market segment, displaying a significant amount of spending power worldwide. Comparative research of AOSA services against foreign-owned airlines should be conducted in future. It may provide South African-owned airlines with valuable input to compare and benchmark their services against international best practice, thus improving services in the local marketplace.

CONCLUSION

ICT's and new technologies are valuable tools that improve and add value to a service, thereby differentiating it in the marketplace. Excellent service means satisfied customers and enhancing one's competitive advantage in the airline industry. Airlines in South Africa are using ICT's and new technologies to make their services more appealing to their techno-savvy passengers. The internet and social media can also be used to promote specials that the airline is offering to passengers. The brand of South African owned airlines can also be posted on social media to gain awareness to a more extensive customer base. New technologies and ICT's are crucial in any organization, and an airline also has to keep abreast of technologies to stay sustainable in the years to come.

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