An Assessment of Service Quality and Customer Satisfaction levels in Railway Industries: A Case Study of Tanzania Zambia Railway Authority (Tazara) Passenger Train in Zambia.

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Abstract

Rail transport plays a critical role in the development of any country. With its inherent advantage of being bulk carrier, safer and cheaper, rail transport is an important component in intermodal transportation. It is also more environmentally friendly, has less congestion and has a better fuel efficiency than other modes of transport. A poorly utilised railway adversely affects transport system and leads to decreased contribution to the country’s economy. Customer satisfaction and retention is one of the key determinants to measure the quality of products or services in the railway industry. Due to the growing importance of quality in our life, customers desire to enjoy a relatively better quality of products and services. Therefore, the rapid population growth in Zambia has contributed to an increase of people travelling demands. In Zambia, Passenger trains are the cheapest and comfortable mode of travelling especially for long distances. Hence, in today’s world, the companies who do not provide value to their customers bring an opportunity for the competitors to steal these customers. Service quality has been viewed as a determinant of customer satisfaction. Various researchers have considered different dimensions of service quality. The aim of the study was to assess Service Quality and Customer Satisfaction levels in Railway Industries: A Case Study of Tanzania Zambia Railway Authority (Tazara) Passenger Train in Zambia. In order to carry out this research, questionnaires were main instruments used in addition to the existing detailed literature review. Two hundred (200) respondents were selected and these respondents were on-board on the passenger railway train travelling from New Kapirimposhi to Nakonde station and beyond. The study results indicated that truly there is a relationship between service quality and customer satisfaction. Personal interaction of customers with service staff, reliability of the railway, assurance, empathy, responsiveness, tangibles, management reaction towards accident clearance and ticket refund as aspects of service quality greatly influence customer satisfaction. The findings also indicated that the railway industry should focus on improving the quality of their services for better and greater customer satisfaction.

Key words: Service Quality, Tangibility, Courtesy, Customer Service, Customer Satisfaction, Customer Loyalty, Responsiveness, Assurance, Empathy, Reliability, Competence
Abbreviations and Acronyms

SQ Service Quality.
TPL Tazama Pipe Line.
SSA Sub-Saharan African.
QSI Quality Service Index.
CSO Central Statistics Office
GDP Gross Domestic Product.
ZRL Zambia Railways Limited.
EUR European Union Railways.
SRT State Railways of Thailand.
RSZ Railway systems of Zambia.
RDA Road Development Agency.
AFD French Development Agency.
UBZ United Bus Company of Zambia
ICS International Customer Satisfaction.
RTSA Road Transport and Safety Agency.
TAZARA Tanzania Zambia Railway Authority.
ISO International Organization for Standardization.
SADC Southern African Development Community.
NACALA Chipata, Muchinji, Nacala railway corridor.

Customer Service: it is an economic activity, that is an intangible product and it does not result to ownership. It is therefore, consumed at a point of sale.

Customer Satisfaction: The positive evaluation of the product or service that the customer acquires as a major reason to continue a relationship with a company’s service or products, and an important pillar that upholds loyalty.

Reliability: It is the ability to perform the promised service dependably and accurately.
Responsiveness: It is the willingness and or readiness of employees to help customers and to provide prompt and timeliness of service.
Assurance: The knowledge, courtesy of employees and their ability to convey positive services to create customer confidence.
Empathy: The provision of core and individualized attention to customers.

INTRODUCTION

1.1 Overview

Understanding the development of Railway transportation management in Zambia is crucial to the understanding of the challenges facing the industry. In Africa, the potential for growth and development is quite promising. The expansion in international trade among most African countries such as Zambia, Tanzania, Kenya and Zimbabwe including Botswana has resulted in increased demand for more effective transportation. This expansion of international trade in these regions has placed a lot of demand on the importance of the transportation industry. Transportation is an important part of human activity. It forms the basis of all socioeconomic interactions (World Bank, 1994).

In many developing countries, lack of transport facilities often hinders economic development. A good transport system is essential to support economic growth and development (Agbaeze and Onwuka, 2014). Bad roads, inadequate fleets of vehicles, trains, airplanes and congested ports are common challenges that transportation sector in developing countries are facing (Bina et al., 2014). Physical problems such as untrained transport managers and planners, capital
Restructuring and bureaucracies, ineffective traffic regulations are also crucial challenges that different modes of transportation are facing in Zambia.

Generally, railway transportation is the actual physical movement of people and goods from one place to another (Ahukannah et al, 2003). Several means of transportation exist for both man and goods. These ways have developed through the span of time of man’s existence on the earth. Air transport is a relatively more recent means of transportation. Before this time, man had transported himself and goods on land with the aid of animals, on wheels and of late automobile and trains. Marine travel is as old as civilization with the invention of the ships to sail at the time of the earliest cities in hundreds of centuries BC. (http://pdfs.semanticscholar.org)

Trade and exchange were significantly expedited between regions across the globe through water transportation. This went on with its own tribulations such as slave trade and the problem of sea pirates. Air foldaway has not only aided movement of man and goods but also importantly man’s exploration to space to study the operations of the universe and aid communication. It is not to be disregarded that pipelines have equally assisted in transporting raw and finished liquid materials such as crude oil, which is a major economic resource and one of the most lucrative foreign exchange earners across the globe according to Nwafor-Michael-Ezaka and Onya Ogwu, 2019.

Road transportation has its own history. Its flexibility and ability to create accessibility to the smallest units of land uses gives a great advantage and helps in the development of local economy. In Zambia, road transportation is the commonest and most extensively used form of transportation. It involves the use of bicycles, motorbikes, carts, cars, buses, lorries, trailers, tankers, etc., in moving people, goods and services from one location to another where they are needed (Anyanwu, 1997). Achieving entrepreneurship especially in emerging economies cannot be achieved if transportation, which is an important component of globalization and economic growth and development, is not properly overhauled.

Transportation, for any country is a dynamic part of its social and economic life. It enhances trade needs whereby the country’s manufacturing industries, tourism and distribution needs are served. Consequently, a vibrant, responsive, effective and efficient transport system in Zambia will enhance economic, developmental and strategic roles in the global system or economy (Agbaeze and Onwuka, 2014).

It is for this reason that Transport has been accorded high priority in the country and the Ministry of Transport is charged with the responsibility of delivering a transport sector that is capable of meeting the needs of a modern, competitive, industrial economy. Even though Transport conventionally covers road, rail, water and air modes, the Ministry of Transport is assigned the statutory responsibility for Rail and Mass transit, Inland Waterways, Maritime, Intermodal co-ordination and policy issues according to CSO report (2013).

Transport service industry comprises of several modes, which range from air, water, railways, pipeline and road transports. Pipelines are used to transport items which are liquids and gaseous in nature while air, water, roads and railways are used to transport goods and passengers. Hence, this study aimed at assessing the levels between Service Quality and Customer Satisfaction in Railway Industries in Zambia a case study of Tanzania Zambia Railway Authority.

1.2 Historical Rail and Road Competition

In general, rail traffic in Zambia comprises mainly export of copper mining products and some
agricultural products. Domestic and imported goods include fertilizer, chemicals, liquid fuel and grain traffic (Jorgensen, 2012). This resulted in reduced service levels by the 1980s arising from poor track condition, a lack of available rolling stock and increased bureaucratic inefficiency. Jorgensen (2012) states that road infrastructure improvements, largely made with international donor funding, reached the most isolated areas while there was little rail development that was generally limited to improvements to the 19th century arterial network and the construction of specialised mining railways. At the same time, many important long-distance arterial rail routes, for example Benguela Railway in Angola and the Sena line between Beira in Mozambique and Malawi, were closed due to civil wars in various countries. One important positive and strategic rail development was the construction of the TAZARA railway line between Zambia and Tanzania (Jorgensen, 2012).

The second half of the 20th century encountered transformations in the modal split of inland freight transport. The need for mass production led to the spread of new logistic philosophies, e.g. just in time and lean production, increasing the importance of time, reliability and speed. Road traffic largely consists of high value consumer goods, refrigerated and perishable products, mine machinery, and minerals. Jorgensen (2012) states that road transport has become so much the norm for international and local traffic that many companies are convinced that this is the transport mode of the future, while rail has become outdated due to the following:

With road, communications between customer and transporter are usually carried out on a more personal basis, whereas with rail a high turnover of marketing staff makes it difficult to build relationships;

Road transport is highly visible while most rail operations take place out of the public view. This creates the impression that rail is of little consequence. The high number of road accidents and health considerations regarding AIDs is, however, casting a negative perception on road transport.

Road degradation and highway congestion particularly at border crossing points is prompting governments to upgrade these facilities but at public expense

“One stop shop” border crossings facilities speed road transport operations; and

Smaller truckloads can be conveniently redirected when required, and on short notice, compared to individual rail consignments such as containers riding on block trains.

To a large extent, this poor competitive position in rail versus road (not to mention air and waterway, which are very poor) transport is mainly due to:

1. Overall government policy concerning the transport sector through infrastructure investment, pricing, fare controls, etc.;

2. Operational inefficiencies by the two rail operators in Zambia.

There are many more international crossing points on road than with rail. This provides road transport operators opportunities to use short cuts, greatly reducing the overall distance between some points when compared to rail. For traffic between Lusaka and Beira, the road route via Chirundu is only 1,054 km, compared to 2,027 km for rail via Bulawayo. With the opening of the Beit Bridge Bulawayo Railway (BBR) rail route from Beit Bridge to Bulawayo, the rail distance from Durban to Lusaka has been reduced to 2,684 km, compared to 2,394 km for road through Harare and Chirundu. Such reductions in theory should make rail more competitive but in practice, road operators are in a better position to obtain return loads and this reduces rail competitiveness (Jorgensen, 2012).

Rail transport in Europe suffered a major decline in the period from the 1970s to the early 1990s. Since then there has been a recovery in the European Union’s (EU) 15 countries, with a 15.0
% increase in rail freight ton-kilometres over the period 1990-2007. In the wider EU28, however, decline had continued with a 14.0% decrease between 1990 and 2007 (Menaz & Whiteing, 2010). Marinov et al, (2013) asserted that between 1995 and 2008, freight transport inside the European Union increased as fast as the economy, with an average annual growth of 2.0%. Moreover, during the economic downturn (2008-2009), a drop of 11.2% in the freight transport accompanied the decrease of 4.2% in the EU-28 gross domestic product.

Passenger traffic by rail had increased by 28.0% in the EU15 countries over the period 1990-2007, against the backcloth of a 32.0% increase in car travel. The Commission of European Communities (CEC) as indicated by Menaz and Whiteing (2010) reports that rail passenger growth in the EU15 countries has not been matched in the wide EU28, where a 6.0% fall had been recorded over the same period. Switzerland has the highest train density in Europe, a higher proportion of the population uses public transport and they travel longer distances than in any other country except Japan. In total, about 353 million people travel with Swiss Federal Railways every year. Every Swiss resident uses rail 50 times a year (EU 27: 15 times). Rail travel in 2010 totaled 17.5 billion passenger km a rise of about 50.0% since 2000 (EU 27: +10.0% since 2000). On average, 149.7 trains per line travel on the Swiss rail network each day (EU 27: 45 trains). In other words, 8,000 trains run on the network each day. SBB transports 480,000 items of baggage every year (Bosch, 2014).

In the USA, Amtrak operates more than 300 trains each day on 21,300 miles (34,000 km) of track with select segments having civil operating speeds of 150 mph (240 km/h) and connecting more than 500 destinations in 46 states in addition to three Canadian provinces (Amtrak Fact Sheet, 2008). According Amtrak 2013, in fiscal year 2012, Amtrak served a record 31.2 million passengers and had $2.88 billion in revenue while employing more than 20,000 people. In Japan, rail transport is a major means of passenger transport, especially for mass and high-speed travel between major cities and for commuter transport in metropolitan areas. There are 27,268 km of rail crisscrossing the country. JR (a group of companies formed after privatization of JNR) controlled 20,135 km of these lines as of March 31, 1996, with the remaining 7,133 km in the hands of private enterprise local railway companies.

Japan's railways carried 22.24 billion passengers (395.9 billion passenger-kilometres) in fiscal 2006 (Annual Report of Rail Transport Statistics, July 2007). Japanese railways are among the most punctual in the world. The average delay on the Tokaido Shinkansen in fiscal 2006 was only 0.3 minutes. When trains are delayed for as little as five minutes, the conductor makes an announcement apologizing for the delay and the railway company may provide a "delay certificate" as no one would expect a train to be this late (Central Japan Railway Company Annual Report, 2007).

Apart from worldwide view on customer satisfaction in public transport sector, in Tanzania many literatures have talked so much about customer satisfaction as a necessary condition for the success of any organization. However, the fact that the topic of customer satisfaction is amusing in literature, only one study in public business done in Dar es Salaam was reviewed. Some of the related studies in the field of customer satisfaction include study done by Ame, (2005) on the effects of quality on satisfying and is a consequence on customer's behavioural intentions by using a case study of service firms in Tanzania. The study was set to examine the causal order between perceived service quality and customer satisfaction, relationship between service quality and behaviour intentions and relationship between customer satisfaction and behaviour intentions.
In addition, some of the things from the study were, as regard to the causal order between service quality and customer satisfaction, it has been found that the mediation power of customer satisfaction on service quality on the customer satisfaction behaviour intentions relationship. This finding has been constantly observed for the industries studied using survey research. This implies in the end, that customer satisfaction is the mediator between service quality and behavioural intentions. It has also been observed from the qualitative study finding that evaluations of customer satisfaction are also influenced and moderated by a number of environment factors such a firm’s offerings, customers, income levels, management culture, goal of the service provider, and that satisfaction is an antecedent to loyalty in attitude and in behaviour (Dobholkar, 2000).

Rail transport is a major sector with a significant contribution to the GDP of any country. This is especially ideal for landlocked counties like Zambia (Dzawanda, 2009). Although Zambia’s Gross domestic product has doubled since independence, per capita annual incomes are currently at about two-thirds of their levels at independence (CIA, 2012). Zambia's economy has experienced strong growth in recent years, with real GDP growth in the period 2005-2011 of more than 7.9% in 2013. Zambia's economy is well diversified in terms of GDP sectoral contributions. According to CSO (2013), the growth in GDP was as a result of increased output in “Construction and Transport” among other sectors. Transport is therefore a prerequisite to economic growth. Rail transport is an integral part of intermodal transportation of goods and passengers for countries engaged in intra and international trade and movements. Zambia falls in this category of countries in need of multimodal transportation. However, Zambia has not made use of the advantages of the rail. Railway in Zambia is not only a minor player in the transport sector but its performance has also been deteriorating. For instance, freight traffic hauled by Zambia Railways Limited (ZRL) has fallen from 1.7 million tonnes in 2002 to 0.6 million in 2012. The same is true for passenger volumes, which dropped from 223,347 passengers carried in 2009 to 192,608 passengers in 2012 (ZRL, 2014). For Tanzania Zambia Railways (TAZARA), the picture is just as gloomy with freight traffic having dropped from 1.2 million tonnes in 1990 to below 400,000 tonnes in 2013. TAZARA passenger levels have also dropped from 998,000 in 1990 to an average of 197,240 passengers per year between 2011 and 2014. With better performance, the railway can take up its position in the intermodal transport, which is critical to national development. The following descriptions of the railway entities further explain the deteriorating position of railway traffic in Zambia.

Zambia Railways Limited (ZRL)

Zambia Railways limited was formerly part of Rhodesia Railways. The construction of the line started at Vic falls Bridge in 1903 and was finally connected to Zaire (Democratic Republic of Congo) in 1909. The line operated as Rhodesia Railways until the dissolution of Federation of Rhodesia and Nyasaland in 1963 when it was operated as a Unitary Railway System with assets being jointly owned by Zambia and Zimbabwe. In 1967, the 35 Zambian government passed the Zambia Railways Act, which gave birth Zambia Railways board. Zambia Railways Limited (ZRL) has a total track length of about 1,266 km, of which 948 is the main line, and runs from the border with Zimbabwe in Livingstone in the south up to the border with the Democratic Republic of Congo, with branch lines in the Copperbelt. ZRL in its present form has passed through various managements. In 1978, it was placed under the care of Zambia mining and Industrial Corporation. In 1982, the Railways Act vested all assets and liabilities of Zambia Railways Board into ZRL, a company incorporated under the companies Act of
Zambia. The transfer was affected in 1984 (ZRL, 1990). It has been operating as such apart from 2003 to 2012 when it was concessioned to Railway systems of Zambia (RSZ), a private operator. In the late 1980s, the performance in terms of freight movements was averaging about 4.6 million tonnes per annum (ZRL, 1990). However, in the subsequent years there has been a steady decline in both freight and passengers.

**Tanzania Zambia Railway Authority (TAZARA)**

TAZARA is jointly owned by the Tanzanian and Zambian governments and operates in both countries. The construction of the railway line was funded by China. It was completed in mid-1975 and started operations in 1976. An important economic consideration was to provide landlocked Zambia with a new access route to the sea, reducing its dependence on existing routes in Southern Africa such as the then Rhodesia (now Zimbabwe) and South Africa which at that time had not attained political independence. In Rhodesia particularly, there was great animosity with Zambia, which needed alternative route to the port. The railway line runs from Dar-es-Salaam to Kapiri Mposhi in Zambia, where it connects with ZRL. It covers a distance of 1 860 kilometres and transports both freight and passengers (Zambia Privatisation Agency, 2005).

After decline in performance of TAZARA in the initial stages of operations, the Tanzanians and Zambians invited the Chinese back to help manage the railway in 1983. Passenger traffic on the railway rose from below 500,000 in the early 1980s to 988,000 in 1990 (Monson, 2004). In the 1990s, the economic performance of the railway began to decline with changes to the broader economic and political environment. With the independence of Namibia in 1990 and the end to apartheid in South Africa in 1994, unfriendly white leaders no longer dominated Southern African regimes and Zambian copper had more economic outlets to the south and east. Road transport provided competition in the form of the Trans–Caprivi Highway and the Walvis Bay Corridor to Namibia. The completion of the U.S.-sponsored Tan-Zam Highway brought direct roadway competition along route.

**Mulobezi Railway**

The Mulobezi Railway line once known as the Zambezi Sawmills Railway was constructed to carry timber from Mulobezi to Livingstone in the Southern Province of Zambia. The Zambezi Sawmills company was founded in 1916 to exploit forests of Rhodesian Teak on the north bank of the Zambezi above Livingstone. The timber is hard, strong, and termite-resistant and found a ready market as railway sleepers, parquet 37 floors and other domestic use. Hence the need for rail to transport the timber. The government then in the early 1930s constructed Mulobezi Railway Line. The railway line covers a distance of 163 kilometres and links Livingstone in the Southern Province to Mulobezi in the Western Province of Zambia. According to the Zambia Privatisation Agency (2004), the Mulobezi Railway Line played a significant economic role since the 1930s as it transported hardwood timber to the copper industries on the Copperbelt in Northern Rhodesia (now Zambia) and in Southern Rhodesia (now Zimbabwe). A study conducted by the Zambia Privatisation Agency (2004) revealed that at the peak of its operations in the 1970s, the Mulobezi railway line ferried about 1 000 000 tonnes of sawn timber and 150 000 tonnes of round timber. The Zambia Privatisation Agency (2004) study also reveals that the Mulobezi area was not serviced by road infrastructure, making the Mulobezi Railway Line the only means of transport for people between Livingstone and Mulobezi. In the early 2000s, Mulobezi Railway Line carried an average of about 18 000 passengers per annum. However, the railway line agonized years of disrepair to the point of running...
as slow as 10km/hr. As a result, both the freight and passenger levels have drastically reduced almost to nothing. In 2005, the line carried about 700 tonnes of freight but in 2013, only 500 tonnes were conveyed. On the hand, 16,500 passengers used the Mulobezi train in 2005 but in 2013, there were only 13,000 passengers.

**Chipata-Muchinji-Nacala Railway**

Zambia Railways limited commenced operations on the Nacala corridor in 2014. Nacala is the terminal of the Nacala Railway that connects to the Central East African Railway of Malawi and the Chipata-Muchinji line that is owned by Zambia Railways up to the border with Malawi. In 2014, Zambia Railways only managed to move a paltry 96,000 tonnes of traffic. This further reduced to 75,645 in 2015. Considering imports and other traffic generated within Zambia, it is noted that there is more than enough traffic, which the railways can move but is being hauled by road trucks. The declining contribution of transport services by the rail contributes negatively to national growth. It also puts more pressure on the roads that in turn demands for more resources from the national budget to repair roads that are damaged by heavy goods carrying vehicles. Zambia Revenue Authority (ZRA) reported in 2014 that 500 to 600 trucks cross Kasumbalesa border every day, not to mention Nakonde and Chirundu. Furthermore, this means that the advantages that rail has in transportation will not be utilized.

**Advantages of railway transport**

Mehta (2015) states the following as the major advantages of rail transport:

1. It facilitates long distance travel and transport of bulky goods which are not easily transported by motor vehicles;
2. It is a quick and more regular form of transport because it helps in the transportation of goods with speed and certainty;
3. It helps in the industrialization process of a country by easy transportation of raw-materials at a cheaper rate;
4. It helps in the quick movement of goods from one place to another at the time of emergencies like famines and scarcity;
5. It encourages mobility of labour and thereby provides a great scope for employment;
6. Railway is the safest form of transport. The chances of accidents and breakdown of railways are minimal as compared to other modes of transport; and
7. The carrying capacity of the railways is extremely large. Moreover, its capacity is elastic which can easily be increased by adding more wagons. In addition, French Development Agency (AFD) in 2014 reported that trains, with their guidance along rails, despite the risk of derailing, are intrinsically safer than road traffic. Another factor which explains the unmatched safety of rail transport is compliance with rigorous procedures which:
8. Limit access to companies holding all the necessary qualifications, with requirements that are stricter and better enforced than in road transport which is a fragmented sector;
9. Ensure wide separation between running trains using “block sections” to prevent the risk of collisions between trains in both directions, head-on or rear-end.

Further, a block section is a stretch of track, usually between a few hundred meters and some tens of kilometres in length, where a train is only authorized to enter provided there is no other train in it; the outer limits of the block section are marked by signals and possibly by crossing or passing loops. Rail transport is more advantageous than its major competitor, the road, in the aspects of fuel efficiency, environmental considerations, traffic congestion and safety. A study sponsored by the United States (U.S.) Federal Railroad Administration in 1991 showed that on average, in ton-miles per gallon of fuel,
railways are about 4.5 times as fuel efficient when compared to trucks. In its last white paper, the Commission of the European Communities (CEC), stated that by 2050, 50.0% of road freight transport over 300 km should shift to more energy-efficient transport modes such as rail and waterborne transport (Emerald Insight, 2014). This is supported by Ford et al. (1995) who indicated that rail could achieve a 50.0 % reduction in energy usage for each ton-km compared to road-based freight systems. Furthermore, rail also allows higher axle weights and larger cargo volume capacity for lighter weight products.

**Disadvantages of Railway transport**

Rail transport has its own disadvantages. Robinson & Mortimer (2004) who stated that poor door-to-door capability, lack of flexibility, competition with passenger services for line capacity, perception of rail infrastructure and related system’s high costs, identified the main weaknesses for railway. Mehta (2015) also mentions the following disadvantages of the railway industry:

1. The railway requires a large investment of capital. The cost of construction, maintenance and overhead expenses are very high as compared to other modes of transport. Moreover, the investments are specific and immobile. In case the traffic is not sufficient, the investments may mean wastage of huge resources;
2. Another disadvantage of railway transport is its inflexibility. It’s routes and timings cannot be adjusted to individual requirements;
3. Rail transport cannot provide door-to-door service as it is tied to a particular track. Intermediate loading or unloading involves greater cost, more wear and tear and wastage of time. The time cost of terminal operations are a great disadvantage of rail transport;
4. As railways require huge capital outlay, they may give rise to monopolies and work against public interest at large. Even if controlled and managed by the government, lack of competition may breed in inefficiency and high costs;
5. Railway transport is unsuitable and uneconomical for short distances and small traffic of goods;
6. It involves much time and labour in booking and taking delivery of goods through railways as compared to motor transport; and
7. Because of huge capital requirements and traffic, railways cannot be operated economically in rural areas. Thus, large rural areas have no railway even today. This causes much inconvenience to the people living in rural areas.

Environmental considerations favour rail over road transport in that it produces less greenhouse gases than the road. Greenhouse gases trap heat in the atmosphere, which makes the earth warmer. People are adding several types of greenhouse gases to the atmosphere, and each gas's effect on climate change depends on three main factors: How much; How long; and How powerful. People produce larger amounts of some greenhouse gases than others do. Carbon dioxide is the greenhouse gas you hear people talk about the most. That is because we produce more carbon dioxide than any other greenhouse gas, and it is responsible for most of the warming. Although carbon dioxide is the most important greenhouse gas emitted by humans, but several other gases contribute to climate change too.

**Challenges associated with Railway transport**

Many railways in the world have been facing keen competition from highway carriers over past decades. Some railways have even suffered from a major decline in the market share and failed to adopt effective strategies to correct the situation (Lan & Lin, 2006). Taking freight transport as an example, the market share, ton-km, for European Union (EU) rails had declined from 32 per cent in 1970 to 12 percent by 1999 as reported by Lewis et al., as cited in Lan and Lin (2006). The weak
The financial performance of railways in SSA is the major threat to the future development of the railway sector. The railway sector in SSA cannot achieve the development goals expected by governments as long as the railway companies are financially non-viable. Olievschi (2013) stated that various analyses developed by the World Bank during the last years lead to the following major challenges that have generated the current unsustainable financial status of railway companies: Overoptimistic expectations on the potential of growth of freight volumes. In most cases, traffic gains have been much lower than the estimated figures used in the business plans. Underestimated investment needs. The investment needs proved much larger than anticipated, the traffic evolution did not generate the necessary resources for investments, and the governments were, in many cases not ready to be involved in the financial support of railway infrastructure. Operation of passenger transport services. In spite of the steady economic growth of most of the sub-Saharan countries during the last decade, the increase in passenger services in railways is not visible. In fact, passenger traffic has stagnated or declined in most of the railways, losing the competition with road transport. In most cases, these services are cross subsidised by the freight transport, creating additional barriers for the development of freight transport. The passenger services currently represent only 1.7% of the total passenger transport services in Africa. The suburban services consist mainly of morning inbound and evening outbound trains with little services at other times. The long-distance passenger trains, which were historically the only practical mode of transport in the region, are less and less competitive; the road networks are improved and the busses provide strong competition (Olievschi, 2013). Undercapitalization. The overoptimistic assessment of the market growth and of the costs for upgrading the infrastructure or rolling stock technical status has generated another risk. The companies created for this purpose have been endowed with far too limited a capital base to address the operating issues. It is common to discover that the estimated positive cash flows did not occur because the traffic growth did not happen as predicted, the need of investments for continuing operations are higher than estimated in the business plans. The railway sector is not assessed as part of the transportation system of SSA. Logistic performance in African countries is very low. The political and economic conditions in Africa does not allow the development of modern logistic systems that have stimulated trade and economic growth in the other regions of the world. According to the World Bank Logistic Performance Index (LPI), with the exception of South Africa, the African countries perform very poorly on infrastructure quality and in all main aspects of logistics. 

Main weaknesses are:
1. Poor functionality of rail-ports connections due to conflicts between rail and port authorities related with the control of rail activities in port areas;
2. Lack of institutional and operational connectivity between neighbouring railways and difficult border crossing procedures;
3. Customs and transshipment barriers that limit the performance of regional corridors;
4. Lack of transport safety due to poorly maintained vehicles and infrastructure;
5. Failures of governance due to corruption of police allowing laws to not be enforced; and
6. ill equipped transport infrastructure, poorly managed, operated, or maintained.
7. In addition to the above stated demerits, Agbaeze and Onwuka (2014) includes the following challenges as some of the difficult that railway transport face.
8. Poor response to emerging rail transport needs: The rail transport network has remained
virtually static, with little accretion to the network since the early 1960s;
9. Loss of patronage to the road transport sector;
10. Other problems and challenges facing the railways include poor productivity (and its negative effect on staff morale), retention and maintenance of un remunerative routes, huge wage and pension bills and other personnel related costs.

1.3 Statement of the problem
Zambia is one of the growing countries in terms of its economical size, which requires efficient means for long-distance transportation. The public transport, being primary mode of transport remains as a powerful yardstick to measure the overall development of a nation. Among the various modes of transport, railways is one of the biggest modes of passenger transport in the world. The railway passenger services face long-term competitive threats from airlines, luxury buses, personalised transport and improved public transport. Low cost airlines are giving stiff competition to upper class segments of the railway passenger service. Though there is competition from various modes of transport, the railway mode has its own unique features and provides more services to the passengers. In order to compete with other modes of transport, it is inevitable for railways to accelerate the growth of passengers’ origination. As the Zambian economy continues to grow, there is an increasing demand for transportation of goods and passengers within and outside the country. CSO (2013) stated in its Selected Socio-Economic Indicators that transport contributed to the economic growth of 6.7% in 2012 and 2013. However, the performance of railways in Zambia is very poor. Passenger traffic levels have plummeted for the two major railway companies over the years. Transport users have lost interest in the use of the railways because of speed restrictions and unpredictable running schedules and over poor rail infrastructure has resulted in the railways not earning enough income to sustain and subsequently improve their operations.

The problems faced by the railways have resulted in considerably reduced service capacity and hence their present inability to attract passenger traffic. “The underutilization of rail sector remains a great concern to the contribution to economic growth of the sector and many attributing low passenger traffic to customer satisfaction due to poor quality of service currently offered by the sector. However, improved rail systems has a number of positive externalities such” as reduced road tear and wear and decongestion and enhanced international interlink connectivity. The improvement in the operations of the railway industry would decongest the road passenger traffic and greatly reduce the fair wear and tear of the road network, which is causing more traffic accidents due to bad roads.

The need for improved quality of service remains paramount to retaining the competitive edge of the business. It was therefore important that the service quality and customer satisfaction levels in railway mode be assessed.

1.4 Research Objectives
The main objective of the study was to assess the service quality and customer satisfaction levels in railway industry in Zambia, a case of Tazara passenger Train.”

The Specific objectives of this study were:

i. Ascertain the levels of customers satisfaction on reliability
ii. Examine levels of customer satisfaction on running time
iii. Determine levels of customer satisfaction on physical facilities
iv. Ascertain levels of customer satisfaction on safety and security
v. Ascertain the levels of customers satisfaction on responsiveness.
1.5 Significance of the study
The study was significant in that the findings were going to provide relevant information to railway industries on the relationship between service quality on customer satisfaction that may be useful to formulate strategies that will help to maintain business competitiveness and aim at providing service quality, which will influence and impact on customer satisfaction. It also aimed at helping the railway industries to recognise the importance of good service quality, which has a greater influence on the satisfaction of their customers.

Customer satisfaction is a very important determinant to measure the organizational performance and accordingly, Service Quality factors can be used to judge the level of satisfaction in service establishments. If any service provider is keen on delivering high quality service, definitely customers may demonstrate a higher satisfaction (Gupta, McDaniel, & Herath, 2005). However, satisfying customers and measuring their level of satisfaction in the service sector is quite difficult since the specificity exists in the sector. Therefore, assessing the customer service quality and customer satisfaction levels in the railway transport service in Zambia was significant. Furthermore, the findings from the study highlights the elements of customer satisfaction, which have a greater benefit and are profitable if the railway industries can capitalise on them. Additionally, the findings from the study are likely to benefit other companies, organisations and the society on understanding the needs of customers.

Lastly, the findings that the study generated may help to provide information on the topic that has not been much researched on and thus contribute to the body of existing knowledge.

2.0 Literature Review

Below is a review of various literatures that have been undertaken in an attempt to reveal the relationship between customer satisfaction and service quality in general. The literatures covered include both the theoretical and empirical studies.

2.1 Theoretical Literature

Definition of Customer Service:

It is the act of taking care of the customer's needs by providing; delivering professional, high quality service assistance before, during, and after the customer's requirements are met as postulated by Lovelock & Wright, (2002). It is an economic activity that is an intangible product, which it does not result to ownership according to Kotler, (1996). It is therefore, consumed at a point of sale. Quality of the service was determined by the difference between expectations of the customer on the one hand and the customer perceived level of service delivered on the other hand, the gap between two points represents the size of service problem.

Services play a vigorous role in marketing program of many companies, and the superiority of the service, is a part of customers’ demanded package of value. Thus, in competitive free markets, some strategies like providing high-quality services have absorbed many customers (Parasuraman et al., 1985). In today’s complicated and competitive markets, the ability to gain and maintain customers’ loyalty is a critical factor for lots of organizations (Bendapudi& Leone, 2002).

Further, different scholars have defined a service differently. According to Kotler, (1996), “A service is an activity or benefit that one party can offer to another that is essentially intangible and does not result in the ownership of anything. Many services are personnel intensive, customized to suit assorted needs and preferences. These are jointly produced by both producer and customer(s) and are intangible and heterogeneous, this idea is commonly accepted that services are evaluated both by production, outcome and delivery process (Siddiqui & Sherma, 2010).
Service is an action or implementation, which is being done by one party for another, although its procedure is necessarily intangible and will not lead to the ownership of none of the parties (Lovelock & Wright, 2002). Kotler believes that the services are among economic activities that make benefits and advantages for the customers in specific time and place due to making the desirable changes in the receiver of the services. Lovelock and Wright confirm Kotler’s theory. Besides that, they believe that the services are a kind of economic activity whose consequence is to make value and benefits for the customers by facilitating the desirable changes in specific times and places. Service is a set of explicit and implicit advantages that is provided by using the supportive and facilitator commodities (Lovelock & Wright, 2002).

Additionally, service quality is a function of the correlation between customers’ basic expectations and their experience and impression before and after receiving the service. Unlike quality of goods, service quality can be evaluated based on both delivery process and the outcome of the delivered service (Fitzsimmons, 2008). When assessing the service quality, customers tend to judge according to certain subjective criteria formed prior to experiencing the new service. The expectations from a provided service are mostly predisposed by the prior experience as a customer. Once an organisation sets service quality standards and managers are committed to them, the organisation must find ways to ensure that customer contact employees perform their jobs well. Contact employees in most service industries like bank tellers, flight cabin crew, waiters, sales assistants, are often the least trained and lowest paid members of the organisation. What service organisations must realise that contact employees are the most important link to the customer, and thus their performance is critical to customer perceptions of service quality. The means to ensure that employees perform well is to recruit and train them well so that they understand how to do their jobs. Providing information about customers, service specifications and the organisation itself during the training promotes this understanding. (https://www.scribd.com)

The evaluation and remuneration system used by the organisation also plays a part in employee performance. Many service employees are evaluated and rewarded based on output measures such as sales volume (car salespeople) or the lack of errors during work (bank tellers). Nevertheless, systems using output measures overlook other major aspects of job performance: friendliness, teamwork, and effort towards customer satisfaction. Thus, customer-oriented measures of performance may be a better basis of evaluation and reward. For example, MFI UK has a tied commission to customer satisfaction surveys rather than sales volume. This type of system stimulates employees to take care of customer needs rather than focus solely on sales or profits. In case customers lack personal past experience, they might make a pre-purchase decision based on factors such as commercial advertising and word-of-mouth advertising. Over time, service institutions for customer expectations form certain criteria. These criteria are strengthened through customer experience as well as factors driven by the company including commercial advertising, pricing, apparent facilities and service employees. Clients tend to equate what they expect to achieve with what they actually receive after the buying stage. In fact, they consider how satisfied they are with service delivery and its outcome, judging the service quality at the same time. Although service quality and customer satisfaction are interdependent, they are not actually equal to one another (http://www.irjabs.com).

Many researchers believe that customer opinion about quality is based on long-term evaluations after receiving a company’s service, while customer satisfaction is a short-term emotional
response to the experience of a particular service (Javadein, 2010).

Definition of Customer Satisfaction:

The positive evaluation of the product or service that the customer acquires as a major reason to continue a relationship with a company’s service or products, and an important pillar that upholds loyalty. Customer satisfaction is defined as "the number of customers, or percentage of total customers, whose reported experience with a firm, its products, or its services (ratings) exceeds specified satisfaction goals as postulated by Lim et al., (2006)

Lovelock & Wright (2002) defined customer satisfaction as a sort of emotional reaction that arose from an actual experience. Brady & Cronin (2001) identified customer satisfaction as the link between quality and post purchase evaluation and firms quite often use customer satisfaction as measure of product or service performance. Satisfaction is either defined as an overall judgment of satisfaction or decomposed into satisfaction with performance or quality attributes (Brady & Cronin, 2001). Customer Satisfaction was determined by the feedback from the customer, which is necessary for maintaining or improving the quality of service being delivered. According to Oliver (2010), “satisfaction is the consumer’s fulfilment response. It is a judgment that a product/service feature, or the product or service itself, provided (or is providing) a pleasurable level of consumption-related fulfilment, including levels of under-or over fulfilment”. Wilson (2012) defined customer satisfaction as the customer’s evaluation of a product or service in terms of whether that product or service has met the customer’s needs and expectations. According to him there are factors that influence customer satisfaction such as product/service quality, perceptions of equity or fairness, price, personal factors (consumer’s mood or emotional state), and other consumers and so on. Oliver and Swan (1989) expanded the definition and mentioned that customer satisfaction is an affective term and they identify five different types of satisfaction, which are pleasure, relief, novelty and surprise.

Customer satisfaction is one of the most important key factors for customer’s future purchase (Mittal & Kamakura, 2001). Those clients that have been satisfied by consuming or buying any goods or services will most likely inform others about their great encounters likewise those dissatisfied customers will without any doubt communicate about their bad experience of the products or services. This is another reason why a company should take into consideration the level of customer satisfaction, as it defines the image of the products/services and the company that the customers have in their mind. By delivering goods and services that meets with the needs and wants of consumers, they will have a positive image and will talk good about the company. However, in case a company do not meet the needs or wants of the customers, it will create a negative image for the company in the mind of the customers and thus discouraging the customer to buy products or services from that particular company.

Moreover, according to Gundersen, Heide and Olsson, customer satisfaction is regularly defined as an evaluative conclusion made by a customer after consuming a particular product or service (Gundersen, Heide and Olsson, 1996). That is in regards to Gundersen, Heide and Olsson’s definition of customer satisfaction, the customer is able to conclude whether he/she is satisfied or not with the product or service only after consuming it. On the other hand, according to Oliver, consumer satisfaction is the process that compares the expectations of customer’s before buying any products or services to the process where the customer is consuming the product or service and after the consumption of the product or service (Oliver, 1980). In other words, according to
Oliver, consumer satisfaction is the course where they compare what the buyer has in his mind about any products or services before buying it to what the buyer feels and has in his mind while consuming and after consuming any products or services. While analysing the definition of Gundersen, Heide and Olsson to that of Oliver, we can see that the definition of Oliver is more detailed compared to that of Gundersen, Heide and Olsson.

The definition of Oliver takes into consideration the expectations of the consumer about a product or service before he even purchase it and compare it to what the buyer feels while consuming and after consuming the product or service. Therefore, using the theory of Oliver, it will be easier for a company to have a better idea about what types of products or services customer’s want to consume and what do consumers expect while consuming and after consuming any products or services. According to Wilson (2012), consumers can also influence the customer satisfaction. Martin and Pranter (1989) also mentioned that in countless service environments, customers potentially influence the satisfaction or the dissatisfaction of other customers. In addition to that, pleasurable encounters with fellow customers add positively to the service experience and seem to enhance perceptions of service quality as well. For instance, unruly behaviour or overcrowding would have a negative effect, whereas a number of good-humored spectators would have a beneficial effect by creating a positive atmosphere. Basically, it means that the spectator’s role takes on added significance where a large number of people are required to share facilities (Martin and Pranter, 1989). Although this approach underscores some of the earlier points illustrated by the services marketing triangle as well. For example, the levels of customer satisfaction may be influenced by the activities of the employee/staff that represent the human component and/or by the physical aspects.

A kind word or a pleasant smile from the staff makes the service experience more enjoyable whereas rowdy behaviour is likely to have the opposite effect. Bitner (1990) mentioned that if the service is affective it has a direct and immediate effect on the customer satisfaction. Therefore, it is important to encourage the staff to deliver the right service to the right people in reasonable time and showing good manners. Customer satisfaction has also become a major contributor for enhancing a service company such as long-term profitability, customer loyalty and customer retention. Many researchers also argue that customer satisfaction has a big impact on customer intentions to repurchase (Cronin, Brady and Hult, 2000). Furthermore, satisfied customers spread positive word of mouth and it helps to attract new customers and create long-term business profit.

According to (Manani et al, 2013), measuring customer satisfaction provides an indication on how an organization is performing or providing products or services. Therefore, customer satisfaction will be the measure of success to all the organizations including the public sectors as well. The literature review also shows that researchers have identified different factors of quality in the context of different services. Transit Cooperative Research Plan (TCRP) Report 100 defines transit quality as “the overall measured or perceived performance of transit service from the passenger’s point of view.” TCRP Report 88 (TCRP Report 100, defines five categories of measures that wholly or partially reflect the passenger’s point-of-view in transit services: (1) availability of transit service, (2) service monitoring, (3) travel time, (4) safety and security, and (5) maintenance and construction activity on passenger trips. Vanniarajan and Stephen (2008) identified the attributes that passengers use to evaluate the service quality of Indian Railways as reliability, assurance, empathy, tangibles, and responsiveness. It was
found that passengers were “moderately satisfied” to “satisfied” on these dimensions. Agrawal (2008) identified employee behaviour as most important determinant of customer (passenger) satisfaction with Indian Railway services.

Eboli and Mazzulla (2007) measured customer satisfaction in the context of bus service on various factors including availability of shelter and benches at bus stops, cleanliness, overcrowding, information system, safety, personnel security, helpfulness of personnel, and physical condition of bus stops. TCRP Report 100 identifies the following elements at bus stations for efficient service: shelters, waiting rooms and seating, doorways, stairways, escalators, signage and information displays, public address systems, and passenger amenities (including shelters, benches, vending machines, trash receptacles, lighting, phone booths, art, and landscaping). In a study on Internet banking, consumers gave the highest weight to the quality of service while selecting a particular bank (Geetika et al. 2008).

In another study of customer satisfaction with banking services, factors of customer satisfaction were traditional (basic) facilities, convenience, behaviour of employees, and the environment of bank (Jham and Khan 2008). J. D. Power and Associates (2008a) measured overall customer satisfaction of electric utilities through six factors: power quality and reliability, customer service, company image, billing and payment, price, and communications. J. D. Power and Associates (2008b) also measured customer satisfaction with high-speed and dialup Internet service providers based on five factors: performance and reliability cost of service, customer service, billing, and offerings and promotions. In another study, J. D. Power and Associates (2008c) found communication (information systems) to be a determinant of customer satisfaction for customers of utility companies.

Ribiere et al. (1999) identified customer satisfaction with hospital information systems in terms of timeliness, accuracy, and completeness. Yet another study on satisfaction with hospital services included communication with patients, competence of staff, staff demeanour, quality of the facilities, and perceived costs (Andaleeb, 1998). Customer satisfaction with full-service moving companies was measured across seven factors: transportation of belongings, loading service, unloading service, optional coverage, estimate process, packing service, and insurance/damage claims. This implies that the quality of basic facilities and other supporting facilities were used as criteria for satisfaction (J. D. Power and Associates Reports 2007).

**Measuring customer satisfaction**

Measuring customer satisfaction is a key performance indicator within business and is often part of the balanced scorecard. The main aim of measuring customer satisfaction is to make a prompt decision for the continuous improvement of the business transactions. Attracting a new customer as a source to build on existing relationship, customer satisfaction measurement is essential to be measured. Similarly, to retain the current customer base, measuring customer satisfaction is equally important. Actionable information on how to make customers more satisfied is, therefore, a crucial outcome. Unless the organization focus on their improvement efforts in the right area, the organization cannot maintain the competition level of business in a market. To recognize the needs of the customer is to satisfy the customer and to meet the need of the customer, a measurement of customer satisfaction is what matters the organization as propounded by Roche & Allen (2007). Measuring a customer satisfaction may be different in the different organization since there are different approaches to measure customer satisfaction. As one of the measurements of the performance of the quality
management system, the organization shall monitor information relating to customer perception as to whether the organization has met the customer requirements.

The methods for obtaining and using this information shall be determined. (American National Standards Institute/International Organization for Standardization/American Society of Quality 9001-2000). Every organization seeks customer satisfaction where these sorts of parameters helps an organization to measure the customer’s satisfaction and demands so that organizations can provide them with appropriate services as per their requirements. The possible dimension to measure customer satisfaction could be quality, price, trust relationship, complaints, problems and many others. The key point of measuring customer satisfaction is to conclude how to improve it and how to keep building a good relationship with customers and potential customers. International Organization for Standardization (ISO) (2000) states that "As one of the measurements of the performance of the Quality Management System, the organizations shall monitor information relating to customer perception as to whether the organization has met customer requirements. The methods for obtaining and using this information shall be determined". While it seems clear that increasing, customer satisfaction is beneficial to a marketing manager, how to measure it is less clear. Customer satisfaction has been studied from the perspective of the individual customer and what drives their satisfaction (Fournier and Mick 1999) as well as from an industry-wide perspective to compare customer satisfaction scores across firms and industries (Mittal and Kamakura 2001). While other research has examined customer satisfaction in a single organization (Schlesinger and Zornitsky 1991) or across several organizations (Iacobucci, 2001). In addition, specific tools for measuring customer satisfaction have been developed in the past, including SERVQUAL (Berry, and Zeithaml, 1988). Thus, there exists an ample literature on which to draw when attempting to measure customer satisfaction.

In attempting to measure customer satisfaction, it is possible that attributes can have different satisfaction implications for different consumer and market segments – the usage context, segment population, and market environment can influence satisfaction and product use (Anderson and Mittal 2000). Failure to take into account segment-specific variation may lead a firm to focus on the wrong aspect for a given set of consumers (Anderson and Mittal 2000). Furthermore, consumers with similar satisfaction ratings, yet different characteristics, may exhibit different levels of repurchase behaviour (Mittal and Kamakura 2001). It is clear, then, that market and consumer segments should be important factors to consider when measuring customer satisfaction and its implications.

Chen and Wang (2009) suggest a view of customer satisfaction as a kind of consistency evaluation between prior expectations and perceived service performance. Accordingly, the positive evaluation of the product or service that the customer acquires is a major reason to continue a relationship with a company’s service or products, and an important pillar that upholds loyalty. Satisfied customers are thus more likely to repurchase, lower their price sensitivity, engage in positive word-of-mouth recommendation, and become loyal customers (Chen & Wang 2009).

In today’s competitive market, there is no business or any company can survive without having satisfied customers. From the definition of Kotler (2000), customer satisfaction is considered as the feelings of pleasure or disappointment caused by the products or services received and their perception towards the products and services received; and the comparison of what they expect and what they actually get through the products
and services. On the other hand, Hoyer and MacInnis (2001) said that satisfaction can directly related to the feelings to accept, happy, relief, excitement, disappointment, surprise, delight and joy. This is applied to all industries as long as it involves with customers. Nowadays customer focus and satisfaction is a driving force for many companies and organizations. Many organizations see customer satisfaction as a key differentiator and it has therefore increasingly become a key element of business strategy. In addition to that, companies and organizations have understood that it is far less costly to keep existing customers than to attract new customers. For that reason, this term has been frequently used in marketing.

Service quality and customer’s satisfaction are two different concepts with different definitions. Service quality is the general evaluation of customers’ experience with an organization, while satisfaction is the evaluation of particular experiences with the organization. With regard to the relation between service quality and customer’s satisfaction one can ask if the satisfaction gives rise to judgments about the quality, or the judgments about quality will lead to customer’s satisfaction (Schneider & White, 2005). Nonetheless, other factors in the service sector such as price, product quality, as well as specific factors such as situational and personal factors have an impact on customer satisfaction (Zeithaml & Bitner, 2000). Their logical assumption was to increase satisfaction in order to induce customers to repurchase services from the provider (Bou-Illusa, 2001).

Customer satisfaction is the outcome that customers receive when the service they experienced exceed their expectation. In marketing, it is being viewed as the global evaluation of service experience over time (Lim et al., 2006). Customer satisfaction is generally known as an outcome of service quality. Numerous studies in different industries have proved this relationship. For instance, Rod & Ashill (2009), Szwajca (2018; 2016) and Ngo & Pavelková (2017) in banking, Hussain et al. (2015) in airline, Srivastava & Sharma (2013) in telecommunication and Saghier (2013) in hotel industry. Customer satisfaction portrays the quality of products or services provided to the customer in a positive manner, whereby the level of customer satisfaction enhanced along with an increased level of service quality (Bilan, 2013; Yeo et al., 2015). In other words, the more positive customers’ perceived service quality, the better their satisfaction level with the service provider is likely to be. Therefore, service quality cannot be separated from the concept of customer satisfaction. Further research has also identified also other factors such as customer specific and situation factors as contributing to overall satisfaction (Zeithaml & Bitner, 2000).

Service quality

This is an attitude formed by long-term overall evaluation of a firm’s performance. According to Zeithaml and Berry (1990), service quality is an extrinsically perceived attribution based on the customers experience about the service that the customer perceived through the service encounter. Service quality assessments are formed on judgments of outcome quality, interaction quality and physical environment quality. Service quality is one of the key dimensions, which are factored into the consumer’s satisfaction judgments. Services are produced and consumed at the same time, which makes it difficult to measure; test and as such specific uniform quality can rarely be set. As a result, it is hard to determine how consumers evaluate the service quality (Parasuraman et al, 1985).

On the other hand, the heterogeneity of services implies its delivery differs from producer to producer, consumer to consumer and day to day (Parasuraman et al, 1985).
ensure since what the consumer receives may differ from what the firm intended to deliver, Boom and Bitner (as cited in Parasuraman et al., 1985). There are inherent difficulties in implementing and evaluating what constitutes service quality. For one, quality perceptions often depend on a repeated comparison of the customer’s expectation about a particular service. Therefore, if a service repeatedly fails to live up to the customer’s expectations it will be perceived as poor service. Secondly, in services, customers evaluate the service process as well as the outcome (Hoffman & Bateson, 2006).

In the case of train travel, that will be whether the train departs on a timely manner, how smooth the journey was, how pleasant the encounter with the train conductor was and if they arrived to their final destination. Service quality has been found out as one of the important elements for increasing the customer satisfaction. Service quality as found is the important input to the customer satisfaction (Araghchi, 2008).

Customer will be satisfied to the company if the company provides the better services. An example is the physical layout of a company, its ambience, parking facilities, the number of employees available, as well as problem resolution during critical incidents (Bitner, Booms, and Mohr 2004). There has been various factors, which affect the satisfaction of customers, but service quality remains as the first when it is crucial because it has a high degree of interaction between the employees and customers.

Most of the scholars have come out very close on their opinions about the relationship between customer satisfaction and service quality among each other, although there are some of the distinction between customer satisfaction and service quality. Nevertheless, they are the strong relationships that exist between service quality and customer satisfaction while emphasizing that these two are conceptually distinct constructs from the customer points of view’s (Akbar and Parvez, 2009; Sureshchandar et al, 2003).

Literature has suggested that the service quality and customer satisfaction are spearhead constructs, which are unique, and share a close relationship (Yap and Kew, 2005). From most of researches and studies conducted on many areas and industries, service quality is the majority and the most important factor that deeply influences customer satisfaction (http://www.ukessays.com)

This has been applied to almost all service sectors. Moreover, banking industry contains much services and interactions especially when customers want to know more about the offerings by the banks. The service quality of banks includes the capability of bank employees to interact and communicate with customers.

The gaps model of service quality

It is a useful framework to understand service quality in an organization. The main service quality gap is the customer gap. The customer gap can be defined as the difference between customer expectations and perceptions of service (Zeithaml et al, 2006). Customer expectations can be considered as standards, which customers place on the service experience, based on what they think should happen (Zeithaml et al, 2006). Customer perceptions on the other hand can be thought of as the customer’s valuation of the actual service experience (Zeithaml et al 2006).

In order to deliver quality services, a company must have a clear understanding of customer expectations. Customer expectations of services play a crucial role in their evaluation of the service quality. Customer expectations are affected by a variety of factors such as price, previous experience with the company, the company’s reputation and what the company has promised (Bergman 2010). It is important for companies to understand these factors, which affect customer expectations, since it could be
Service quality remains among one of the most leading position in both the marketing literature generally, and the service marketing literature specifically according to Jensen and Markland (1992). Practitioners, academics and others measured service quality to get a clearer picture of its main antecedents and consequences, thereby implementing suitable methods to gain competitive advantage and build customer loyalty (Palmer and Cole, 1995; Zahorik and Rust, 1992).

Conversely, customer satisfaction definition implies the feeling or attitude towards a particular good or service after delivery. While service quality is simply “the customers’ overall impression of the relative inferiority and superiority of the organisation and its services” (Anderson and Sullivan, 1993; Cronin and Taylor, 1992; Bitner and Hubbert, 1994; Taylor and Baker, 1994; Rust and Oliver, 1994; Levesque and McDougall, 1996).

Furthermore, some researchers argued that both customer satisfaction and service quality are “Best conceptualized as unique constructs that should not be treated as equivalents in models of consumer decision making” (Taylor and Baker, 1994).

Service quality is always regarded as the basis of creating, as well as maintaining satisfying relationships with the most asset of a business, which is its customers. Consequently, these two inter-related words have become a topic of significant and strategic concern (Bolton and Drew, 1991; Cronin and Taylor, 1992; Taylor and Baker, 1994). Generally, research in this area has demonstrated that service quality is an essential sign of customer satisfaction (Spreng and Mackoy, 1996).

Service quality involves a comparison of expectations with performance: it is a measure of how well the service level delivered matches customer expectations on a consistent basis. Service quality has been conceptualized as a function of consumer expectations towards the service situation and process, and of the output quality, they perceived themselves to have received. The ultimate goal of service quality measurement is to assist managers in ensuring service quality and customer satisfaction. Measurement is a necessary step towards devising any action plan however, the five key gaps or discrepancies on the service provider’s side that are likely to affect consumers’ perceptions of service quality are:

Consumer expectation-management perception gap, which is the gap between consumer expectations of service quality and management perceptions of these expectations.

Management perception-service quality perception gap, that is, the gap between management perceptions of consumer expectations and the firm’s service quality specifications.

Service quality specifications-service delivery gap, the gap between service quality specifications and actual service quality.

Service delivery-external communications gap or the gap between actual service delivery and external communications about the service.

Expected service-perceived service gap, which is the gap between expected service and perceived service.

Service quality is more difficult to measure than the quality of goods. Today, researchers on service quality widely accept and apply two service theories among the various service quality opinions. One is the Gronroos Technical and Functional Quality framework. Several researchers to examine numerous service industries such as Banks (Oyetunji, 2014),
Education (Samanhyia, 2014) and Health (Aikins, 2014) have used the SERVQUAL measuring tool.

Gronroos (2000) argued that in the 1990s, the two-dimension model of service quality (technical quality and functional quality) were used to describe and measure the service quality. In this model, technical quality focuses on the outcome of what is the service provided and functional quality takes into account how it is delivered.

Parasuraman, Berry & Zeithaml (1991) discussed ten (10) service quality dimensions that customers use to judge the quality of the service offered and described determinants of service quality as reliability, responsiveness, competence, access, courtesy, communication, credibility, tangibles, security, and understanding the customers were reviewed. Later in 1988, they modified the framework to five determinants as reliability, assurance, tangibles, empathy, and responsiveness (http:www.ukessays.com)

SERVQUAL model

Adapted from Parasuraman et al. (1988)

Finally, Parasuraman, Berry & Zeithaml (1991) propounded another measure of service quality through the SERVQUAL model. SERVQUAL is based on the “GAP model” of service quality, which facilitates quantification of the gap between customers’ expectations of a service and their perceptions of the actual service delivered. As an outcome of a further study, Parasuraman (2000) reduced the ten dimensions and combined them into five dimensions of quality: tangibles, reliability, responsiveness, assurance (including competence, courtesy, credibility, security) and empathy (including access, communication and understanding).

Bebko (2000) defined reliability as “the ability to perform the promised service dependably and accurately”. Reliability of a service as the ability of personnel to perform the desired service dependably, accurately and consistently in order to meet customer’s expectations.

Parasuraman et al., (1991) defined responsiveness as the willingness of the service providers to assist the customer and deliver prompt services. It shows how reactive an organization is towards its customers (Cronin & Taylor, 1992). The term responsiveness has numbers of definitions which depends on the area of responsiveness is applied. Bernades and Hanna believed that the conceptualization of the term is still lagging. In 1993, the early definition of responsiveness had been viewed in a very general context. Tunc and Gupta described responsiveness as the time when dealing with the customer. A few years later, Matson and McFarlane defined responsiveness in the context of manufacturing application. They clarified responsiveness as the ability of a production system to respond to disturbances (originating inside or outside the manufacturing organization) which influence upon production goals. In this regard, responsiveness is seen as a requirement for an organization to achieve their goals. Responsiveness has also been viewed as the overall capability to seize business disturbances by other researchers. Zhihong et al. defined responsiveness in more specific context as the ability to swiftly confirm the specifications and delivery dates of customers’ orders. Similar definition identified as the speed of fulfilling customer orders. Responsiveness has been defined as the ability to respond time effectively. Overall, responsiveness can be described as ‘time to respond’ to customer demands in the meant time serves ability to compete in rapid market changes.
Thus, this paper defines responsiveness as the capability of service operations to be timely responsive in fulfilling customer demands and subsequently compete in the rapid market changes.

Assurance can be stated as employee’s knowledge and courtesy and the ability of the firm and its employees to inspire trust and confidence”. Assurance can also be described as a function of other dimensions such as reliability, tangibility, and responsiveness.

Curry & Sinclair (2002) defined sympathy as the caring, of individualized attention that the firm provides its customer. The techniques of customer satisfaction analysis allow the critical aspects of the supplied services to be identified and customer satisfaction to be increased (Cuomo 2000). According to Hoffman & Bateson (2006), customer satisfaction is the comparison of customer expectations to perceptions regarding service encounter. Customer expectations are beliefs about service delivery that serve as standards or reference points against which performance is judged (Zeithaml et al, 2006).

Titchener, an adaptation of the German word Einfühlung (Wispé, 1986), coined the term ‘empathy’ over one hundred years ago. According to Stotland and colleagues, discussions of empathy may even date back to “the beginnings of philosophical thought” (Stotland, Matthews, Sherman, Hansson, & Richardson, 1978). Empathy is not a well-defined notion. Instead, there are perhaps as many definitions as there are authors in the field (Decety & Jackson, 2004; de Vignemont & Singer, 2006). Empathy is an emotional response (affective), dependent upon the interaction between trait capacities and state influences. Empathic processes are automatically elicited but are also shaped by top-down control processes. The resulting emotion is similar to one’s perception (directly experienced or imagined) and understanding (cognitive empathy) of the stimulus emotion, with recognition that the source of the emotion is not one’s own according to Cuff, B., Brown, S. J., Taylor, L., & Howat, D. (2014).

Customer Loyalty

Customer loyalty is viewed as the strength of the relationship between an individual’s relative attitude and re-patronage. Although customer satisfaction is a crucial part of a business, satisfaction alone cannot take a business to a top level. Customer satisfaction produces a positive financial result, especially in regular purchases. Today’s unforgiving market where creating and maintaining customer loyalty is more complex than it used to be in the past years. This is because of technological breakthrough and widespread of the internet uses. Loyalty building requires the company to focus the value of its product and services and to show that it is interested to fulfil the desire or build the relationship with customers as postulated by (Griffin, 2002).

Thomas and Tobe (2013) emphasize, “Loyalty is more profitable.” The expenses to gain a new customer is much more than retaining existing one. Loyal customers will encourage others to buy from you and think more than twice before changing their mind to buy other services. Customer loyalty is not gained by an accident; they are constructed through the sourcing and design decisions. Designing for customer loyalty requires customer-centred approaches that recognize the want and interest of service receiver. Customer loyalty is built over time across multiple transactions. A relationship with a customer is equally important in customer loyalty and this requires that company work in a broader context that extends beyond itself, as no company can be world class at everything (McDonlad & Keen 2000).

Customer loyalty is another important factor in customer satisfaction. The impact of the
satisfaction in loyalty has been the most popular subject in study of the marketing theory. Therefore, several studies have proved that satisfaction and loyalty have the direct connection between one another. As satisfied customers are loyal and dissatisfied, customers are a vendor (Heskett, 2011). Finding the loyal customer is not accessible, even the customers seem to be satisfied with the products and the services. In fact, the behaviour and attitude of the customers towards the particular goods and services matters the most. If the behaviour of the customers is positive to the service holder, then those customers are said as a loyal customer (Abdullah 2012). There are two types of customer loyalty based on behavioural and emotional loyalty on the goods and services. Behavioural loyalty refers to frequent shopping in a particular retailer and emotional loyalty refers to the customers’ concern towards certain retailer because of past buying experience and attitude. In this both behavioural and emotional loyalty model, increased satisfaction should increase customer loyalty. When customers are not satisfied, customers have the option to express the complaints going to the competitor. According to Gremler and Brown (1996), little information is known about customer loyalty although it is an important aspect within any organization. Experts have tried their best to define what customer loyalty really means and what being a loyal customer really means. According to Gremler and Brown (1996), many researchers and academics agree that customer loyalty is an important part in the business as it is considered the “back-bone of the business”. Customer loyalty is an essential aspect in any organization whether it is offering a good or providing a service. Many organizations are looking for various ways to increase their customer loyalty as it has a positive effect on the profitability of the organization (Gremler 1996, Abdullah et al. 2000).

According to Abdullah et al. (2000), customers’ attachment to a certain brand or product over a long period is considered loyalty. Customers can express their loyalty through the continuous purchase of the product and positive word-of-mouth referrals. Hu et al. (2009) state that factors affecting customer loyalty include the degree of the quality of the service offered as well as the corporate image of the organization. Many studies have concluded that there is a positive relationship between the corporate images of the organization and customer loyalty; the better the image, the higher the customer loyalty (Hu et al. 2009, Abdullah et al. 2000). Furthermore, customer satisfaction is considered one of the major aspects affecting customer loyalty. This is mainly due to the fact that a satisfied customer is more likely to be loyal to the organization and therefore spread positive word of mouth (Hu et al. 2009). However according to Abdullah et al. (2000), a satisfied customer may not necessary be a loyal one. Therefore, many organizations have taken a further step to ensure that their customers are both satisfied and loyal through the development of customer loyalty programs (Hawkins and Mothersbaugh 2009).

**Empathy**

Empathy is the cognitive process of identifying with or vicariously experiencing the feelings, thoughts, or attitudes of another.” (Verderber, 2004). Empathy is an important element in understanding and maintaining good customer service and satisfaction relationships. Therefore, empathy tries to understand and experience that other people experience. Empathy seek to understand each other’s experience, feeling, thoughts and attitudes. (Seiler, 2005). Empathy enables individuals to competently interact with others and display behaviours appropriate for a given situation or person (Redmond, 1989). Research indicates that empathy creates symbiotic and recursive interactions in an exchange process:
that is, the display of empathy by one party can strengthen the other party's empathy and lead to positive outcomes (Kraus et al., 2012). Evidence also supports that empathy influences the decision to engage in prosocial behaviour (Bagozzi and Moore, 1994; Basil et al., 2008).

**Assurance**

Assurance is a management method that is defined as “all those planned and systematic actions needed to provide adequate confidence that a product service or result that will satisfy given requirements for quality and be fit for use”. An Assurance programme is defined as “the sum total of the activities aimed at achieving that required customer satisfaction standard” (ISO, 2004).

**2.2 Empirical Literature**

Empirical evidences has supported that customer satisfaction reduces the likelihood of defection and or is positively related with retention, repurchase intention and loyalty (Oliver, 2009). According to Boshoff & Gray (2004), satisfaction is not inherent in service of product. However, satisfaction is mainly present in consumer’s perception of the service or product attributes that relates to the specific individual. Therefore, different customers will express different levels of satisfaction for the same service encounter or experience (Ueltschy et al., 2007). Dabholkar et al. (1996) conducted a qualitative research using phenomenological interviews, exploratory depth interviews, and customer tracking in a store during the actual shopping experience. The findings were combined with the existing SERVQUAL model. The dimensions of service quality earlier proposed by Parasuraman et al. (1985, 1988) were improved to make them suitable for a retail environment. They opined that service quality in retail environment has a hierarchical factor structure with five dimensions: physical aspects, reliability, personal interaction, problem solving, and policy. Comparable physical aspects in RSQS replaced the tangible dimension of SERVQUAL. Reliability had a similar connotation in both the scales. The third dimension of personal interaction in RSQS was a combination of responsiveness and assurance from SERVQUAL. Problem solving and policy were added to RSQS keeping in view the significance of service recovery and store policy for total quality of service. For the final version of RSQS, 17 items were adapted from SERVQUAL scale and 11 items were created based on literature review and research conducted by Dabholkar et al. (1996). The total items in the RSQS scale were 28, which included 6 for physical aspects, 5 for reliability, 9 for personal interaction, 3 for problem solving, and 5 for policy.

Dabholkar et al. (1996) tested the RSQS with department store customers in the US, and later in two store units of a departmental store involved in the first study. The model showed a fit in both the studies, and the scale was expected to be suitable for the study of retail businesses, such as departmental or specialty stores. Later, researchers tested it across countries and retail formats. Mehta et al. (2000) found RSQS appropriate among supermarket consumers in Singapore. In the following year, Siu and Cheung (2001) used RSQS to study department store in Hong Kong. Kim and Jin (2002) reported it to be useful to study the cultural context for discount stores across USA and South Korea. Siu and Chow (2003) used the adapted version proposed by Siu and Cheung (2001) and examined the service quality of a Japanese supermarket in Hong Kong. Kaul (2007) tested RSQS for apparel stores in India.

Leen and Ramayah (2011) performed a study of apparel stores in Malaysia. Ihtiyar and Omar (2014) performed a comparative study for grocery retailers in Malaysia and Turkey. Although the scale proposed by Dabholkar et al. (1996) has a high construct reliability and validity, there is a need to look at its applicability for more countries, and in different contexts. This is so because each country is believed to have its own unique set of quality dimensions (Trappey, & Lee, 1995).

Customer Satisfaction Customer satisfaction is a function of the discrepancy between a customer’s expectations prior to purchase and their perception of the same service afterwards (Anderson & Sullivan, 1993), and will be significant if the perception is placed at a higher level than the expectation. Customer satisfaction is found to be dependent on the quality of service offered to the customer and is one of the tools to increase value for customers.

More value for customer means higher satisfaction, which can benefit the retail organization in long run (Zeithaml, Berry, & Parasuraman, 1996; Cronin, Brady, & Hult, 2000), and generate higher revenue (Aaker & Jacobson, 1994). The main challenges for service industry are service quality and customer satisfaction (Anderson & Sullivan, 1993; Hung, Huang, & Chen, 2003). Customer satisfaction is a powerful intangible asset similar to service quality and can be achieved through the fulfilment of customer expectations (Oliver, 1980). Researches have emphasized the significance of relationship between service quality and customer satisfaction (Cronin & Taylor, 1992; Taylor & Baker, 1994), and found satisfaction to be the consequence of customer experience during service encounter (Anderson & Sullivan, 1993). Service quality and customer satisfaction are dissimilar constructs (Carman, 1990).

Researchers have tested the significant relationship between service quality and customer satisfaction, and service quality was proposed to be an antecedent of customer satisfaction (Parasuraman et al., 1985). Brady and Robertson (2001) found service quality to be an antecedent of customer satisfaction for cognitively oriented consumers, and a consequence for emotional consumers. The causal relationship between service quality and customer satisfaction is the subject of great academic debate and no unanimity has yet been reached (Bahia et al., 2000). The researches have also specified customer satisfaction as a function of perceived quality and disconfirmation- the extent to which perceived quality fails to match prepurchase expectations (Olsen, 2002). It has also been found that their purchase intention is more affected by quality, which falls short of expectations, rather than the one, which exceeds expectations (Anderson & Sullivan, 1993).

Gupta, Datta, (2012) carried out a research on Prioritizing service attributes for quality upgradation of Indian railway stations, with an objective to measure the quality of service provided at Indian railway stations. The purpose of the paper was to propose a method that indicates the level of importance and satisfaction which other known methods of service quality assessment did not clearly provide. In total, six attributes related to passenger services of an Indian railway station were considered. Prioritization of the attributes for improvement of service quality was decided based on the proposed method. The Law of Categorical Judgment was used to determine levels of importance and levels of satisfaction of disaggregated passenger groups and passengers as a whole. The law was applied to the responses obtained, using a Likert scale, to the six attributes through random passenger survey of different groups at Howrah Railway Station, a major railway terminal in eastern India. The objective was to check the difference in importance levels and satisfaction levels and then prioritize for improvement accordingly.
Moreover, Anand & Srivastava (2016) in Ethiopia studied customer satisfaction in passenger service and found that most passengers in the data collection sites were complaining about the lack of basic facilities in the stations. In addition, they stressed that even if the basic facilities were present, they are charged for using them (especially toilets). Passengers claimed that trains did not depart on time from stations. The worst case all passengers in the stations stated was that trains carry beyond the specified capacity and tariff set by the government was not usually put in place.

On the other hand, some drivers and assistants lacked professional ethics in serving customers. An empirical study by Krishna, (2014) in Agra district in Pradesh in India found that not all the passengers surveyed were satisfied with the passenger transport service offered by the state entity in the district. This is because the trains were not clean and were congested and the associated facilities were not appropriate. A study on service quality of public passenger service vehicles in South Africa, Clark & Baker (2004) found that bus users were positive about the service quality in terms of reliability, comfort, safety and affordability than those who used smaller taxis.

A study by Channoi (2014) on service quality determined that service quality, corporate image and customer perceived value are three significant descriptors of customer satisfaction. Furthermore, the level of satisfaction increases when the quality of service exceeds the wants, needs and expectations of the customer. Customer satisfaction takes place in two situations. One is the result of a product or actual service meeting the customer’s expectations. The other is the result exceeds the expectations. Dissatisfaction will occur when the actual service is below the expected level and service quality seen as an antecedent of customer satisfaction (Niveen, 2013). Al Karim (2014) stated the factors affecting customer satisfaction on service quality. Factor analysis was used to measure the determinants of service quality. The findings showed customer satisfaction have significant effect on Reliability, Empathy, Assurance and Responsiveness but not on Tangibles. Denke (2016) studied the impact of service quality on customer satisfaction and the result of the study showed that tangibility, reliability, responsiveness, assurance and empathy significantly and positively influenced customer attitudes in terms of satisfaction (Mudenda & Guga, 2017).

Vavra (2002), Postulates that generally, customer loyalty is a behaviour while customer satisfaction is an attitude. Therefore, there are certain differences between the factors that influence customer satisfaction and customer loyalty (Gajjar, 2013). Price, quality, reliability, empathy, responsiveness are the main factors that influence. Quality and customer satisfaction both have long been recognized as crucial role for success and survival in today’s competitive market. Considerable evidence exists in literature that supports relationship between company’s performance and level of satisfaction reported by customers according to (Bolton, 1998). Therefore, it is argued that customer satisfaction should be considered the ultimate goal for all firms (Morgan et al., 2005; Mittal et al.).

Researchers have tested the significant relationship between service quality and customer satisfaction, and service quality was proposed to be an antecedent of customer satisfaction (Parasuraman et al., 1985). Brady and Robertson (2001) found service quality to be an antecedent of customer satisfaction for cognitively oriented consumers, and a consequence for emotional consumers. The causal relationship between service quality and customer satisfaction is the subject of great academic debate and no unanimity has yet been reached (Bahia et al., 2000).
researches have also specified customer satisfaction as a function of perceived quality and disconfirmation- the extent to which perceived quality fails to match prepurchase expectations (Olsen, 2002). It has also been found that their purchase intention is more affected by quality, which falls short of expectations, rather than the one, which exceeds expectations (Anderson & Sullivan, 1993).

Geetika and Nandan (2010) conducted a study on railway platform in India. The study intended to identify the features for passenger satisfaction on railway platforms. After grouping some factors together, the study came up with five factors, which were considered to be the most important for determining passenger’s satisfaction in railway platforms. The factors suggested were refreshments, behaviour of the operating staff, information system and efficiency, basic facilities, and safety satisfaction. This study employs similar approach to assess the passenger’s perception on five service quality dimensions, however the focus is on whether route type influence passenger satisfaction.

Kai and Jen (2006) conducted a study on passengers perceived service quality on city bus in Tai Pei in China. The aim of the study was to understand passenger’s perception and expectation towards quality of services provided. They developed four service quality dimensions that are interaction with passengers, tangible services equipment’s, convenience of the service and operating management support. Kai and Jen (2006) recommended that using the assessment of four dimensions management could detect whether the services quality is acceptable by passengers or not. In that case, five service quality dimensions used to understand passenger’s satisfaction perception between two routes.

Kumar (2012) conducted a qualitative study with the purpose of ascertaining the expectation and perception of passengers using public transport in India. A total number of 200 passengers were selected as a sample size. The study used six dimensions assurance, empathy, reliability, responsiveness, tangible and comfort. The study revealed that there is a big difference on passenger’s perception towards various service quality dimensions. Using a Chi-square test, they compared satisfaction based on gender and occupation. The results showed that there is a difference between satisfaction gained by male and female travellers; likewise, between passengers of different occupations. However, they did not show if the satisfaction perceived could be different based on route type. Most of the above-mentioned studies were conducted in Asian countries whose context may be different from African countries like Zambia. In addition, the studies addressed other transport sectors other than railway sector. However, these studies still provide useful insights on further assessment of public transport service satisfaction.

2.3 Theoretical Framework.

The Equity Theory- Equity models are derived from the Equity Theory (Adams, 1963), and are based on the notion of input-output ratio, which plays a key role in satisfaction (Oliver & Swan, 1989). According to this theory, parties to an exchange will feel equitably treated (thus, satisfied), if in their minds, the ratio of their outcomes to inputs is fair (Oliver & DeSarbo, 1988). According to the Equity Theory, satisfaction exists when consumers perceive their output/input ratio as being fair (Swan & Oliver, 1989). According to this theory, parties to an exchange will feel equitably treated (satisfied), if in their minds, the ratio of their outcomes to inputs is fair. Whether a person feels equitably treated or not may depend on various factors including the price paid, the benefits received, the time and effort expended during the transaction and the experience of previous transactions (Woodruff et al 1983). This implies that
comparative baseline may take many different forms. Equity models of consumer satisfaction appear to be different from the other models, in that satisfaction is evaluated relative to other parties (people) in an exchange and the outcomes of all parties sharing the same experience are taken into consideration.

Erevvels and Leavitt (1992) argue that equity models can provide a much richer picture of consumer satisfaction in situations that may not be captured using traditional satisfaction models. For example, they may be especially useful in modeling situations where satisfaction with the other party is considered to be an important element of the transaction. Equity theory indicates that customers compare perceived input-output (gains) in a social exchange: if the customer gain is less than their input (time, money, and other costs), dissatisfaction results (Reisinger & Turner, 1997). Satisfaction is therefore, "a mental state of being adequately or inadequately rewarded" (Moutinho, 1987). Further, Adams observed that satisfaction is seen as a relative judgment that takes into consideration both the qualities and benefits obtained through a comparisons work (Oliver & Desarbo, 1988). Hence, equity theory was proposed as satisfaction determinant theory.

Therefore, the study was based on Adams 1963 Equity Theory in that customers to the give-and-take of the services together with the price paid, the benefits received, the time, effort expended during the transaction and the experience of previous transactions offered by Tazara felt equitably treated (satisfied), and in their minds, the ratio of their outcomes to inputs was fair.

2.4 Operational Definitions

1. **Customer Service:** It is the act of taking care of the customer's needs by providing and delivering professional, helpful, high quality service and assistance before, during, and after the customer's requirements are met. It is an economic activity, that is an intangible product and it does not result to ownership. It is therefore, consumed at a point of sale. An example of a service is a health service, etc. Quality of the service was determined by the difference between expectations of the customer on the one hand and the customer perceived level of service delivered on the other hand, the gap between two points represents the size of service problem.

2. **Customer Satisfaction:** the positive evaluation of the product or service that the customer acquires as a major reason to continue a relationship with a company’s service or products, and an important pillar that upholds loyalty. Customer satisfaction is defined as "the number of customers, or percentage of total customers, whose reported experience with a firm, its products, or its services (ratings) exceeds specified satisfaction goals." Customer Satisfaction was determined by the feedback from the customer, which is necessary for maintaining or improving the quality of service being delivered.

3.0 Methodology

This study used a case study and adopted the descriptive approach because descriptive method is effective to analyse non-quantified topics and issues and has the greater opportunity to integrate the qualitative and quantitative methods of data collection (Charmaz, 2015).

In addition, descriptive approach was appropriate for the purpose of describing, explaining and evaluating social constructs (Zucker, 2012). This methodology was selected for this particular study report because the research questions aimed at the assessment of the levels between Service Quality and Customer Satisfaction in Railway Industries.

3.1 Study population

The study target population involved all the expected 2000 customers for Tazara on a single passenger train operation at the main stations and...
on board from new Kapirimposhi to Nakonde and beyond.

3.2 Sample Size
The study sample size in this research comprised 10 percent of the target population of 2000 passengers and a representative number of 200 respondents on board were randomly selected and administered with questionnaires as this helped to meet the objective, time and space of the study.

3.3 Sampling Techniques
Random sampling was used to select respondents because it represented the target population and eliminated sampling bias by giving all respondents an equal chance to be chosen. The instrument to this study included focused group discussions and questionnaires that were used by the respondents in the sample.

3.4 Methods of Data analysis
Data was quantitatively and qualitatively analysed using SPSS and Microsoft excel. This was because quantitative data in descriptive statistics was well-analysed using pie charts and graphs. Excel was used to format the findings in graphs, tables, bar charts. The qualitative data obtained through open-ended questions, was analysed by considering major themes to extract relevant information. This helped the researcher to make description of the data collected from the field basing on research objectives and derive conclusion on what to take regarding its usefulness.

4.0 Empirical Analysis and Discussion
This study achieved the response rate of 100%. Below is the descriptive statistics of some of the variables covered in the study.

4.1 Respondents’ Demography
This study aimed at investigating the relationship between customer service quality and customer satisfaction in railway industries in Zambia by targeting customers on Mukuba Express Train of Tanzania Zambia Railway Authority (Tazara). The research covered the following customers: First Class, Second Class, Super Seater and Third Class boarders. Thus, the figure below presents the analysed findings for customers sampled.

![Fig 1: Gender of the study respondents](source: Authors Analysis, 2019)

The study had a total sample target of 200 respondents involving 120 male customers and 80 female customers all from different places around the world. The male respondents dominated by 60% and females with 40% as the distribution of the sample size is shown in the bar chart above.

Respondents Town/City of residence
The study sought to find out on the Town/City distribution of the sampled respondents who boarded the passenger train in order to determine the representation of the study. The distribution is as presented in the figure below.
Majority of the respondents in the sample came from Kapirimposhi with the proportion of (18%) from the sample, Kasama and Serenje had equal representation of 14% each of the target sample, 10% respondents represented Kitwe whilst Nakonde and Lusaka had 8% each, Mpfika having 6% respondents. Mungwi, Mufulira, and Ndola had 4% each with the lowest distribution from Solwezi and Makasa in Zambia, Incheon, Seoul and B1 from Korea with 2% representation each as the bar chart above shows.

In terms of provincial representation within Zambia, the research study covered respondents from 7 provinces and 3 provinces across boarders as reflecting on a single train movement. Central province with 30% proportion, Northern Province had 18% representation, Muchinga province 16% proportion, Lusaka and Copperbelt with 12% each; Luapula province had 4% representation, Northwestern province in Zambia equaled with the European countries having 2% each as the pie chart below shows.

4.2 Train service Reliability.

The study sought to find out the reliability distribution of the respondents on Tazara passenger train as is in terms of transportation safety and convenience. This was in order to ascertain passenger train reliability representation of the study. The distribution was as in the figure below.
Most of the customers in the sample commended that Tazara passenger train that it is quite reliable (36 percent proportion). Furthermore, the results showed that 32 percent of the customers viewed Tazara passenger train as very reliable, 20 percent of the respondents said passenger trains were reliable, and 12 percent customers being the least had Tazara passenger trains not to be reliable as the pie chart above show the results.

4.3 Train service running time.

The study sought to establish the passenger schedule distribution of the respondents who happened to be the users of the passenger train either one time user or frequent user. This was in order to ascertain the Passenger Train Running Time Schedules representation of the study as the distribution is presented in the figure below.

Passenger trains are time tabled and this makes the customers programme their business schedules for others make connections at the end of their train journeys. The research study on the passenger train running times 48% of the respondents said that sometimes the trains run on time. A segment of 22% of the respondents commented that always trains run as scheduled. Some other 18% asserted to say it is rare that trains run on time. Often times passenger trains run on time and was represented by 12% of the customers as the pie chart above depicts.

4.4 Physical facilities offered by Tazara.

Customer Furniture provision in Waiting Rooms

The study sought to find out the state of customer furniture in Tazara passenger waiting rooms from the passengers who boarded the train. This was to ascertain the furniture provision representation of the study. A good proportion of the customers in the sample said that Tazara passenger waiting rooms had no or less passenger furniture representing 72 percent while the customers who said there was enough furniture represented 28% as shown in the distribution figure and pie chart below.
Sanitary in Tazara Passenger Waiting Rooms

The study sought to establish the sanitary distribution of the respondents who happen to be the users of the passenger train either one time user or frequent user. This was in order to ascertain the station sanitary situation representation of the study. The figure below shows the distribution.

Fig 8: Sanitary in Passenger Waiting Rooms

Source: Authors Analysis, 2019

The study revealed that the sanitation in the waiting rooms was relatively poor as shown by the 46 percent of the respondents. However, the other customers (28 percent) evaluated the sanitary situation as clean. On the other hand, some customers indicated that the sanitary situation in the passenger waiting halls was moderate with 22 percent score. Only a handful 4 percent of customer appreciated the sanitary environment in the passenger waiting rooms as the pie chart above illustrates.

4.5 Levels of safety and security provision

The study sought to establish the safety distribution of the respondents who happen to be the users of the station waiting rooms and on board either one time user or frequent user. This was in order to ascertain the customer safety representation of the study. The distribution is presented as in the figure below.

Fig 9: Customer safety at the station waiting rooms and on board

Source: Authors Analysis, 2019

The majority (38 percent) of the customers in the sample agreed that Tazara provides customer safety in the waiting rooms and on board. A further indication of customer safety provision was strongly agreed upon by 34% of the customers. The proportion of 20% denied the provision of safety and further 8% strongly disagreed Tazara having provided safety in the waiting rooms as shown above in the bar chart.

4.6 Levels of customer satisfaction

The research study wanted to find out Customer Service Satisfaction distribution from the respondents who happened to have used the passenger train operations general for either the first time or regularly. This was in order to ascertain the customer service satisfaction of the
study. The respondent’s satisfaction distribution were presented as in the bar chart below.

**Fig 10: Customer service satisfaction**

The majority of the customers in the sample agreed that were satisfied with the services Tazara provides a proportion of (62 percent) and 38 percent of the customers denying that they were not satisfied as shown above in the chart.

**Discussion**

According to the first objective, which was to ascertain the reliability of the Tazara passenger train in the railway organisation. Most of the respondents (customers) in the sample commended that Tazara passenger train as quite reliable (36 percent proportion). The respondents who stated that backed this:

“Passenger train journeys are the most reliable modes of transport because they are safe and are rarely involved in accidents as compared to road transport”.

The results are consistent with the study by Mehta (2015) who postulated that railway is the safest form of transport. The chances of accidents and breakdown of railways are minimal as compared to other modes of transport. According to Bebko (2000) reliability is the ability to perform the promised service dependably and accurately”. Reliability of a service as the ability of personnel to perform the desired service dependably, accurately and consistently in order to meet customer’s expectations.

According to the second objective that was to examine the levels of customer satisfaction on running time. The research study on the passenger train running time majority 48% of the respondents said that sometimes the trains run on time. The findings to the study are in support with the study by Annand & Srivastava (2016) where Passengers claimed that trains did not depart on time from stations. The worst case all passengers in the stations stated that trains carry beyond the specified capacity and tariff set by the government was not usually put in place.

Kumarage (2014) identified the reality issues in the railway system when he conducted a pilot survey using a sample of 10 passengers at Anuradhapura railway station considering service at different service points, in train, ticketing counter and platform. The results showed the 60% dissatisfaction regarding the railway service as a whole.

According to the third objective, which was to determine the levels of customer satisfaction on physical facilities. The study results on Passenger waiting room, Appearance of facilities, and the communication materials that the company provides it showed from the majority customers that the passenger waiting rooms are poor, had no or less passenger furniture and the sanitation in the waiting rooms were poor. These findings are consistent with the study by Annand & Srivastava (2016) in Ethiopia studied customer satisfaction in passenger service and found that most passengers in the data collection sites were complaining about the lack of basic facilities in the stations. In addition, they stressed that even if the basic facilities were present, they are charged for using them (especially toilets). Passengers claimed that trains did not depart on time from stations. The worst case all passengers in the stations stated was that trains carry beyond the specified capacity and
The presence of uniformed personnel both at the station and on the train itself certainly provide some form of contentment and gives an indication of some form of law and order within the vicinity area. The research results indicated that majority (38 percent) of the customers in the sample agreed that Tazara provides customer safety and security in the waiting rooms and on board. These results were consistent with the work of Collins (1993) who recognised the importance of having more uniformed staff as it would enhance security awareness. The famous concept of Crime Prevention through Environmental Design (CPTED) emphasizes the importance of having visible on-foot patrols as well as rapid maintenance and repair. This is because it was found to be effective in reducing crime rates and fear of crime (Sullivan, 1996).

Most of the time, if the presence of security guards is reasonably sufficient in terms of numbers at any one place, it appears that the number of crimes in that area is relatively low and the people surrounding will sense safety (Iseki and Taylor, 2010). The lack in the numbers of security and enforcement staff at the platform will encourage people not to follow the rules even when the posters about taking precautions and safety is everywhere (Bachok, Osman, Murad and Ibrahim, 2014). Indeed, without the presence of security guards, it will potentially allow youths to loiter and commit vandalism (Advancing Public Transport, 2014).

According to Joewono and Kubota (2006), security class consists of four aspects which is safety from crime (staff/police presence, lighting, visible monitoring, layout and identified help points), safety from accident (presence/visibility of supports, avoidance/visibility of hazards), active safeguarding by staff and perception of security (conspicuousness of safety measures). These four components made up the core of the security scope.

According to the fifth objective, which was to ascertain the levels of customer satisfaction on responsiveness the results on Customer satisfaction shows that 62 percent of the respondents have a higher level of satisfaction with the quality of services provided by the Tazara. According to Yang & Peterson (2004) and Fullerton & Taylor (2002) service quality play a significant moderating role only if the level of customer satisfaction is above the mean. The study findings show that service quality positively affects customer satisfaction in that it promotes

tariff set by the government was not usually put in place.

An empirical study by Krishna, (2014) in Agra district in Pradesh in India found that not all the passengers surveyed were satisfied with the passenger transport service offered by the state entity in the district. This is because the trains were not clean and were congested and the associated facilities were not appropriate.

Stafford (1996), construed tangibility as a core dimension of service quality such that services with more tangible components were viewed as being more worthy of purchase. Additionally, the effectiveness of service tangibility in influencing consumers' purchase decisions is also affected by the perceived importance of these tangible service attributes (Ding and Keh 2017; Santos 2002; Wakefield and Blodgett 1999). For example, Santos (2002) and Sharma et al. (2014) revealed that consumers tend to place more emphasis on the quality of tangible elements for service industries. Deneke (2016) studied the impact of service quality on customer satisfaction and the result of the study showed that tangibility, reliability, responsiveness, assurance and empathy significantly and positively influenced customer attitudes in terms of satisfaction (Mudenda & Guga, 2017).

The forth objective was to ascertain levels of customer satisfaction on safety and security. The presence of uniformed personnel both at the station and on the train itself certainly provide some form of contentment and gives an indication of some form of law and order within the vicinity area. The research results indicated that majority (38 percent) of the customers in the sample agreed that Tazara provides customer safety and security in the waiting rooms and on board. These results were consistent with the work of Collins (1993) who recognised the importance of having more uniformed staff as it would enhance security awareness. The famous concept of Crime
customer repurchase intention, positive recommendation and willingness to pay more. Consistent with the result of Jang & Noh (2011) in their study on measuring customer acceptance of IPTV, it was found that service quality had a positive effect on repurchase intention. However, it seems that the influence of customer satisfaction to repurchase intention is not very substantial. Past studies have also found that service quality explains medium variance in repurchase intention, for instance 58% in Gao & Bai (2014) and 66.3% in Aksoy et al., (2013). Next, it was found that service quality gives positive effect to positive recommendation from customers. This is consistent to other research in contractual service setting such as Lee et al. (2015). There is a moderate influence of service quality to positive recommendation. As such, service provider shall take into consideration to increase the level of customer satisfaction to avoid customer from giving negative bad of mouth.

The study also found a positive relationship between customer satisfactions with willingness to pay more. This finding is consistent with other studies in contractual service settings such as Lee et al. (2015) and Vázquez-Casielles et al. (2009). Power (1988) indicates that the service delivery plays critical role in customer service, meaning that customer service will be effective to the customer when the customer can receive required and extra services in time and in right place. It is reasonable and sensible to realize the crucial role of the customer service in the success and development of an organization nowadays. The fact proves that the quality of service offered by most current organization should be invested to improve to the customer’s highest expectation.

**5.0 Conclusion and Recommendation**

In conclusion, the objective of the study was to assess Service Quality and Customer Satisfaction levels in railway industries. The findings therefore shows truly that there is a connection between service quality on customer satisfaction. The study finding shows that Reliability, responsiveness, assurance, tangibles and company operation performance have different implications on customer satisfaction. Hence, should be accorded much attention for they positively influence the customer.

Service quality and customer satisfaction both are crucial factors for success in the business world. However, service quality is not the only aspect that customers demand to get satisfied. Other factors together with the quality affect customer perceptions and expectations about the services. These factors (as identified in the findings) are lack of basic facilities, bad sanitation quality, lack of safety and security, slow managements reaction to accident as well as clearing and ticket refunding, irregularity of passenger train schedules and behaviour towards passengers.

A winning strategy nowadays is to deliver excellent services. Service quality is essential to gain competitive advantage in the market place. In addition, it helps to sustain customer’s confidence (Leonard et al., 1994). Companies should develop different strategies in order to meet the quality expectations of its customers and to ensure the smooth service delivery they must continuously engage themselves in improving the quality standards and customer satisfaction.

Tazara need to develop effective strategies that lead to increased level of satisfaction and customer loyalty. Hence, there is need for Tazara to know how service quality relates and effects customer satisfaction level, its role and cost to assess the customer value and its relationship with customer satisfaction (Tam, 2004). Customer satisfaction classifies attributes based on how they are perceived by customers and their effect on customer satisfaction.
Tazara management should aim at making sure that customer requirements are fulfilled so that customer will not be dissatisfied. Attractive requirement should be put in place, as these requirements are the product/service criteria that have the greatest influence on how satisfied a customer will be with a given product (Kano, 2015). Quality is a key factor in the creation of worth and in influencing customer satisfaction. Hence, the railway industry in Zambia has to be strategically positioned to provide quality services to satisfy customers. Customer service and satisfaction are important issues for business organizations like the railway industries, which is in a competitive environment in Zambia, thus, it is a necessity to pay particular attention to the level of service quality provided to the customers. Customers in today’s competitive world are free to choose alternatives, and so if they perceive that they will get better service at a competitor, they will switch over to competitor. We have seen that government has now deregulated markets, and so allowing privately owned companies to compete against companies. Hence, service quality levels have become vital to the former monopoly to retain its customers. Services play a vital role in marketing program of many companies, and the superiority of the service, is a part of customers’ demanded package of value. Accordingly, in competitive free markets, some strategies like providing high-quality services have absorbed many customers. Therefore, in today’s complex and modest markets, the ability to gain and maintain customers’ loyalty is a critical factor for lots of organizations (Bendapudi & Leone, 2002).

**Recommendations**

In this research study, customer satisfaction has been taken into account, which is a very important element for the success of any business. Tazara can practically use our study in creating customer satisfaction. Based on the findings of this research study, recommendations are hereby suggested

The company should establish good relationship with customers through efficient customer services and keeping the price of services compatible to establish long-term profitable relationship with customers and focus should be directed towards vital service quality factors like Basic facilities, Hygiene, and Safety, Security, which are considered paramount to customer satisfaction in railway industries.

The company should increase its efficiency and performance level for producing quality services to its customers in order to make them satisfied or delight. In addition, Quarterly or monthly surveys regarding customers’ satisfaction or getting feedback from customers can be made to get to know what customers are experiencing about company’s services and what they want more.

Management should continuously monitor customer satisfaction by carrying market surveys frequently, to determine customer requirements, since customer needs and wants keep on changing from time to time and within different age groups, and should incorporate total quality management in the provision of services, so that all departments within organizations are coordinated with the single purpose of satisfying customers.

Assessing what other competitors are doing such as road transport concerning customer expectations. This will help setting quality standards. External communication made to customers should be realistic, portray to customers a realistic picture of the service as such promises influence customer expectations, and influence satisfaction. The management should commit important resources for quality provision to customers, in doing this management should consider long run benefits.
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