

# **DOCTOR OF BUSINESS ADMINISTRATION**

## **Customer Retention and Churn Management in Saudi Arabia**

A Saudi Telecom Company (STC) Case Study  
Competing in the Saudi Telecommunication Market

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Document Five

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## **Declaration**

The work presented in this document is my original work and has been, neither in part nor in whole submitted for the award of any certification or conferment of a degree or diploma at any institution. Proper citations have been and a corresponding reference list generated to acknowledge reference made to the works of others.

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## Abstract

The quantitative piece of research presented in the current document was to continue and enhance research performed and reported in four documents preceding it. This document was designed to build upon previous qualitative research to measure commitment as a predictor of churn among Saudi Telecommunications (STC) Al Jawal post-paid users. The research presented in this document also compares STC's performance against the performance of its major competitor and refines the questionnaires used to collect data for document 4 into a practicably useful tool for measuring commitment as a predictor of churn at STC. Data collected were analysed using SPSS version 21 while Structural Equation Modelling using AMOS was used in measuring the extent to which image, price, and service influence commitment. The initial 14 reflective indicators of image were reduced to five variables using Principal Components Analysis while price and service were loaded into the model as obtained from the questionnaire.

The findings showed that STC/Al Jawal had significantly higher overall impression, capacity to meet subscriber needs, and relevantly differentiated from its competitors than its major competitor. However, the difference in subscriber likelihood/motivation to switch to other competitors in STC/Al Jawal was not statistically significant from that of its major competitor. Other findings showed that none of the constructs could predict calculative/continuance commitment. However, the rating of Al Jawal's sales offices and the perception that Al Jawal was trying to improve or be innovative for its customers were found to have significant predictor influence on affective commitment. On the other hand, sales offices rating emerged as a significant predictor for normative commitment.

# Table of Contents

<b>Declaration.....</b>	<b>ii</b>
<b>Acknowledgements .....</b>	<b>iii</b>
<b>Abstract.....</b>	<b>iv</b>
<b>List of Tables .....</b>	<b>viii</b>
<b>List of Figures.....</b>	<b>x</b>
<b>1. Introduction.....</b>	<b>1</b>
1.1 Overview.....	1
1.2 Background .....	3
1.3 Research objectives.....	5
1.4 Contribution of Research .....	6
1.5 Document Structure .....	7
<b>2. Literature review .....</b>	<b>9</b>
2.1 Consumer satisfaction .....	9
2.1.1 Factors influencing customer satisfaction in general.....	12
2.1.2 Principal factors influencing customer satisfaction in telecommunications....	15
2.1.3 Loyalty and customer retention .....	22
2.1.4 Customer loyalty segmentation.....	23
2.2 Commitment .....	25
2.3 Churn.....	27
2.4 Conceptual framework .....	29
<b>3. Project Methodology.....</b>	<b>32</b>
3.1 Research Methodology Model .....	32
3.2 Research philosophy .....	33
3.3 Research approach .....	34
3.4 Research strategy .....	35
3.5 Research choices/methods .....	36
3.6 Time horizons .....	37
3.7 Data collection .....	38
<b>4. Work Completed and Way Forward .....</b>	<b>39</b>
4.1 Summary of document 3 .....	39
4.2 Summary of Document 4 .....	42
4.2.1 Data collection details.....	43

4.3 Document 5 and Gaps from Previous Documents .....	45
4.3.1 Data processing and analysis .....	46
<b>5. Data Analysis and Results.....</b>	<b>49</b>
5.1 Commitment towards STC/Al Jawal .....	49
5.1.1 Commitment statistics for Al Jawal .....	49
5.1.2 Al Jawal Overall Impression (Affective Commitment).....	50
5.1.3 Commitment: Al Jawal post-paid services and meeting specific needs .....	51
5.1.4 Commitment: Likelihood to switch from Al Jawal .....	52
5.1.5 Commitment: Al Jawal's relative differentiation .....	54
5.2 Commitment towards Competitor.....	55
5.2.1 Commitment statistics (Competitor).....	55
5.2.2 Commitment: Competitor's overall impression.....	56
5.2.3 Commitment: Competitor's post-paid services and meeting specific needs .....	57
5.2.4 Commitment: Likelihood to switch from competitor .....	59
5.2.5 Commitment: Competitor's Relative Differentiation .....	60
5.3 Comparison of Commitment to Al Jawal and Its Competitor .....	61
5.4 Region-based variance of commitment .....	64
5.5 Image, Price, and Service as Antecedents of Commitment .....	69
5.5.1 Factor analysis for commitment.....	70
5.5.2 Factor analysis for Image.....	73
5.5.3 Contribution of Image, Price, and Service to commitment impressions .....	76
5.6 Comparing STC's and Competitor's performance based on commitment and its antecedents .....	81
5.6.1 Comparing Service performance between STC and its competitor .....	81
5.6.2 Comparing Price/tariff plan performance between STC and its competitor....	82
5.6.3 Comparing image performance between STC and its competitor .....	83
<b>6. Discussion of Findings .....</b>	<b>87</b>
6.1 Modification of the Churn Prediction Model.....	90
6.2 Questionnaire Refinement .....	92
<b>7. Conclusions, Recommendations, and Reflections .....</b>	<b>94</b>
7.1 Conclusions.....	94
7.2 Recommendations.....	96
7.3 Reflection on the Conduct of Research .....	97

7.4 Recommendations for Further Research.....	98
<b>References .....</b>	<b>100</b>
<b>Appendix.....</b>	<b>117</b>
Appendix A .....	117
Appendix B - PARTICIPATING MOBILE CUSTOMERS – INTERVIEWS.....	124
Appendix C - FINAL FIELD VERSION.....	133
Appendix D – REFINED QUESTIONNAIRE.....	152

## List of Tables

Table 1. Commitment Means, Skewness, and Kurtosis.....	50
Table 2. Al Jawal Overall Impression (Affective Commitment).....	51
Table 3. Commitment: Al Jawal post-paid services meet specific needs .....	52
Table 4. Commitment: Switching likelihood from Al Jawal Post-paid services.....	53
Table 5. Commitment: Relative Differentiation .....	54
Table 6. Combined commitment statistics for the competitor.....	55
Table 7. Competitor's overall impression .....	57
Table 8. Competitor's post-paid services and meeting customer needs.....	58
Table 9. Likelihood to switch from competitor .....	59
Table 10. Competitor's Relative Differentiation.....	61
Table 11. Comparison of Al Jawal and competitor's commitment scores (group statistics) ..	62
Table 12. Independent samples test for commitment variables between Al Jawal and its competitor .....	64
Table 13. Al Jawal's region-based commitment ANOVA.....	65
<i>Table 14a.</i> Post hoc test results for region-based comparison of service provider meeting specific needs .....	66
<i>Table 15b.</i> Post hoc test results for region-based comparison of relative differentiation.....	67
Table 16. KMO and Bartlett's test for factor analysis on commitment.....	70
Table 17. Communalities for factor analysis on commitment.....	71
Table 18. Total variance explained for Al Jawal commitment factors .....	71
Table 19. Component matrix for Al Jawal commitment factors .....	72
Table 20. Rotated component matrix for Al Jawal commitment factors .....	72
Table 21. KMO and Bartlett's tests for Image factor analysis .....	73
Table 22. Total variance for Image factor analysis factors explained .....	74
Table 23. Rotated component matrix for Image factor analysis factors .....	75
Table 24. Baseline comparisons for commitment model fitness .....	78
Table 25. Model's RMSEA index .....	78
Table 26. Standardised regression weights for commitment model .....	79
Table 27. Squared multiple correlations for commitment types.....	80
Table 28. Comparison of STC/Al Jawal and its competitor in Service performance (group statistics) .....	81

Table 29. Comparison of STC/Al Jawal and its competitor in Service performance (independent samples t-test results).....	82
Table 30. Comparison of STC/Al Jawal and its competitor in Price/tariff plan performance (group statistics).....	82
Table 31. Comparison of STC/Al Jawal and its competitor in Price/tariff plan performance (independent samples test results) .....	83
Table 32. STC and Competitor means for the 14 image attributes.....	84
Table 33. Independent samples test results for STC/Competitor image attributes.....	85
Table 34. RMSEA scores for the modified churn prediction model .....	92
Table 35. Baseline comparison scores for the modified churn prediction model.....	92

## List of Figures

Figure 1. Conceptual framework .....	31
Figure 2. Research onion .....	32
Figure 3. Al Jawal Overall Impression (Affective Commitment) .....	51
Figure 4. Commitment: Al Jawal post-paid services meet specific needs.....	52
Figure 5. Commitment: Motivation to switch from Al Jawal Post-paid.....	53
Figure 6. Commitment: Relative Differentiation.....	55
Figure 7. Competitor's overall impression .....	57
Figure 8. Competitor's post-paid services and meeting customer needs .....	58
Figure 9. Likelihood to switch from competitor.....	60
Figure 10. Competitor's Relative Differentiation .....	61
Figure 11. Mean plot for region-based commitment on Al Jawal meeting specific subscriber needs .....	68
Figure 12. Al Jawal's region-based commitment on Relative Differentiation.....	69
Figure 13. SEM Model for commitment types and Image, Service, and Price antecedents....	77
Figure 14. Modified model for churn prediction .....	91

# **1. Introduction**

## **1.1 Overview**

In the present information age, telecommunications firms and industry sectors are continually registering high developing indices. Among the diverse communication and telecommunications industry sectors, the phone and mobile services' industry is registering the fastest increase in market share and adoption (Keramati & Arbadili 2011). The rapid and expansive growth is not only attributable to the market size, but to the increase in diverse services and the intensity of the competition in the industry as well. In spite of the infancy that the mobile phone industry is said to be in, the competition mode has taken a new dimension from acquisition of new service subscribers to retention of the extant consumers. This need has led telecommunications service providers to invest heavily in marketing efforts with a view to appeal to consumers in competing companies (Hashmi, Butt, & Iqbal, 2013). With such kind of endeavours, most companies are increasingly encountered with the problem of customer churn (Hashmi, Butt, & Iqbal, 2013).

Customer churn has been described as the predisposition of an existing consumer to exit subscription from the current service provider (Chitra, *et al* 2013). In the urgency of the need to deal with customer churn and develop an understanding of the influencing factors, prediction of customer churn has become inevitable for service providers especially in the telecommunications industry. Prediction of customer churn involves the identification of those consumers that are likely to leave or switch providers due to a multitude of reasons (Coussement & van den Poel 2008). Lu (2003) argued that the principal aim behind churn prediction models is to establish customers that are likely to switch in order to ensure that retention strategies are put in place to target them and prevent or mitigate their chances of switching to competitors. This understanding may help companies in flourishing through maximisation of the overall levels of revenue.

Customer churn prediction is a painstaking issue that has been raised in different fields and across diverse industry sectors. However, the telecommunications sector has appealed to numerous studies (for example, Verbeke *et al.*, 2012; Huan, Kechadi, & Buckley, 2012; Hashmi, Butt, & Iqbal, 2013). There are many implications that are traceable to customer churn. However, an increase in operational costs and therefore reduced revenue generation is a major predicament that telecommunications companies continue to grapple with. For example, Lu (2003) indicated that the financial implications of losing a customer is

that it would cost up to ten times more to gain a new customer in comparisons to retaining older customers.

A survey-based study conducted in the US in 1995 showed that the cost per account of acquiring new customers was about USD 300 in comparison to USD 20 per account for retention of existing consumers. However, the cost of acquiring new customers remained the same while that of retaining existing ones rose to USD 25 per account in 2004 (Brown, 2004). A US telecommunication market survey demonstrated that these costs later reverted to the originals respectively. This implies that it cost fifteen times more to acquire new customers compared to retaining existing ones according to Seo, Ranganathan, and Babad (2008). The increased costs related to acquisition of new customers are traceable to the efforts that service providers make in the collection and analyses of data concerning consumers. The aim of such efforts is normally to acquire valuable insights and information about consumer behaviours and preferences. Additionally, acquisition of extra subscribers oftentimes implies taking such subscribers from existing service providers in mature market situations (Keramati & Arbadili, 2011). Therefore, it is more sensible for organisations to focus on customer retention from a financial and marketing perspective. In fact, the telecommunications sector faces a mean of between 20 and 40 percent churn rate per year according to Barrett (2003). In the US alone, Seo, Ranganathan, and Babad (2008) estimated churn rates of about 46 percent for one mobile network provider in the year 2001 alone. In Norway, the annual rate of churn was reported to be between 15 and 20 percent by the Norwegian Post and Telecom Regulation Authority (Post og Teletilsynet, 2008 cited in Svendsen & Prebensen, 2013).

Despite the evidence of increased churn rates in the telecommunications industry, the factors that influence churn are still not explicitly clear to most service providers. Moreover, the complexity to rationalise consumer churn increases with the classification of churn into partial and total churn (Colgate & Hedge, 2001). In partial churn, service providers lose a section of the customers' business and this makes it considerably difficult to detect (Siddiqui, 2011). However, total churn is normally not as difficult to detect because consumers close their entire accounts with a service provider and switch to the services of another provider (Gurjeet Kaur & Mahajan, 2012). For example, a consumer may continue to use the internet services of the current telecommunications service provider, but switch to using the call services of a competitor. This would translate to partial churn.

Gurjeet Kaur and Mahajan (2012) argued that an estimated 35 percent churn rate is attributable to external factors that exceed the control of a service provider from a customer satisfaction view. However, the remaining percentage happens due to internal factors that are normally within the control of the service provider. These controllable factors include product problems, pricing, poor quality of service attributes, location, convenience, merger, and problem resolution (Trubik & Smith, 2000). This would then imply that telecommunications service providers have control over the factors that trigger switching in over six in every ten consumers who switch. Thus, the development of strategies for enhancement of these factors besides their identification is critical in mitigating customer churn rates and its subsequent negative implications.

This quantitative research study is an attempt at identifying and modelling the key mobile performance criteria from a customer perspective, measure the impact of the key customer-perceived mobile performance dimensions on repeat purchase behaviour and switching intentions, and compare STC customer-perceived mobile performance with that of its major competitor. The study uses a technique of quantifying the responses of the survey participants' views about various products and services on a large sample comprising 1660 mobile customers of Al Jawal and its competitor with a view to ascertain the perceived performance by the mobile customers. The results will enable one to quantify and compare customer perceived performance of STC and its major competitor and make comparisons with established research on customer retention and churn management in other jurisdictions and will be used for the purpose of compiling a report on a piece of structured research.

## **1.2 Background**

Saudi Telecommunications Company (STC) is the largest telecom operator in the Middle Eastern region. It started as Saudi Arabia's sole telecommunications operator in 1998, when the Government of Saudi Arabia established it as a Joint Stock Company. Operating through its four subsidiaries, the company provides a wide range of telecommunications services including fixed line, mobile, data and internet. Since its inception, STC has seen rapid subscriber growth catering to 600,000 customers by the end of its first year of existence. At the end of 2006, STC successfully built a subscriber base of over 15 million subscribers (STC Annual Report, 2006). By the end of 2013, it boasted of a subscriber base of over 160 million mobile and landline customers (Albilad Capital, 2014). This was a 3 percent increase in market share from 48 percent by the close of 2012 to 51 percent by the

end of 2013. Additionally, the subscribers in the STC domestic market were estimated at 27.5 million by 31 December 2013 (Albilad Capital, 2014; STC Annual Report, 2013).

Until recently, STC was primarily a domestic operator servicing only the Saudi Arabian market. It covers 95 percent of the country's geographic landscape. The company enjoys a monopoly in the fixed line, data and internet segments and is the leading provider of mobile services. At the end of 2006, STC's Al Jawal (Mobile) controlled over 80 percent of Saudi Arabia's mobile telecommunications market, apart from its monopoly in the other three subsidiaries, Alhatif (landline), Saudi Data and SaudiNet (ISP). However, in recent years, STC has ventured international market by acquiring significant share in large telecommunications companies around the world. Two of the significant ones are in Indonesia and Turkey. The Saudi Government decided to privatize STC partially in 2005, selling 30% of the equity to Saudi nationals. Meanwhile, the mobile market in Saudi Arabia is opening up to fierce competition with the entry of new mobile operators. The country's second mobile phone service provider UAE-based Etisalat (Mobily) began operations in May 2005 forcing STC to defend its market share by launching innovative products and better customer service.

Saudi Government's Communication and Information Technology Commission (CITC) granted licenses to three new fixed-line phone companies in early 2007. Some of them started launching their products in early 2008. With the grant of the three new fixed line licenses, STC was set to lose its monopoly and market dominance over fixed line services too. Since the new fixed and mobile service providers have further intensified the competition, the Saudi telecom market is likely to witness reduced revenue growth and subscriber retention in the coming days. As evidence of the existing competition, STC has already initiated significant cuts in its charges to remain competitive. In order to stave off the effects of competition, Saudi Telecom is diversifying, introducing customized products and services. It is adopting a strategy of providing cost effective products specializing in the needs of customer. STC also has instituted a price cutting strategy. However, given that price reduction is not a sustainable competitive tool, it is also looking to enhance the quality of its products through value added services. For instance, STC became the first Middle East Company to provide 3G services in 2006 (STC Annual Report, 2006).

However, it is notable that STC's annual revenue growth declined to 7% in 2005 from the 12% recorded in 2004. This trend changed in the year 2013, with STC reporting a revenue income growth of 1.92 percent to reach SAR 45,602 Million up from the previous year's

SAR 44,745 Million. In a very short span of one year, STC's major competitor (Mobily) had gained a significant subscriber base, and added 200,000 subscribers in December 2006 alone (STC Annual Report, 2006). STC, currently with a subscriber base of more than 160 million mobile customers is still far ahead of its rival. Altogether, competition is becoming even fiercer in recent times, as indicated in the STC Annual Report (2013). For example, STC Annual Report (2013) acknowledged a decline in net revenue rates during the first two quarters of 2013. However, the company recovered the decline in the last two quarters in 2013 to register a 36 percent net profit increase in 2013 compared to 2012. The volatile nature of the net profit is attributable to three major factors. These include increased customer churn, low pilgrim turnout owing to development expansions at the Holy Mosque by the government, and regularisation of the situation of migrant workers (STC Annual Report, 2013).

It means that it has now become essential for the STC senior management to focus on churn management and take proactive measure by implementing customer retention programs to tackle the situation. However, STC management lacks a clear understanding of how they should go ahead to evaluate customers' view of their performance and hence identify the reasons of churn to develop and implement retention programs to manage churn. The aim of this study is to develop a methodology or tool for STC to identify the churn behaviour of their customers with a view to develop strategies for reduction of customer churn rates through appropriate empirically-backed recommendations.

### **1.3 Research objectives**

STC management is well aware and convinced that to be competitive in Saudi telecommunication market; they must be able to quantify their mobile customers' perceived performance about STC and its competitor through some means. They must also derive relationship of the performance indicators/dimensions with their customers' commitment/loyalty levels and be able to measure relative impact of each of the performance dimensions quantitatively. This will enable the STC management to set target performance and plan to achieve it by adjusting the performance indicators/dimensions. To achieve and maintain a predetermined level of customer commitment/loyalty, the management of STC will be able to implement loyalty programs by setting the related performance dimensions to achieve expected performance. For better understanding of the customer behaviour, the management should be able to determine what percentage of the customers' judge perceived performance differently, and compare STC perceived performance with that of its major

competitor. This process would enable the management to implement and maintain effective loyalty program and equip them to monitor effectiveness of their loyalty programs in terms of their performance with its competitor. With the aim of providing the management answers to some of the above issues in details at the country and regional level, the objectives of this research study are set as follows;

1. To identify and model the key mobile performance criteria from a customer perspective
2. To develop a set of questionnaire to conduct survey on the key customer-perceived mobile performance dimensions
3. To measure the impact of the key customer-perceived mobile performance dimensions on repeat purchase behavior and switching intentions
4. To compare STC customer-perceived mobile performance with that of its major competitor

It is imperative to note that the four objectives listed above have been pursued and addressed at different levels in four documents i.e. Documents 1, 2, 3, and 4 that the researcher developed prior to the current Document 5. Document 1 served as the scoping document where the researcher set out the principal areas of interest and outlined the proposals for the entire research project. Document 2 contained an extensive literature review of the conceptual domain relevant to this study. In Document 3, the implementation of the sequential mixed methods began with the presentation of a qualitative research piece. The purpose of this qualitative research was to help develop a provisional survey questionnaire to be administered among STC and competitor's customers. Subsequently, Document 4 presented the piece of quantitative covering a major consumer survey and preliminary analysis of results. The current document (Document 5) serves as a vehicle for refining the questionnaire and completing the requisite analyses to achieve the overall research objectives.

#### **1.4 Contribution of Research**

Thus research contributes to both knowledge and practice, being amongst the first to examine the effect of major determinants of customer satisfaction (image, price and service attributes) on customer commitment - as a predictor of churn - in the telecoms industry, in a Middle Eastern context. It includes contribution to knowledge concerning customer behaviour with respect to churn, satisfaction, and commitment from a general perspective. The findings of this study will also contribute to practice for STC especially in view of

customer commitment as a predictor of customer churn and with respect to how STC performs in comparison to its major competitor.

Concerning contribution to knowledge in general, this research is one of the very few studies conducted within the Arab telecoms market. The implication is that this research extends and tests existing theoretical suppositions concerning customer commitment and satisfaction developed in non-Arab and non-telecoms contexts to an Arab telecoms market. Secondly, this research draws from Saudi customer opinions and experiences through a survey that addresses satisfaction and commitment from the entire Kingdom of Saudi Arabia represented through a sample of 1660 respondents from four geographical regions including rural and urban customers. Thirdly, the results from this research will help STC understand the relationship between major satisfaction drivers and intention to switch among other related issues. Finally, the findings of this study demonstrate that Saudi telecom organisations presenting with equal service satisfaction levels may now always appeal to similar levels of affective customer commitment.

In terms of contribution to practice for STC, the telecommunications company will become aware of the most critical items for evaluating customer commitment and customer satisfaction antecedents and will thus allow it to develop the most parsimonious questionnaire for obtaining intelligence on customer attitudes and intention regarding customer churn. The research begins with a 30-page questionnaire and one of the objectives is to render this more practical/viable for administration, and less complex/time-consuming for analysis. This renders another contribution to practice in the sense that it will create increased awareness of the problems involved in customer surveys and the projects the need to learn more concerning the best means of data collection. This research will also help STC in evaluating and understanding its position in comparison to its competitors from a regional perspective and in relation to customer commitment and satisfaction. Finally, this research has the potential of advancing STC's practice concerning data collection and analysis thereby allowing room for using and improving emerging expertise over the years to come. This is attributable to the introduction of an advanced model and methodology for analysing the three types of commitment based on the three satisfaction indicators of Image, Price, and Service using AMOS.

## **1.5 Document Structure**

This section outlines the structure of this document. In the next chapter, the researcher provides an updated and more focused review of previous literature related to the

principal areas of study that are relevant to defining the conceptual direction of the research. Chapter 2 also specifies the importance of the research questions culminating into the development of the conceptual framework used in this study. In Chapter 3, the researcher highlights and justifies the methodology employed in pursuing the research objectives addressed in the current document in line with previous work. Chapter 4 constitutes discussions on the current document with the aim of identifying gaps between the overall study objectives and the work completed previously in Document 3 and Document 4. This culminates in a set of research objectives specific to the current document. In chapter 5, the researcher presents the results of data of the data analysed with respect to the objectives of the current document as defined in Chapter 4. Chapter 6 is a discussion of the research findings realised in Chapter 5. Finally, the summary of results and conclusions are drawn by establishing how the objectives are fulfilled by the research findings and the knowledge gathered from this quantitative research in Chapter 7. The final chapter also includes reflections on the research, limitations of the current study and the recommendations for areas of further research.

## **2. Literature review**

This chapter contains review of existing literature in the areas of customer churn, customer (dis)satisfaction, and the various factors that influence customer satisfaction especially in the telecommunications industry. Earlier on, a review was conducted and presented in document 2. This culminated in the theoretical positions that were applied to inform the empirical undertakings for Documents 3 and 4. In the interest of the current document (Document 5), the review is more extensive, updated, and refined. The current review leads to the development of a conceptual framework that illustrates the rationalisation and synthesis of the theoretical positions deduced from previous literature. In addition, the author reviews literature related to commitment and draws the theoretical relationship between satisfaction and commitment as an outcome. The review primarily explores the potential of reducing churn based on increased commitment as attributed to more customer satisfaction. Thus, the chapter begins with a section covering literature about consumer (dis)satisfaction and the aspects implicated therein.

### **2.1 Consumer satisfaction**

The multitudes of existing marketing scholarly works on customer satisfaction and customer dissatisfaction provide evidence of the extensive research that has been conducted on this subject (for example, Rahman, 2014; Almossawi, 2012; Eshghi, Kumar, & Gangui, 2008). There lacks scholarly consensus as to what customer satisfaction really is and the existence of numerous diverse definitions of customer satisfaction proves as much. For example, Westbrook, Newman, and Taylor (1978) stated that satisfaction is an emotional or feeling reaction. They further mentioned that satisfaction results from a complex process that requires understanding the psychology of customers. According to them, the range of emotion is wide with, for example, contentment, surprise, pleasure, or relief. Satisfaction is influenced, in the end, by expectations and the gap between perceived quality and expected quality, called "expectancy disconfirmation".

As per NBRI (1982) customer satisfaction is the company's ability to fulfil the business, emotional, and psychological needs of its customers. In Burdiek (1993), customer service has been indicated as the only parameter, that if optimized in the short run, yield better long-term customer satisfaction that are critical to overall corporate success. Burdiek (1993) further stated that a model for customer service quality for cellular service is not yet available, despite the fact that a tremendous amount of industry capital has been allocated to model other network performance attributes.

Westbrook, Newman, and Taylor's (1978) can be questioned following the understanding that the psychology of customers is not the single, ultimate determinant of customer satisfaction. For example, Leelakulthanit and Hongcharn (2011) conducted a quantitative study investigating customer satisfaction determinants among 400 Thai mobile phone users. They found promotional value, corporate image, and customer service quality to be the most significant determinants. Thus, customer satisfaction is more than just rational thought in the author's opinion. Indeed, other tangible factors like price, service quality, product quality, discounts, and so on influence satisfaction. NBRI's (1982) definition of customer satisfaction appears satisfactory. However, the NBRI study lacks in outlining the factors in each of the business, emotional, and psychological needs of customer along with procedure to either qualitatively or quantitatively determine them. Burdiek's (1993) approach to customer satisfaction is one-sided, emphasising heavily on customer service for better customer satisfaction. However, it has been argued that a business needs to have a concerted approach by improving the interrelated services such as customer service, network service and operational service to improve the overall customer satisfaction in today's world (Almossawi, 2012).

Kotler and Keller (2009) defined satisfaction as the feeling of disappointment or gratification that an individual has and that results from comparing a given product's perceived outcome or performance against his or her expectations. In other words, Kotler and Keller (2009) portray satisfaction as a feeling whose origin is traceable to comparative analysis of expectation against delivery or actual experience of a product. This definition has received endorsement from numerous studies and seemingly matches the definitions provided in studies preceding the study by Kotler and Keller (2009) such as Oliver (1997).

Other researchers (such as Hansemark & Albinsson, 2004; Wells & Prensky, 1996; Solomon, 1996) argued that customer satisfaction is the attitude or feeling that customers exude towards a given service or product after experiencing it. This definition somewhat responds to the rhetoric posited in the previous paragraph as it overlooks the need for preconceived or predetermined expectations towards a given service or product. Altogether, literature demonstrates that numerous customer satisfaction studies utilised the Disconfirmation of Expectations Model in defining and rationalising customer satisfaction. The Disconfirmation of Expectations Model presumes that customers assess product or service performance through comparison of perceived performance value against a certain expectation (Motley, 2003; Almossawi, 2012). In other words, customers become satisfied

when their perceived performance exceeds or matches expectations. On the contrary, customer dissatisfaction ensues when perceived performance falls below expectations (Mittal, Kumar, & Tsilos, 1999; Banker, Potter, & Srinivasan, 2000).

Despite the contentions in the definitions of satisfaction, customer satisfaction is a principal cognitive measure that features predominantly in consumer and marketing literature (Zorn, Jarvis, & Bellman, 2010). An extension of the expectations that lead to customer dissatisfaction or satisfaction as an outcome of comparison is also found in literature indicating that consumer expectations towards a certain service or product are attributable to the perceptions consumers hold about a certain firm. These perceptions may include perceived pricing fairness and firm performance (Dover & Merthi, 2006). Nonetheless, consumer expectations are at times fuzzy, which explains why they exhibit highly sophisticated levels of variability. This is particularly common in the service industry (Chandrashek *et al.*, 2007) such as the telecommunications industry. Subsequently, consumer behaviour can be termed as stable throughout a broad range of distributed satisfaction until it exceeds or falls below a given threshold level (Chandrashek *et al.*, 2007).

Several authors (such as Olsen & Johnson, 2003; Homburg *et al.*, 2005) concur that satisfaction may assume two forms. These include transaction-specific and overall satisfaction. The former is associated with an instantaneous after-purchase assessment. The latter has to do with customer assessment of their transactions' history in its entirety, and encompasses satisfaction with certain firm aspects like physical facilities, and satisfaction with services or goods purchased (Zorn, Jarvis, & Bellman, 2010). Based on repeat experiences, transaction-specific satisfaction has lesser impact compared to overall satisfaction according to Olsen and Johnson (2003). In fact, Zorn, Jarvis, and Bellman (2010) argue that overall customer satisfaction can also be described as typically service quality in literature in the service industries. Moreover, these authors contend that overall satisfaction constitutes a principal antecedent to customer retention and repeat purchase.

Generally, markets presume that both overall and specific satisfaction advance relationship length and behavioural loyalty (Ganesh, Reynolds, and Arnold, 2000; Dover & Merthi, 2006). Nevertheless, it is noteworthy that customer satisfaction is not by itself and in itself a guarantee of loyalty among customers (Ganesh, Reynolds, and Arnold, 2000; Dover & Merthi, 2006). Without necessarily pre-empting the review of literature under the loyalty section in this paper, it is worth noting that the correlation between customer loyalty and customer satisfaction is sophisticated and largely nonlinear especially due to the existence of

other factors that exert influence on the length of the relationship. These factors are extractable from existing literature and include social pressure, quality of product or service (Oliver, 1999), commitment and pricing perceptions (Bolton *et al.*, 2004) among others. Moreover, Chandrashek *et al.* (2007) argued that the strength of the satisfaction judgments made by a customer suffices as a moderator in the relationship between loyalty and satisfaction. In other words, customers that hold weakly satisfaction are not likely to exhibit loyalty. For instance, failures in services could trigger uncertainties and subsequently weaken the satisfaction judgments of a consumer even after the firm solves the problem in its entirety (Zeithaml, Berry, & Parasuraman, 1996). In the next subsection, the author reviews literature concerning the various factors that influence customer satisfaction in general.

### ***2.1.1 Factors influencing customer satisfaction in general***

According to Henderson (2013), service quality is a subject generating heated debates and appealing to considerable interests from both researchers and practitioners in nearly equal measure. Uddin and Akhter (2012) contended that service quality is an influential aspect of customer satisfaction as situated in the satisfaction model. On the other hand, quality on its own is a multidimensional phenomenon as explained by Mosahab, Mahamad, and Ramayah (2010). Therefore, achieving service quality without the rationalisation and distinction of the significant quality aspects is not possible (Rahman, 2014). Gronroos (2000) assumed a similar position earlier on during his study about service quality. Gronroos (2000) referred to three major dimensions of service quality, which he outlined as the technical quality of output, quality related to service performance and the mental picture in customer's mind with respect to the organisation in question.

Through a qualitative research involving focus groups, Parasuraman, Zeithaml, and Berry (1985) pointed out ten detailed service quality determinants. These included reliability, communication, tangibles, responsiveness, credibility, courtesy, access, customer understanding or knowledge, security, and competence. Later on, Parasuraman, Zeithaml, and Berry (1988) further refined the ten dimensions and clustered them under five principal dimensions. These include assurance, empathy, reliability, tangibles, and responsiveness. The five dimensions define the SERVQUAL model, which has been a domineering method that researchers and practitioners alike use in measuring consumer perceptions towards service quality (Parasuraman, Zeithaml, & Berry, 1988; Rahman, 2014). Dehghan, Zenouzi, and Albadvi (2012) explained these five dimensions explicitly. Assurance encompasses courtesy, competence, security, and credibility. It relates to employee knowledge and courtesy as well

as their capacity to instil confidence and trust. Empathy incorporates communication, customer understanding, and access, which define care and personalised attention offered to customers by a firm. Concerning reliability, it refers to the capacity to deliver the pledged service with a high level of dependability and accuracy. Tangibles refer to the physical facilities of a firm, equipment, and appearance of the personnel in the firm. Finally, responsiveness is about the willingness to assist customers and offering service promptly (Dehghan, Zenouzi, & Albadvi, 2012).

The application of SERVQUAL is evident in numerous industry contexts (for example, Brown & Swartz, 1989; Babakus & Boller, 1992; Bahia & Nantel, 2000) and in telecommunications industry studies (for example, Sureschander, Chandrasekharan, & Anantharaman, 2002; Tyran & Ross, 2006; Khan, 2010). Despite this popularity, several researchers (such as Cronin & Taylor, 1992, 1994; Lai *et al.*, 2007) have criticised the use of SERVQUAL in determining service quality. Lai *et al.* (2007) criticised the SERVQUAL instrument for using negative wording, gap scores, measuring expectations, generalizability issues with its dimensions and the definition of a baseline good quality standard. The SERVQUAL criticism by Cronin and Taylor (1994) informed their development of the SERVPERF measure, which emphasises on using a perception-based performance only scale. In their work, Cronin and Taylor (1992) argued that performance as opposed to perception less expectation defines service quality.

Cronin and Taylor (1992) proceeded to offer substantive proof to demonstrate that expectations have negligible if any impact on consumer evaluations especially when considering service quality. SERVPERF comprises 22 perceptions drawn from SERVQUAL, but exempts any expectation considerations and this makes the former more efficient when comparing service quality provision (Lee, Lee, & Yoo, 2000). Several researchers (including Babakus & Mangold, 1992; Brown, Churchill, & Peter, 1993; Pont & McQuilken, 2002) have substantiated the use of SERVPERF over SERVQUAL in determining service quality. Additionally, SERVPERF has undergone empirical testing severally (e.g. Cronin and Taylor, 1992, 1994; Quester, Wilkinson, & Romaniuk, 1995) and has been shown to explain more variance than SERVQUAL with respect to overall service quality.

Altogether, Parasuraman, Zeithaml, and Berry (1988) argued that superior service quality is the means for competition in service markets. Authors such as Ismail *et al.* (2006), Aydin, and Özer (2005) have endorsed this view by portraying satisfaction in the service markets as being majorly subject to service quality. Malik, Ghafoor, and Iqbal (2012) contended that perceived

quality service in the service industry directly affects customer trust and satisfaction. In other words, service markets' customers tend to be more satisfied when they get more and superior services beyond the expectations they had before purchasing from the firm (Malik, Ghafoor, & Iqbal, 2012). However, Jacoby and Chestnut (1978) recommended the examination of customers' attitudes, intention, and belief in order to establish whether repeat purchases are attributable to loyalty.

Besides service quality, consumer and marketing studies allude to price as being one of the many factors that influences customer satisfaction (Rahman, 2014). Price has been described as a product quality indicator, which leads to advanced product (or service) expectations and defines higher satisfaction levels (Rahman, 2014). Research by Herrmann *et al.* (2007) demonstrated that price perceptions had a direct effect on satisfaction judgments whereas perceived price fairness exhibited an indirect relationship with satisfaction judgments. The other aspect of price that has a significant relationship with customer satisfaction is price reasonability (Ali *et al.*, 2010).

Another aspect of customer satisfaction evident in general literature is the brand image of a company. Roberts and Dowling (2002) described brand image as being an invaluable intangible capital, which is difficult to mimic and one that can assist a firm in achieving a superior yet sustainable performance level. Rahman (2014) simplified the definition of company image and referred to it as the overall "impression that the public has for a company" (p.78). From the view of the company, being innovative, reliable, and professional, contributing socially, and upholding customer value constitute the components that constitute the image of a company (Vranakis, Chatzoglou, & Mpaloukas, 2012).

For Martensen, Kristensen, and Grønholdt (2000), image is a significant component within the customer satisfaction model. This is because it is expected that image will exhibit a positive correlation with customer expectations, satisfaction and loyalty to a company. Empirical proof provided by Gupta (2002) demonstrated that corporate reputation constituted a competitive advantage for companies through successful differentiation from competition. In addition, Gupta (2002) also found Corporate Social Responsibility (CSR) and corporate ability to be elements of corporate reputation. These findings endorse the infamous view that when consumers encounter with parity in product quality and price, they would exhibit predilection towards products of the firm that has concrete CSR initiatives when making the decision related to consumption (Rahman, 2014).

From the literature reviewed in this section, it is evident that consumer and marketing studies exhibit a common trend in portraying service, image/reputation, and price as the principal determinants of customer satisfaction in general. In the subsection that follows,

literature concerning factors influencing customer satisfaction in the telecommunications sector, which is the major focus of the current thesis, appears.

### ***2.1.2 Principal factors influencing customer satisfaction in telecommunications***

#### ***2.1.2.1 Service quality***

In the telecommunications industry, massive literature and empirical proof underscores unanimously the instrumental and overarching role of service quality in influencing customer satisfaction. For example, a study by Chou and Chang (2006) using a case study approach about Chine Mobile established that perceived value, perceived expectations, perceived ease of use, and perceived quality were influenced by service quality and constituted crucial customer satisfaction factors in mobile service provisions. Another study conducted by Nimako, Azumah, and Donkor (2010) although using a cross-sectional survey design involving 1,000 subscribers drawn from four different mobile telecommunications networks revealed that service quality was the principal cause of customer dissatisfaction in mobile subscribers.

Boohene and Agyapong (2011) conducted a different study in Ghana involving 460 Vodafone clients. It was established that although satisfaction did not necessarily imply loyalty, service quality had a strong, positive relationship with loyalty. Altogether, Almossawi (2012) argued, “customer satisfaction is already built into service quality” (p.143). In other words, customers are likely to perceive service quality in positive light if their level of satisfaction with the service provider is good and the services offered to them are high quality.

Rahman, Haque, and Ahmad (2011) also established the significance of service quality in the decision for mobile phone operators. Their quantitative study involved 400 mobile telecommunication customers drawn from across four major Malaysian cities. In their study, network quality emerged as a principal factor in defining overall service quality. The other major factor related to customer satisfaction in the study by Rahman, Haque, and Ahmad (2011) was price. Paulrajan and Rajkumar (2011) also described network quality as an aspect of service quality in the mobile telecommunication market in India. However, these authors described network quality as one of the items of communication as a construct along with call quality, geographical coverage, and call drop rate. Another Indian-based study conducted by Gupta and Sharma (2009) helped establish that mobile service providers needed to provide reasonable quality service without hidden charges in order to appeal to new customers and retain existing ones. Gupta and Sharma (2009) concluded that price and

service quality were the principal customer satisfaction determinants in the Indian mobile telecommunications industry.

Similarly, Seo, Ranganathan, and Babad (2008) noted that call quality as defined by voice quality and geographical coverage were fundamental service quality traits of mobile telecommunication that affects the choice of a service provider by a subscriber. In another research, Birke and Swann (2006) also reported that the geographical coverage of a network was influential in determining subscriber satisfaction besides the choice of one service provider over another. Eshghi, Kumar, and Gangui (2008) engaged 238 mobile phone subscribers from four Indian cities in a quantitative, cross-sectional survey study to determine the impact that factors related to service had on repurchase intention, recommendation to others, and customer satisfaction. Their findings showed that reputation (image), transmission, quality, competitiveness, relational quality, and reliability were the most important customer satisfaction predictors.

Similar findings were also reported by Balaji (2009) who undertook a study to investigate the antecedents and repercussions of consumer satisfaction with mobile services in India. Data in the quantitative study by Balaji (2009) was collected from 199 post-paid subscribers using a survey. Balaji inferred that perceived quality of service attributes is a significant customer satisfaction predictor that ultimately implicates trust, customer loyalty and price tolerance. Taken literary, this would mean that customers would be willing to pay more, trust the brand/firm and remain loyal when they considered service quality superior. Hafeez and Hasnu (2010) also portrayed price and service quality as determinants of customer satisfaction in a Pakistani study. Through a quantitative study involving 148 subscribers drawn from the major telecommunication firms in Nigeria, Omotayo and Joachim (2011) established the influence service quality has on customer satisfaction. Their findings showed that service quality had a direct correlation with both loyalty and satisfaction. Numerous other studies in the telecommunications industry across different countries (e.g. Negi, 2009; Agyapong, 2011) also support the relationship between satisfaction and service quality.

Altogether, a question that one might consider is what telecommunication customers really regard as service quality or what influences their judgment of service quality. Perhaps the best response to this query is deducible from the explanation by Boohene and Agyapong (2011). These authors stated that researchers assess service quality in the telecommunications industry by measuring the relationship service providers have with their customers owing to

the lack of many tangible products. Therefore, this means that service management in the telecommunications industry must pay extra attention in staff skills and professionalism, as well as the provision of the efficient and fast services (Boohene & Agyapong, 2011). The author of this paper faults this argument because it would then lead to the subsequent dilemma of how one can actually measure the relationship that telecom service providers have with their customers.

Service quality also involves service recovery especially in the case of telecommunications industry. According to Gronroos (1998), service recover can be described as the actions organisations take to respond or resolve a service failure. On the other hand, service failure is any mishap or problem related to service provision that may be real or perceived and that occurs when a customer is having an experience with the service provider (Maxham, 2001). According to Michel and Meuter (2008), service failures can result in negative disconfirmation and therefore customer dissatisfaction. However, they add that suitable recovery efforts may be successful in restoring a dissatisfied client to the satisfaction state. Subsequently, service providers with the capacity to respond to service failures in an effective manner and implement service recovery measures will be better placed to retain profitable consumers. Besides, successful service recovery further boosts the image/reputation of the organisation in the eyes of a consumer (Michel & Meuter, 2008).

Smith, Bolton, and Wagner (1999) portrayed service recovery as a resource bundle that organisations can deploy to respond to a service failure. On the other hand, service recovery and complaint management are rooted in encountering service failures. Nevertheless, complaint management is traceable to the reaction of a firm towards a customer's complaint. Service recovery also deals with the ability of the firm to respond immediately to a failed service experience and ensure customer pleasure prior to the customer finding it necessary to lodge the complaint (Miller, Craighead, & Karwan, 2000). In other words, service recovery is more proactive whereas complaint management leans more towards the reactive side. Smith, Bolton, and Wagner (1999) argued that recovery management has a significant influence on customer assessments since customers exhibit increased observation and emotional involvement in first time service or routine service. Customers also tend to experience dissatisfaction by the failure of an organisation to recover as opposed to service failure itself (Smith, Bolton, & Wagner, 1999). In relation to customer switching (churn), Keaveney (1995) offered empirical proof that failed recoveries and service failures are major causes of customer switching behaviours in the service industry.

Thus, comprehensive service recoveries are crucial for improving customer satisfaction, averting customer defections, and developing customer relationships (Smith, Bolton, & Wagner, 1999). According to Swanson and Kelley (2001), effective service recovery elevates both the overall satisfaction and the positive word of mouth (WOM). In other words, successful service recovery means that customers are likely to endorse companies to others or show a strong predisposition towards sharing positive information concerning their good experiences. When it comes to measuring service quality in the telecommunications industry, similar superiority of SERVPERF over SERVQUAL in determining service quality in other industry sectors as discussed in the previous section was demonstrated in the studies conducted by Hahm, Chu, and Yoon (1997) and Ojo (2008). Following the literature reviewed in this section in relation to service quality, the researcher considers service an important determinant of customer satisfaction and subsequently an instrumental factor that has the potential to affect customer commitment and churn.

#### *2.1.2.2 Price*

As illustrated in other literature reviewed previously, price, and in particular perceived price fairness, is a critical factor within the marketing mix. However, the role played by service or product price in the shaping of consumer satisfaction has yet to appeal to extensive studies in previous research about customer satisfaction (Herrmann *et al.*, 2007). The inclusion of price is now a relevant attribute among the various service or product factors (Voss, Parasuraman, & Grewal, 1998). Altogether, the unique influence that price has on judgments concerning satisfaction is still not clear. Price fairness may be portrayed as a representation of a straightforward attempt at establishing consumer willingness to support and consume a service or product because they feel that the price matches the performance of the service or product. In other words, customers would be satisfied with a service or product when they feel that the product is worth the price value (Herrmann *et al.*, 2007).

On the other hand, price is normally perceived as an indicator of service or product quality. Its outcome is enhanced expectations from the service or product and influences higher satisfaction (Rahman, 2014). In addition, it has been argued that customer satisfaction and price reasonability (fairness) are positively correlated. According to Ali *et al.* (2010), customers could switch to other cellular services providers whose prices they consider fair. This is then interpreted as an indication that customers can be retained for longer periods by providing them with fair prices thereby implying that customer satisfaction is significantly influenced by price fairness (Ali *et al.*, 2010).

Butt (2011) argued that price also causes customers to repel or be attracted to a service, product or even the firm itself. This author describes price as the exchange medium with which customers get value, which may take the form of services (intangibles) and/or goods/products (tangibles). Customers tend to be hesitant to pay less for satisfaction (Sattar & Sattar, 2012). Thus, it can be argued that low price has a direct relationship with high satisfaction degree whereas high quality has a direct influence over customer satisfaction. Ahmed *et al.* (2010) concur that the decision for customers to purchase products or services is dependent upon quality and the price associated with the said service or product. According to Garrette and Karmani (2010), customers must be positive and have willingness to pay the set price, which should match the quality expectations.

Oliver (1997) argued that dissatisfaction or satisfaction created by price matching quality is dependent upon the equity principle. Peng and Wang (2006) found price to be the major cause for customer churn. In addition, price fairness has been defined as a perception relating to how the company's product or service price compares to that of its competitor. Altogether, Bolton *et al.* (2004) argued that price fairness only affects the customer relationship length with calculative commitment just as switching costs. In the telecommunications industry, price normally tags along mobile tariffs. Therefore, mobile tariffs are the single most influential churn factor apart from service quality. Mobile tariffs are especially influential among prepaid subscribers when it comes to choice of mobile service providers (Haque, Rahman, & Rahman, 2010). In addition, Haque, Rahman, and Rahman (2010) also contended that mobile tariffs constitute a major factor that telecom subscribers consider when making decisions to churn from one service provider to another.

However, the perception of price by a subscriber also relates to other beliefs, values and quality according to Munnucca (2008). Arguably, a subscriber could be less sensitive to alterations in mobile tariffs when the network quality of the service provider is rated highly and the converse would prove true. Ultimately, this implies that mobile tariffs' changes could lead to increased subscriber churn especially if the network quality is poor (Munnucca, 2008). Service providers with reduced charges would have higher chances of attracting more subscribers with higher commitment levels. Ultimately, this means a considerable rise in number of call times being accomplished (Rahman, Haque, & Ahmad 2010). Similarly, a research study performed by Paulrajan and Rajkumar (2011) in the Indian cellular industry revealed that mobile tariffs were the key influential factors on subscriber motivation to prefer one service provider to another.

In a Korean based quantitative study, mobile tariffs emerged as one of the top four factors that influence subscriber switching behaviour (Min & Wan, 2009). The other three factors included switching costs, customer satisfaction and customer loyalty. According to the study, 27.4 percent of subscribers involved in the study churned their service providers due to competitive market deals. On the other hand, 14.7 percent of the subscribers churned their service providers due to high pricing of call tariffs (Min & Wan, 2009). Whereas this study by Min and Wan (2009) makes significant contribution in the context of the current study by identifying price (mobile tariffs) as one of the principal reasons behind churning, the researchers overlooked the overarching relationship between satisfaction as influenced by price. In other words, these researchers treated mobile tariffs as being independents whereas there is a lot of empirical proof documenting that tariff prices influence customer satisfaction as discussed earlier on in this subsection.

In real sense, the prices of mobile tariffs are inherent in the tariff plan types especially in the cellular industry sector. Nonetheless, Raghuram, Jedidi, and Kohli (2008) contended that tariff plans are a reflection of the preferences of subscribers that lower their billing rates in relation to their projected usage. Empirical findings reported by Lambrecht, Seim, and Skiera (2007) demonstrated that prepaid tariff plans were under the influence of underestimation of subscriber usage and are a demonstration of overspending risk by subscribers. Bearing in mind that prepaid subscribers at the market's lower end are influenced by cost and have tendencies to make short calls, changes within the billing unit could trigger a considerable variation in the entire subscriber expenditure (Barrantes & Galperin, 2008). Additionally, Barrantes and Galperin (2008) pointed out that per-second billing tariffs would elevate usage among prepaid subscribers on the lower end and this would preclude their churning proclivity.

Consequently, tariff plans among service providers whether per-second, two-part, or flat/fixed tariffs would steer a given usage behaviour according to Kollmann (2000). However, subscriber perceptions towards such tariffs depend on the market in question. Unfortunately, Kollmann (2000) did not offer examples or even empirical backing to define the perceptions of such tariffs across different market contexts. This exemption makes it difficult to rationalise their argument or even test its credibility through empirical and/or practical proof. The other factor that influences customer satisfaction based on general market literature and customer relations literature is image as discussed in the next subsection.

### 2.1.2.3 Image

In existing literature, image is portrayed as being nearly synonymous with reputation. In other words, reputation builds upon image and is a reflection of the image that stakeholders and especially customers have in relation to a certain company, service and/or product. Alternatively, image could be conceptualised as either corporate image or brand image. According to Nguyen and Leblanc (2001), corporate image relates to the behavioural and physical attributes exhibited by a firm, which include the architecture, the business name, various services or products, and the extent to which every individual interacting with clients communicates the quality impression. On the other hand, Malik, Ghafoor, and Iqbal (2012) suggested that brand image is instrumental in the creation of customer satisfaction. Foxall and Goldsmith (1994) indicated that branding and brand perceptions influence customer perception with respect to service and product traits. This is why the essence of product and brand management is to create a strong brand image, which leads to the generation of the huge short- and long-term profits (Malik, Ghafoor, & Iqbal 2012).

The reputation of a seller or service provider in this case affects the quality perceptions of the products or services offered according to Cabral (2000). In their study, Haque *et al.* (2006) portrayed customer confidence and familiarity as being significantly dependent upon product/service brand and the history of the company. Generally, familiarity develops when a long history, strong company brand images, and past satisfaction with the product or service exists (Wen-Yeh *et al.*, 2004). Donnavieve and Sivakumar (2002) explained that such confidence in a brand is a derivative of consumer attitudes, which directly affect purchasing intentions. This means that consumer purchasing intentions result from attitudes that such customers hold towards a brand. In their explanation of customer satisfaction and customer loyalty, Aydin and Özer (2005) argued that perceived quality of service attributes, customer switching costs, corporate image, and trust constitute the main customer loyalty and customer satisfaction antecedents. Subsequently, loyal, satisfied customers have tendencies to purchase more, tolerate higher pricing, and uphold positive WOM. Therefore, corporate image must influence behavioural intentions like customer loyalty, which ultimately counteract customer churn (Johnson, Gustafsson, & Andreassen, 2001).

Image encompasses the beliefs and knowledge of a consumer concerning the different products of the particular brand. Research undertaken by various researchers (including Grace & O'Cass, 2005; Keller, 2003) shows that image is one of the major antecedents of

consumer brand preference. Service value attributes include service quality and the price associated with the acquisition of the service. In consistency with interdisciplinary research on image, the role played by perceived corporate identity/image as an influencer of stakeholder behaviour appears to apply in the context of subscribers in telecommunication. Further backing features in the research by Brown *et al.* (2006) who construed image as consumer perceptions towards given brands and the belief or knowledge they have concerning the organisation. According to Balmer *et al.* (2009), the significance of corporate image is further evident in a person's image about the organisation and their behaviour towards it. A quantitative study conducted by Minkiewicz *et al.* (2011) established that a positive image is directly related with customer satisfaction. Furthermore, these authors supposed that it is logical to project that a positive expectation and image of a service or product before encounter when exceeded or met would result in customer satisfaction. In the next section, previous literature related to customer retention and loyalty appears in the subsection below.

### **2.1.3 Loyalty and customer retention**

There exist many literature sources that define loyalty and its dimensionality (Ball, Coehlo, & Machás, 2004; Bennett & Rundle-Thiele, 2002; Buttle & Burton, 2002). The definitions of loyalty have been approached from both attitudinal and behavioural perspectives. However, most original works contain the definition of loyalty based on the behavioural dimension with regard to both purchase frequency and repurchase (Ball, Coehlo, & Machás, 2004). Ganesh, Reynolds, and Arnold (2000) described loyalty as either passive or active. While the former refers to the loyalty that keeps customers with a service provider even during less positive situations, the latter refers to the kind that involves intention to use and WOM. Conversely, some authors portrayed loyalty as a process instead of an outcome. For example, Oliver (1997) discussed four loyalty stages, which include cognitive loyalty, affective loyalty, conative loyalty, and action loyalty.

There are different approaches to understanding and explaining loyalty based on behavioural and attitudinal loyalty (Chaudhuri & Holbrook, 2001; Zeithaml, 2000). Behavioural loyalty involves repeated transactions, which can be computed as a “percentage of total transactions in the category, or total expenditures in the category” (Ball, Coehlo, & Machás, 2004, p.1273). Usually, attitudinal loyalty would be described as the positive affect to continuance of a relationship and the willpower to persist in the relationship. This attitudinal loyalty is at times described equivalently as the relation with customers (for

example, Morgan & Hunt, 1994). According to Ball, Coehlo, and Machás (2004), attitudinal loyalty is often measured using questionnaire methods.

On the other hand, behavioural loyalty is highly coveted, as it implies sales in most cases (Ball, Coehlo, & Machás, 2004). Altogether, Oliver (1997, 1999) argued that attitudinal loyalty is also considerably coveted because both attitudinal loyalty and behavioural loyalty are increasingly intertwined. This intertwinement is evident in the sense that repeated purchases often result in positive affect, which in turn triggers conative loyalty. This implies high involvement levels and intention to continue repurchasing. Ball, Coehlo, and Machás (2004) contended that we might regard both conative and attitudinal loyalty as being attitudinal loyalty types. This sentiment seemingly receives indirect backing from the argument that strong attitudinal loyalty usually makes consumers highly resistant to attempts by rival marketers to take them away (Gundlach, Achrol, & Mentzer, 1995). Dick and Basu (1994) have argued that attitudinal loyalty increases customer resistance towards seeking alternatives and counter-persuasion.

#### ***2.1.4 Customer loyalty segmentation***

There exist various perspectives to customer loyalty and the segmentation thereof (Kuusik & Varblane, 2009). Theories related to behavioural loyalty were domineering until 1970. Some of these theories considered loyalty as a function of the fraction of sum purchases (Farley, 1964; Cunningham, 1956). Others portrayed loyalty as a function of the probability of purchasing (McConnell, 1968; Harary & Lipstein, 1962). Alternatively, there were theories that viewed loyalty as a function traceable to purchasing pattern or frequency (Sheth, 1968; Tucker, 1964). Kuusik and Varblane (2009) criticised these approaches for their tendency to look at brand loyalty from the perspectives of the outcome or repeat purchase behaviour instead of looking at the reasons. However, this criticism excludes the work of Day (2003) who introduced the two-dimensional brand loyalty concept. This concept supposed that loyalty needs to be assessed using both attitudinal and behavioural criteria. Some studies (e.g. Reichheld, 2003; Djupe, 2000; Chaudhuri, 1995; Oliver, 1999; Jacoby & Kyner, 1973) consider and accentuate the psychological factor of loyalty, which mainly refers to emotional and attitudinal aspects.

The approaches described in the previous paragraph enable the distinguishing of customers as either emotionally or behaviourally loyal. Kuusik and Varblane (2009) argued that emotional loyalty tends to be perpetual and much stronger than behavioural loyalty. This is because emotional loyalty constitutes a perpetual desire to sustain a highly valued

relationship. Various authors (including Moorman, Zaltman, & Deshpande, 1992; Morgan & Hunt, 1995; Reichheld, 2003) indicated that the importance of the relationship is so high for the customers that they ensure optimum efforts to sustain it. Butz and Goodstein (1996) also showed that highly bonded consumers are more likely to buy repeatedly from providers to whom they are bonded. In addition, highly bonded consumers are more likely to recommend the provider to other potential consumers and tend to defend their choices to others by insisting that their preference is the most superior service or product (Butz & Goodstein, 1996).

On the other hand, behaviourally loyal consumers appear loyal although they do not have an emotional bond with the either the supplier/provider or the brand unlike emotionally loyal ones (Kuusik & Verblane, 2009). Based on similar rationalisation, Jones and Sasser (1995) have referred to these two loyalty types as false (behavioural) or long-term (emotional). Hofmeyr and Rice (2000) classified these customers into committed (emotional) and simply loyal (behavioural). However, it has been argued that behaviourally loyal customers are classifiable into sub-segments based on their mannerisms. These sub-segments include customers that are ‘compelled’ to be loyal, those that are functionally loyal, and those that are loyal owing to inertia (Kuusik & Varblane, 2009).

Customers can be ‘compelled’ to loyalty when they circumstantially must be customers even if they may not want to. Such compulsive loyalty could occur when companies are monopolies thereby limiting consumer choice (Kuusik & Varblane, 2009). Grönholdt, Martensen, and Kristensen (2000) demonstrated that firms using low cost strategies achieved considerably higher loyalty levels than projected from customer satisfaction. Conversely, firms that invested significant efforts on branding achieved higher customer satisfaction, but lacked a commensurately high level of loyalty (Grönholdt, Martensen, & Kristensen, 2000). According to Kuusik and Varblane (2009), customers may be forced into loyalty through the creation of exit barriers. In the telecommunications industry, Malhotra and Malhotra (2013) referred to these exit barriers as switching barriers.

Loyal behaviour resulting from inertia implies that customers do not switch to other providers because of the comfort or the comparatively low significance of operation. In other words, the choice of little importance and this eliminates the desire to spend effort and time seeking for alternatives (Kuusik & Varblane, 2009). This means that customers remain loyal because they do not seek substitutes and instead peg their loyalty on how suitable the current product appears to be. This premise complements Oliver’s (1999) cognitive loyalty approach,

which exemplifies loyalty based on brand belief only when cognition can be founded on vicarious or previous knowledge or on present information based on experience. The loyalty depth does not supersede mere performance when the transaction is mundane - implying that satisfaction is never processed (such as utility provision or trash pickup) according to Oliver (1999). On the other hand, Hofmeyr and Rice (2000) found that customers might not switch brands when they are not satisfied if they perceive alternatives to be equally bad or worse than their current brands. Wernerfelt (1991) argued that inertia might also result from lacking information about appealing brand characteristics.

The loyalty of functionally loyal consumers is traceable to objective reasons for the loyalty. Wernerfelt (1991) offered brand loyalty based on cost as an example, which implies that brand utilities wield a positive impact on brand choice. It is possible to develop functional loyalty through functional values using quality, usage convenience or distribution of a product or even through various loyalty programs such as games, points, and coupons. These programs give a concrete reason (objective reason) to prefer one supplier to another (Kuusik & Varblane, 2009). Unfortunately, these functional values are easily imitable by competitor. Thus, the creation of functional values provides a transitory competitive advantage. Consequently, Barnes (2004) has described functional loyalty as rarely perpetual.

Jones and Sasser (1995) have suggested three loyalty measures that may be used in segmenting based on loyalty. The first measure is the primary behaviour of customers, which implicates purchase frequency, amount, and recentness. Secondary customer behaviour is the second measure and relates to behaviours such as customer referrals, spreading word (WOM), and endorsements. The final measure is the repurchase intention (Jones & Sasser, 1995).

## 2.2 Commitment

There are several definitions of commitment when it comes to consumer and marketing studies. Bowen and Shoemaker (1998) defined commitment as the belief that a continuing relationship is so valuable that partners have a willingness to work at sustaining it and are willing to pursue long-term benefits through making short-term sacrifices. Cater (2007) described commitment as an implicit or explicit relational continuity pledge shared by exchange partners. Huang, Cheng, and Farn (2007) described commitment as the belief that exchange partners hold mutually that sustaining a continuing relationship is valuable and worthy and would like to make maximum effort in maintaining this relationship. According to Lacey (2007), commitment can be defined as an enduring desire or attitude for a specific

brand or firm. Theron, Terblanche, and Boshoff (2008) described commitment as “the desire for continuity manifested by the willingness to invest resources into relationship” (p.998). However, Jones, Taylor, and Bansal (2009) portray commitment as a psychological power that binds individuals towards maintaining the relationship with a specific entity.

Concerning the nature that customer commitment exhibits, Wong and Zhou (2006) contended that customers commit to relationships with service providers when they perceive that the relationship will earn them more satisfaction and value. Thus, committed customers are likely to give back to the relationship with their suppliers in return for the benefits received prior.

Garbarino and Johnson (1999) found that committed customers are likely to endure dissatisfaction at times since they are keen on reaping the benefits of the long-term relationship with firms. Owing to this reason, Bolton, Lemon, and Verhoeff (2004) contended that satisfaction is not a significant predictor of the length of relationship in the case of committed consumers as it is for customers that have short-term perspective and evaluate every transaction individually. The principal commitment antecedents include trust, benefits, shared values and switching costs according to Spake *et al.* (1999). It has been argued that communication elevates trust levels whereas opportunistic behaviours and uncertainty hinder it (Spake *et al.*, 1999).

Bolton, Lemon, and Verhoeff (2004) classified commitment as either calculative (continuance) or affective. However, McCormack *et al.* (2009) described normative commitment as another commitment dimension or type besides affective and calculative commitment. These authors used the terms continuous commitment and calculative commitment interchangeably. According to Cater (2007), these commitment dimensions are related to the psychological attachment states although each is triggered and steered by diverse motivations in sustaining the extant relationship. Colgate *et al.* (2007) argued that affective commitment originates from positive attitudes towards the company (image) and therefore the intention to remain committed, which has a positive influence on the length of the relationship. On the other hand, the origin of calculative commitment is rational motives like perceived price fairness and switching costs (price). Unfavourable alterations in these motives trigger churning among customers that have calculative commitment (Bolton, Lemon, & Verhoeff, 2004). This explains the inconsistency in literature concerning the correlation between loyalty and commitment especially because most researchers exhibit

ambiguity concerning the commitment type being measured (Bolton, Lemon, & Verhoeff, 2004).

Gustafsson, Johnson, and Roos (2005) contended that commitment dimensions appear increasingly presumptuous. Calculative and affective commitment captures the relationship depth between customers and service providers. This inspires the continuation of the relationship on long-term basis. However, normative commitment captures the social mutual exchange norm. Jones *et al.* (2009, p.17) stated that the three commitment dimensions can be viewed as “want to stay” (affective), “should stay” (calculative/continuous), and “have to stay” (normative). In other words, these commitments may be seen as the rational (normative), emotional (affective), and moral (calculative/continuous) commitment forms.

### 2.3 Churn

Customer churn has been defined as the percentage or number of regular customers that abandon a relationship with their service providers (Hwang, Jung, & Suh, 2004; Berson, Smith, & Thearling, 2000). Mattison (2001) classified churn as either internal or external in nature. Internal churn happens when customers switch from one service to another with the same provider. External churn entails switching from one service provider to another and may be involuntary or voluntary. Yang and Chiu (2006) discussed these customer churn subtypes. Voluntary churn happens when customers switch to alternative providers due to reasons such as perceived superior value, change of customer location, and cancelling of services. It may be either incidental or deliberate (Jahanzeb & Jabeen, 2007). Involuntary churn happens when providers terminate customers due to various reasons such as fraud, failure to pay bills, or underutilisation (Yang & Chiu, 2006; Mattison, 2001).

Previous studies (such as Bolton, 1998; Ng & Liu, 2000; Wei & Chiu, 2002) mainly investigated the reasons behind customer churn and the causality or link between churn and its determinants. Such studies generally investigated eight churn determinants including customer loyalty (Bolton *et al.*, 2000), customer satisfaction (Bolton, 1998), customer loyalty and customer satisfaction (Gerpott, Rams, & Schindler, 2001), switching barriers’ adjustment effect on churn (Kim & Jeong, 2004), and exit interviews with customers abandoning a service through post hoc analysis (Kon, 2004).

Other researchers utilised complex tools in an attempt to predict customer churn (for example, Wei & Chiu, 2002; Ng & Liu, 2000) and switching of brands (e.g. Weerahandi & Moitra, 1995) as opposed to conducting descriptive analysis on customers that are likely to churn. Additionally, majority of these previous studies cited above emphasised on identifying

the direct effect that independent variables have on customer churn. However, Ahn, Pil Han, and Seop Lee (2006) used a different approach and studied consumer status as a mediator variable between customer churn and the determinants of churn. However, the study by Ahn, Pil Han, and Seop Lee (2006) was focused on identifying the stages involved in the customer churn process. Similarly, Keramati and Arbadili (2011) used customer status as a mediator of customer churn

Svendsen and Prebensen (2013) conducted a two-wave longitudinal study in the Norwegian telecommunications sector. They investigated the effect of customer satisfaction, perceived switching costs, and customer demographics on churn. The findings revealed significant effects of satisfaction, age, and provider as well as the effects of interaction between provider and satisfaction on churn although gender had no statistically significant effect. Provider effects were defined as brand image effects since switch costs, demographics, and satisfaction were controlled for in the research design. The authors concluded that a very strong brand image reduces the susceptibility of a service provider to customer churn especially churn triggered by low customer satisfaction (Svendsen & Prebensen, 2013).

Several other factors that influence churn in the telecommunications industry have emerged in previous studies. Paulrajan and Rajkumar (2011) found that price and communication are principal motivating factors for retention or churn in the mobile market in India. In their study, communication comprised of geographical coverage, call quality, and call drop rate. These factors together refer to network quality. In another study, Seo, Ranganathan, and Babad (2008) indicated that voice clarity and geographical coverage are important factors that influence customer churn in the telecommunications industry. Birke and Swann (2006) showed that geographical coverage affects retention and churn of mobile service subscribers. The results of a UK mobile service study conducted by Turki (2010) showed that over one-third of study participants ranked poor mobile signal, which translates to poor network coverage, as the top cause for customers switching to alternative providers. Similarly, Rahman, Haque, and Ahmad (2010) demonstrated that network quality constituted a significant factor associated with customer satisfaction and one that causes customer churn in mobile service. Min and Wan (2009) found that 13.7 percent of Korean mobile service subscribers churned due to problems associated with network coverage.

Another important churn factor is mobile tariffs especially in the case of prepaid subscribers (Haque, Rahman, & Rahman, 2010). Altogether, Munnukka (2008) contended that the perception of a subscriber about price is connected with the perception of most

beliefs, quality, and value. Mobile tariffs was also found to be a principal influential factor that influenced subscriber preference for one provider to another (Paulrajan & Rajkumar, 2011) Min and Wan (2009) indicated that mobile tariffs were an influential factor in understanding subscriber switching behaviour in the Korean market. It is noteworthy that customers across different markets perceive provider mobile tariff plans such as flat and per-second billing tariffs differently (Kollmann, 2000).

The quality of customer service has also been described as an influential factor in customer churn. Kim, Park, and Jeong (2004) listed various activities involved in customer service. They include complaints' processing speed, friendliness during reporting, customer support systems, reporting ease and the manner in which complaints are addressed. This implicates the importance of employee professionalism, courtesy, and friendly attitude (Soderlund & Rosengren, 2008). Johnson and Sirikit (2002) linked customer service quality to promotion of customer satisfaction, which influences customer loyalty as well as future purchases. Rahman, Haque, and Ahmad (2010) also found that customer service quality influenced the perceptions of Malaysian subscribers about service providers directly. Almana, Aksoy, and Alzahran (2014) also argued that inadequate or slow response to complaints increase the churn probability in the telecommunications industry.

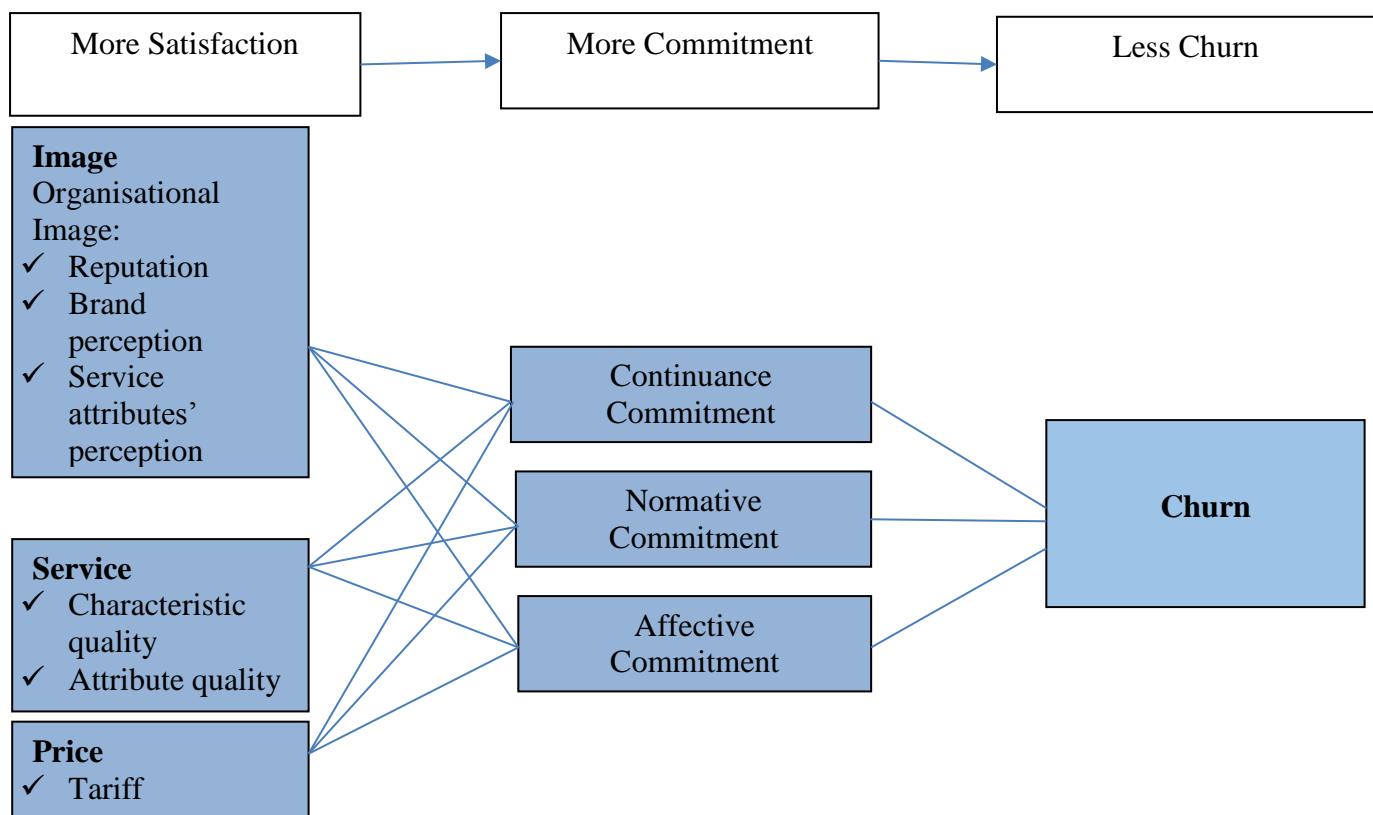
However, Malhotra and Malhotra (2013) added that innovativeness is a crucial aspect of subscribers' perceptions towards brand image. Subsequently, these authors recommended the evaluation of innovation with a view to establish its influence over both image perceptions and customer loyalty. Innovation in the telecommunications industry may take the form of hardware, software, or service. Thus, it is important to seek better understanding of the perceptions subscribers hold towards innovativeness of service providers and the impact of such perceptions on commitment and therefore trigger churn or retention (Malhotra & Malhotra, 2013).

#### **2.4 Conceptual framework**

The literature reviewed in this chapter demonstrated that although there are numerous churn factors that have been proven empirically in different contexts. However, a closer look into literature reviewed demonstrates that when customers are satisfied, they tend to be more loyal and therefore develop affective, continuance, and normative commitment. However, telecommunications literature also showed that subscribers' positive perceptions of provider image, service quality, and price determine whether they are likely to be satisfied with either of the variables. However, it has been demonstrated that there are various indicators of

service quality in the telecommunications (such as network coverage, call quality, and customer service quality). Nonetheless, these indicators point towards satisfaction or dissatisfaction, which in its overall or itemised sense has been demonstrated as influential over subscriber's loyalty to the provider through affective, normative, and/or continuance/calculative commitment. The development of this commitment based on satisfaction attributable to positive perceptions of service quality attributes, image, and price would lead to less churn. Based on this understanding, Figure 1 below illustrates the conceptual framework used as a basis for empirical elements of this DBA project.

*Figure 1.* Conceptual framework



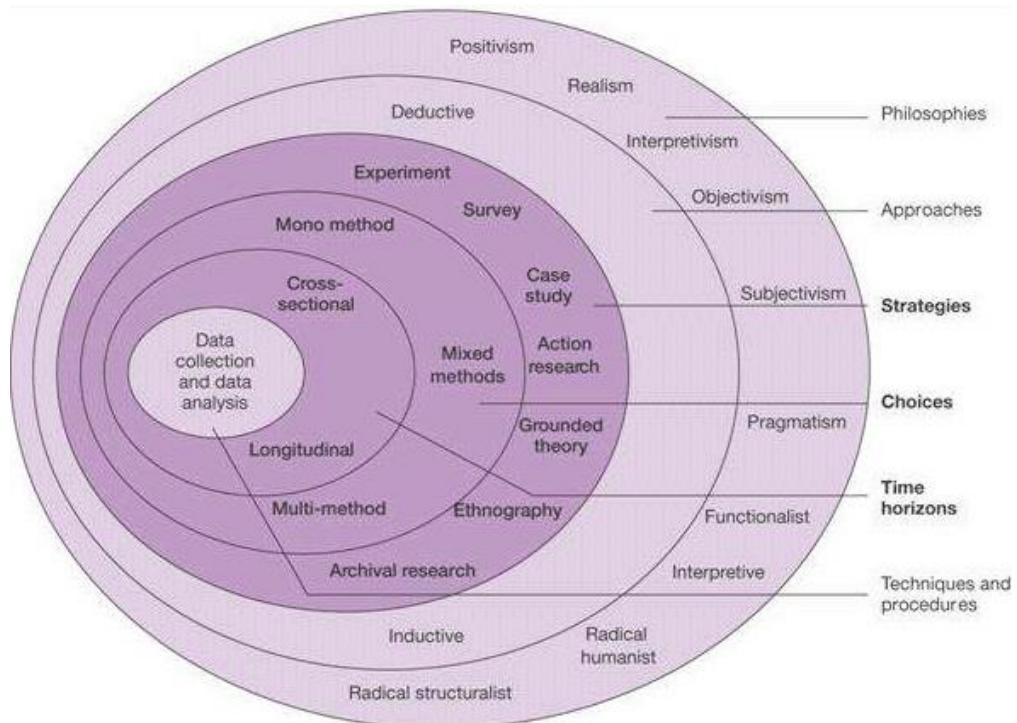
### 3. Project Methodology

This chapter contains discussions about the research methods used in the study to accomplish the aim of the project as a whole. The aim and objectives set out in the present document will be addressed later and the conclusions made thereof shall be progressive from the research advanced from the previous documents. Docs 3, 4 and 5 are continuous and that there is an overriding ontological position of objectivism and a primarily positivist approach applied to the work. The work presented is primarily quantitative. However, in order to undertake the quantitative work some qualitative work was necessary in order to help develop the questionnaire. The first section provides an overview of the research methodology model adopted to guide the development of the research methodology in this document. The research philosophy, research approach, research strategy, data collection, data analysis, ethical considerations, and chapter summary follow respectively.

#### 3.1 Research Methodology Model

The understanding that a study's research methodology encompasses sensible thought processes and principles employed in performing scientific research as argued by Fellows and Liu (2008) informed the need for the adoption of a research methodology model. The model was meant to assist in the systematic conceptualisation and presentation of the research methodology. See Figure 1 below for the research onion.

Figure 2. Research onion



Source: Saunders et al. (2002)

### **3.2 Research philosophy**

An understanding of the research philosophy was crucial in developing a clear perspective of the suitable research designs and research methods. This understanding was useful to the researcher when it came to considering the kind of evidence necessary for the accomplishment of the current document's research objectives. This is traceable to the academic premise that a research philosophy describes the researcher's choices and assumptions about the study question (Rubin & Rubin, 2012). In spite of the many philosophies described in the research onion, Creswell (2014) argued that research philosophies commonly involve epistemology and ontology. In fact, Saunders *et al.* (2012) concur that epistemology and ontology are the main pillars of research philosophies. Based on the arguments by these two authors, the researcher found it worthy to discuss the ontological and epistemological stances implicated in the research presented in this document.

Bryman (2012) suggested that ontology is the way people perceive the world via the social lens. Thus, researchers may assume constructionist or objectivist ontological positions (Bryman, 2012). For constructionists, social phenomena and associated meanings emanate from ever-dynamic social interactions, which the social actors keep changing. On the other hand, objectivists view social actors and their phenomena as autonomous of each other (Bryman, 2012). The literature review in this document and the results discussed in Document 4 showed that the factors influencing customer churn in the telecommunications industry are dynamic. In addition, it emerged that consumers and service providers as the social actors influence important antecedents of customer churn such as customer commitment/loyalty and performance indicators/dimensions. Whereas the researcher concedes to the dynamic nature of social actors and the factors that influence churn, the researcher also believes that there are indicators of these phenomena that are relatively, conceptually stable and can be measured objectively. Thus, a broadly objectivist approach has been adopted for the entire study.

Positivism, interpretivism, realism, and pragmatism are the four major epistemologies in social research (Saunders *et al.*, 2012). Positivists uphold that reality can be measured directly, is stable, and knowable because there is only a single external reality and truth (Rubin & Rubin, 2012). Accordingly, positivists show detachment from the research processes to ensure the highest objectivism levels by eliminating bias (Wilson, 2014). As for realists, they assume that there is a single reality, but it is independent of the mind (Saunders

*et al.*, 2012). Realism essentially relies on what the senses interpret as reality to be the truth and presumes scientific approaches for knowledge development. Interpretivist researches attempt to describe, draw interpretations, and understand situations from scientific views while aiming at capturing the subjective connotations of the social action observed during the research process. To accomplish this, interpretivists interact directly with participants in their research processes (Bryman & Bell, 2007). On the downside, these interactions have been described as jeopardising generalizability because interpretivist research processes tend towards subjective than objective ontologies (Wilson, 2014). Finally, a pragmatist researcher employs the method or methods s/he considers most suitable for resolving the research questions. For pragmatists, knowledge comes from outcomes, situations and actions as opposed to antecedents (Creswell, 2014). Pragmatists also focus on resolving the problems outlined in their research studies (Saunders *et al.*, 2012).

Overall, a primarily positivist approach was adopted owing to the need to generate outputs that can be objectively compared, both over time and between communications service providers operating in Saudi Arabia. Moreover, it was important that outputs generated are readily communicated to and understood by managers and other employees within STC. However, since the measures used in this study relate to phenomena that are determined socially, the researcher figured that an interpretivist approach was necessary to identify and confirm the nature of the attributes and characteristics to phenomena around commitment and service, image, and price needed to be measured throughout the entire project.

### **3.3 Research approach**

Defining a research approach is crucial especially when one intends to draw conclusions and distinguish that which is true from what is not. This is because a research approach describes how the research rationalises issues (Håkansson, 2013). Researchers may opt for a deductive or inductive research approach or combine the two in a single research. Deductive reasoning focuses on testing existing theories and knowledge to check for trueness or falseness of positions taken in existing knowledge and theories. Conversely, researchers employing inductive reasoning try to identify patterns that represent a particular order of commonness as events happen (Saunders *et al.*, 2012).

There already exist many theories and academic knowledge as presented in past literature concerning the customer churn and its antecedents in the telecommunications industry. However, no directly applicable model concerning factors affecting churn for STC

could be found. Thus, it was important to test the extent to which consumer and marketing theories discussed in literature applied in the case of STC. This understanding explains why the researcher adopted both the deductive and inductive research approach for the entire research project. For example, the researcher found evidence from research methodologies' literature (Saunders *et al.*, 2012; Wilson, 2014) showing the compatibility of the deductive research approach with positivism and quantitative research. However, there was need for the researcher to identify patterns that represented a commonness in the interpretation of commitment by different consumers drawn from STC and its major competitor.

### **3.4 Research strategy**

Yin (2009) stated that a research strategy is an all-inclusive method that defines the logical design and integrates the approaches to collection and analysis of data. It is not in the interest of the current document to provide details about the numerous research strategies listed in the research onion, as an extensive and comprehensive discussion can be found elsewhere (cf. Gray, 2009; Saunders *et al.*, 2012; Wilson, 2014). Altogether, based on the research strategies listed in the research onion, the survey research strategy was most appropriate for this research. The survey strategy involves many sets of research methods that researchers often use to investigate the state of different phenomena (Conaway & Powell, 2010). The reasons for the adoption of the survey strategy are explained in the next paragraph.

In addition, survey strategies assist researchers in drawing scientifically based conclusions about a big population based on a small sample population from the bigger population (Forza, 2002). This explanation was consistent with the practical reality that scope of this research and financial constraints faced by the researcher in conducting this research made it difficult to determine and reach out to all STC and competitor consumers in Saudi Arabia. Thus, adopting the survey strategy enabled the researcher to draw a large and adequately representative sample as described in Document 4. In addition, the survey strategy allowed the researcher to conduct focus group interviews in Document 3 for qualitative data. Moreover, the research objectives addressed in the current document could best be addressed using measurable data from sampled respondents that were geographically dispersed across Saudi Arabia and a survey made this possible. This is one of the benefits of using surveys as outlined by Gray (2009).

### **3.5 Research choices/methods**

Research choices have been interchangeably discussed as research methods. Researchers may employ multiple, mono or mixed research choices/methods according to Saunders *et al.* (2012). In mono research methods, researchers use one data collection technique and a complementing data analysis procedure. For multiple methods, researchers use at least two techniques of collecting data and corresponding techniques to analyse data. Nevertheless, researchers using multiple methods employ more than one method of research (qualitative and quantitative), or techniques for collecting and analysing data, which includes at least two methods in a single research paradigm (Saunders *et al.*, 2012, 2007). Finally, researchers using mixed methods combine both qualitative and quantitative techniques in collecting and analysing within one research design (Teddlie & Tashakkori, 2009). Based on these definitions, it is clear that the basis of the three research choices is quantitative and/or qualitative research methods.

Quantitative research methods focus on investigations of phenomena using numerical data that a researcher analyses using mathematical tools and methods particularly statistical tests (Aliaga & Gunderson, 2002). Quantitative research methods are particularly useful if the research problem in question requires quantitative or quantifiable solutions (Fellows & Liu, 2008). Normally, researchers deploying quantitative methods emphasise on prediction of outcomes and often detach themselves from their prejudices, knowledge, and opinions in order to maximise objectivity in research and making conclusions (Harwell, 2011). Mainly, quantitative research requires more structured data collection instruments and bigger samples compared to qualitative research (Babbie, 2013). Wilson (2014) explained that quantitative research involves grouping of different features, variables' selection and counting, and development of statistical models in order to explain different observations.

Contrastingly, qualitative research revolves around investigating beliefs and views that people have as opposed to facts and numerical data as is the case with quantitative research (Fellows & Liu, 2008). This suggests that qualitative researchers mainly explore human elements within a particular topic to establish or investigate the way people perceive their social world (Given, 2008). Normally, comparatively smaller sample populations are found to be enough to yield reliable qualitative findings. This is because data analysis in qualitative research is iterative and often entails theme and pattern identification based on the data analysed (Håkansson, 2013). Denzin and Lincoln (2005) suggested that qualitative research mainly involves localised activities that render the researcher an observer within the

world. This happens through an interpretive and naturalistic approach to the world. According to Creswell (2014), this understanding explains why qualitative research is mostly associated with the interpretivist philosophical stance than any other (Creswell, 2014). Despite the strengths associated with qualitative research, Yin (2009) criticised it by citing generalizability problems.

Based on the arguments presented above and the researcher's understanding of the different research choices available, sequential mixed methods were deemed most appropriate for achieving the research objectives of this project. Concerning the sequential mixed methods employed, the researcher deployed qualitative research methods in Document 3 and sequentially employed the outcomes of the qualitative research to develop a questionnaire for Document 4 due to several reasons. First, mixed methods enabled the researcher to combine the strengths of both the quantitative and qualitative methods in one research to determine the relative contribution of pre-determined antecedents to overall expressions of customer commitment and the strength of their contribution to commitment. For example, employing qualitative methods led to the development of deeper and richer meanings concerning the factors of commitment that potentially influence churn. On the other hand, objectivity and generalizability that were crucial to enhancing the representativeness of the findings to STC and Saudi telecommunications industry would have been jeopardised by the exclusive application of qualitative research and this implied the importance of applying quantitative research in Document 4 and Document 5. Third, using both qualitative and quantitative research methods complemented the use of an interpretivist philosophy, the survey strategy and the combination of both the inductive and deductive research approach. Finally, most previous studies on customer commitment/loyalty, customer satisfaction, and churn in the telecommunications industry employed quantitative research methods successfully (for example, Shafiq *et al.*, 2013; Malik, Ghafoor, & Iqbal, 2012; Sattar & Sattar, 2012). However, it is imperative to state that the whole project involves a sequential mixed methods approach considering that the survey used in Document 4 and Document 5 was developed based on the qualitative results of focus group interviews in Document 3. Thus, Documents 4 and 5 were quantitative using a questionnaire developed qualitatively in Document 3.

### **3.6 Time horizons**

Researchers can conduct either cross-sectional or longitudinal work (Saunders *et al.*, 2012). Researchers executing cross-sectional studies normally collect data involving many

cases within a relatively short period. Normally, cross-sectional studies require lesser amounts of time and financial resources. This is because researcher need not follow up on research subjects urging them to continue participating in the research since participants in cross-sectional studies participate only once (Gravetter & Forzano, 2012). Additionally, cross-sectional studies require data that provides a snapshot into phenomena of interest (Saunders *et al.*, 2012). Despite their numerous merits, cross-sectional have been can be faulted for internal validity problems and difficulty in offering full account for cohort or generational effects inherent in different research phenomena (Gravetter & Forzano, 2012).

Contrariwise, longitudinal studies require repeated data collection about the same subjects at least two times over a comparatively longer period (Saunders *et al.*, 2007). Most longitudinal studies seek to establish time-weighted changes (Wilson, 2014). Therefore, researchers conducting longitudinal studies take more time and use more financial-related resources to observe the subjects under investigation for longer periods in attempts to draw time-based comparisons that assist in determining change that happens with time (Saunders *et al.*, 2012). For the current research, a cross-sectional study was preferred because the evidence needed to achieve the research objectives did not require data collected at different times from the same consumers. Instead, the research was about providing a snapshot into the current explanation for customer commitment, behaviour, and churn related to STC consumers and develop a short-form measuring instrument that can be used to gather relevant customer intelligence quickly and efficiently on an ongoing basis. Thus, the focus of the immediate research is cross-sectional, but some of the outputs from this will enable subsequent longitudinal research to be undertaken.

### **3.7 Data collection**

Secondary and primary data were collected in this study. Secondary research was conducted through desk research involving peer reviewed journals, reliable reports, and books in order to conduct a review of the relevant literature. The desk research was conducted both offline and online through the university library. Primary data collection procedures for Documents 3, 4 and 5 are explored in sections specifically relevant to these documents and the research conducted therein.

## **4. Work Completed and Way Forward**

### **4.1 Summary of document 3**

Document 3 was tailored to explore the perspectives and reasons behind defection of consumers from STC using qualitative research. The essence of the focus group interviews was to identify the main issues that would feature in the questionnaire development process. A group of 10 participants that had defected fully or partially were selected from the STC billing register and focus group interviews comprising all 10 participants together were conducted. At the conclusion of the exercise reported in Document 3, a principal outcome was a structured questionnaire developed from the responses of the interviewees. The questionnaire developed as an outcome of the qualitative findings reported in Document 3 was progressively used as the data collection tool for the findings reported in both Document 4 and Document 5 (the current document).

The actions arising to identify the attributes and the associated reasons for defection needed a group of fully and partially defected mobile subscribers to be established. A list of one hundred subscribers covering a wide range of customer profiles were randomly identified from STC's customer care and billing system, ICMS (Integrated Customer Management System). The researcher shortlisted fifty defected customers by closely looking into their location, education, profession, age, social, and economic background to proportionately cover all subscriber groups. Considering the proximity of participants, all members were chosen from Riyadh. In the middle of November 2007, these fifty potential participants were individually called by phone and briefly explained the purpose of the research study and expected commitment level to find out their initial willingness to participate. Thirty of them expressed their enthusiasm to participate and five could not be reached by phone. The researcher individually met each of the potential participants and based on the availability of the members and their level of commitment to the research, came up with a list of ten active members. A tentative list of five other members was made in case any of the ten members dropped out for reasons beyond their control.

The approach was to meet the members individually twice every month with a set of pre-designed initial basic questions, for their response. The pre-designed initial basic questions were drawn from the researcher's personal experience at STC's loyalty group and through consultations with top-level managers working at the Loyalty group of STC. In real life, the subscriber's decisions are independent of each other, so the researcher figured it was appropriate to conduct individual interviews with the members. During interviews, a pre-

designed set of initial questions (Appendix A) were asked, members' feedback was noted to improve the questions and the possible answers, notes were taken to act as supporting information for interpretation. The next method employed in undertaking this research involved two whole day group meetings at the end of the interviews for sharing the thoughts and inputs by the members. A list of key issues related to churn in the telecoms industry, inspired by the Document 2 literature review, were discussed at a meeting with colleagues in STC. The meeting arrived at a series of nine attributes that related churn, the telecoms industry, and STC in a meaningful way. From the meeting, for each attribute, a list of potential questions - involving different service/operational activities specific to STC – was developed (See Appendix A). For each attribute, approximately a week was spent in interviewing the members and obtaining their views on the relevance and usefulness of the questions. This translated into ninety interview meetings, each lasting between 60 to 90 minutes. Summary notes of interview overview and main issues raised during the interview are outlined in Appendix B, Participating Mobile Customers – Interviews. Participants were briefed about the area of interest and its questions before each interview session. At the end of each interview, participants were also briefed about the topic and questions for the next meeting to avoid surprise and for them to be prepared for the questions.

The initial set of questions were enhanced and updated from interviews based on members' input, discussions and the researcher's interpretations. After nine such meetings with each member, two group meetings, each of approximately 120 minutes duration, were conducted to share members' views and common understandings. While individual interviews were about garnering personal insights concerning customer churn and issues around subscriber commitment from a personal level, the group interviews were discussions meant to harmonise the perspectives and reasons of customer defection. During the interviews, in addition to obtaining members' views on our projected questionnaire content, their views on the issues being addressed were also sourced. At the end of all the interviews, the set of questions were compiled into questionnaire (Appendix C) for future use to collect data for the next phase of the research study.

The final questionnaire comprised 13 sections. The first section contained information about the study and the researcher as well as prompts to source for consumer contact details. The second section had screening questions that were meant to determine the suitability of the potential respondent to participate in the study. For example, no respondents that had participated in a research survey regarding telecommunication over the past six months were

allowed to participate in the study pursuant to prompt S2. This was a measure to avert respondent bias. Section A, which was the third section of the questionnaire overall, prompted respondents for general information about their subscription, the services they were aware of and the reasons that would motivate them the most to subscribe to new services with their respective service providers. The fourth section of the questionnaire, titled Section B in the questionnaire, contained 14 Image reflective indicators related to the three key Image attributes. It was retrospectively considered that the fourteen questions formulated in the end were a comprehensive reflection of these three Image attributes.

The fifth questionnaire section, entitled Section C in the questionnaire, had five ‘Commitment’ items, three relating to the notions of Affective Commitment, Normative Commitment and continuance commitment, and two relative to preference regarding competitor Services. In Section D, which was the sixth section essentially, contained prompts related to major Service areas about quality of call and network coverage. Similarly, the seventh section of the questionnaire, Section E, contained service awareness prompts such as rating of value added services. Questionnaire Section F (section eight) related to handling of complaints, which also related to quality of service. One pricing scale was developed based on the questionnaire prompts at section nine of the questionnaire, which was titled section G. Section H (section ten), Section I (Section eleven), and Section J (section twelve) covered the areas of sales offices, customer care, and website respectively. Finally, section 13 sourced for background information of the respondents such as their nationality and work status. It is noteworthy that each of the questions from sections D through J, which were covering the six Service areas and Price, had one top-level or headline question seeking the respondents’ overall rating of the Service area. Additionally, these sections of the questionnaire comprised a number of detailed prompts designed to provide more finely grained insights.

The results of the focus group interviews were analysed in order to develop the questionnaire based on the views of former STC customers. The interviewees involved in the focus groups largely indicated dissatisfaction with STC in relation to service quality, service features, Price, complaint resolution, fault resolution, and after-sales customer service. Document 3 showed that all interviewees expected high levels of service from STC although STC was not meeting their expectations. Low commitment levels towards STC were detected with similar dissatisfaction levels being observed in the service awareness, quality of call, visiting sales offices, calling customer call centres and browsing STC website attributes. Responses were also used as an input into the refinement and development of the

questionnaire. During the interviews, in addition to obtaining members' views on our projected questionnaire content, their views on the issues being addressed were also sourced. However, there were controversies in interviewees' perspectives concerning complaint handling and network coverage. In the end, Document 3 could not report on conclusive measuring of the impact that such aspects of customer commitment and satisfaction have on commitment. In addition, the scope of Document 3 did not require specific information such as demographics and this was necessary in developing conclusive research in the end.

## **4.2 Summary of Document 4**

The questionnaire comprising numerous items as developed in Document 3 was used in Document 4 as the data collection tool (see section 4.2.1 below for further detail). This progressed the use of sequential mixed methods' research whereby the findings of the focus group interviews led to the refinement of a questionnaire for use in Document 4, as the next research phase. Subsequently, Document 4 was a quantitative research report that attempted to measure commitment as a potential predictor of customer churn and the attributes associated with the reasons of customer defection based on a larger sample ( $N= 1660$ ). This sample comprised of consumers subscribed to STC ( $n= 827$ ) and other drawn from the competitor service provider ( $n= 833$ ) selected based on a stratified area probability sampling procedure (see 'Sampling' at 4.2.1.1 below). This was because mobile customers for both STC and its competitor are scattered in the urban and rural areas consisting of the Central, Western, Southern, and Eastern regions. The rationale behind comparing the performance of STC with the performance of its biggest competitor was to investigate the performance areas that appeal to STC customers to the extent that they completely or partially abandon STC's services for those of the competitor.

In the end, the output from Document 4 was a descriptive report of questionnaire items developed in Document 3, but the report focused on 14 Image items and just top-level questions related to six Service attributes and the top-level question relating to Price/tariff plan. Neither the responses to detailed questions in sections D to J, nor the responses to the Commitment questions in section C were analysed, as the main purpose of Document 4 was just to develop a provisional understanding of the relative performances of STC and its major competitor. A simplified data reduction process using a combination of top- and bottom-ranking values was employed to report on key performance indicators that could be used to compare STC and its major competitor visually. The results of the questionnaire were

presented in the form of frequencies and percentages. The results appeared to show that STC performed better than its competitor in respect of service quality and commitment, but relatively the same in respect of commitment. The main outcomes derived from Document 4 were frequency distribution (in percentage) of individual lower level attributes, a comprehensive set of attribute association models, and a number of key performance metrics for both STC and its competitor. The key performance indicators for all regions across all four regions included service quality, Price and Image. In short, Document 4 built upon the qualitative findings of Document 3 using the questionnaire developed in the latter document to offer descriptive information about the survey respondents drawn from STC and its competitor.

#### ***4.2.1 Data collection details***

The questionnaire (see Appendix ‘C’) was used to collect primary, quantitative data for this piece of research. Questionnaires contain structured prompts or statements that may either be open-ended or close-ended or both (Bryman 2012). According to Robson (2011), questionnaires tend to be most productive when all respondents can interpret the questionnaire items in the same way within the whole sample. The approach was to meet the subscribers individually with a set of questionnaire, as in Appendix C, for their response. The same questionnaire was used by replacing ‘Al Jawal’ with the competitor’s name to administer the survey with competitor customers. In real life, the subscribers’ decisions are independent of each other, so the researcher considers it right to conduct individual interview with the subscribers. Ten (10) interviewers were trained to conduct survey interview around the kingdom. The interviewers posed questions to the respondents and recorded their responses to ensure accuracy of responses and provide room for explaining prompts that respondents could not understand on their own.

The rationale behind administering the questionnaires face-to-face was based on two major reasons. First, the questionnaire was highly structured in the sense that affirmative or contrary responses to some prompts required respondents to skip some questions and proceed to others. Thus, it was important that trained interviewers administered the questionnaires to avoid erroneous questionnaire completion or incompleteness. Indeed, Babbie (2014) noted that one of the most significant advantages of face-to-face interviewer-administered questionnaires is that “they generally produce fewer incomplete questionnaires” (p. 293). Secondly, the use of interviewer-administered face-to-face questionnaires was useful in ensuring that respondents could participate regardless of their literacy levels, as would be

required for self-administered questionnaires, for example (Babbie, 2014). The researcher acted as the coordinator during the survey and supervised the survey activities from Riyadh.

#### *4.2.1.1 Sampling*

Quantifying the attributes and the associated reasons for loyalty or defection required identification of large samples of STC and its major competitors' mobile subscribers. According to The World Factbook (2014) the Saudi urban population was estimated at 82.3 percent in 2011. This leaves approximately 17.7 percent residing in rural areas. In the case of both Al Jawal (brand name of STC Mobile) and its major competitor, urban and rural customer population varies considerably. The considerable variance in sub-populations implicated the need to employ stratified probability sampling.

According to Pride and Ferrell (2014), stratified sampling involves division of the target population into categories based on at least one common attribute followed by the selection of a random sample in every group. This renders stratified random sampling more representative of the population considering that all sample elements in probability sampling have equal and known chances of being chosen into the study sample (Pride and Ferrell, 2014). For the current piece of research, the stratified sample was based on the customer's residential area.

The total sample size of Saudi Arabia was subdivided into four regions based on respective population size. The four regions included the Central, Western, Eastern and Southern regions of KSA. Subsequently, the population was grouped into relatively identical subgroups prior to commencing the stratification process. In total, there were 501 participants from the Central region (248 subscribed to Al Jawal and 253 to the competitor), 594 from the Western region (297 subscribed to Al Jawal and 297 to the competitor), 281 from the Southern region (140 subscribed to Al Jawal and 141 to the competitor), and 284 from the Eastern region (142 subscribed to Al Jawal and 142 to the competitor). The main disadvantage of using the stratified sampling technique is the need for more administrative efforts, which translates to more human resources than in when using simple random sampling techniques or even nonprobability techniques. However, the researcher used STC human resource to overcome this obstacle.

In total, 1660 randomly selected subscribers divided relatively equally between STC and its major competitor were interviewed, as demonstrated above. Each interview lasted between 60 and 90 minutes. Prior to each interview, the interviewers briefed each participant about the purpose of the survey, rights to participate voluntarily or withdraw from the study

without penalty, privacy and ethical issues implicated. This involved individually meeting each participant at least once during the period of June to October 2008. On average, each interviewer had to conduct two or three interviews per working day. Interviewers worked 8 hours a day, 5 days a week from Saturday to Wednesday while Thursdays and Fridays were weekends. Any issue raised by members during the interview were noted by the interviewers and immediately passed on to the researcher (coordinator) for quick clarification and/or rectification.

#### **4.3 Document 5 and Gaps from Previous Documents**

The outcome of Document 3 helped in the development of a questionnaire based on customer experiences of STC. The questionnaire developed following this interviews captured essential aspects of customer satisfaction from a qualitative approach. However, it was not possible to draw relationships between the different factors and explain their significance level. The purpose of document 3 was primarily to help in the development of a questionnaire based on qualitative findings, which sufficed as secondary to the findings realised following the administration of the questionnaire.

Document 4 used outputs from Document 3 to develop a provisional understanding of the relative performances of STC and its major competitor. However, the results discussed in Document 4 only provided descriptive findings about select demographic factors and the key performance indices. The scope of the data discussed in Document 4 was extended to incorporate competitor's customers and their perspectives on the two service providers. However, the descriptive nature of the findings could not be used to make substantive inferences. For example, the researcher could not use the findings of Document 4 to state with finality the differences in performance between STC and its major competitor, nor the relative impact of the various Image, Service and Price factors on commitment (and, indirectly, on churn). In other words, it was difficult to situate the role of the factors related to customer satisfaction and commitment, for example, in determining STC churn rate and/or reducing it.

To remedy the limitations outlined in Documents 4, the current Document (Document 5) builds upon the results of the descriptive research in the previous documents to introduce an advanced approach to testing the relationship between commitment, its Service, Image, and Price antecedents. Advanced statistical operations using SPSS are also conducted to ascertain the levels of customer commitment for both STC and its competitor in relation to

mobile service provision. However, the ‘Commitment’ variable was not evaluated in Document 4. Further, AMOS software was used to help refine the questionnaire and make it as parsimonious as practicable, for ready and regular application as a top-level diagnostic tool. At the Document 4 stage of this project, it had already been determined that the detailed questions for sections D to J contained too much information for general company reporting and, as a consequence, analysis of responses for ‘Price’ and for ‘Service’ was limited to top-level/headline questions only (see items in sections D to J highlighted yellow). This same pattern was retained for Document 5, but the researcher found it necessary to see if he could evaluate the factor structure of Image and commitment and reduce the number of questions related to both, too. The current document also provides more sophisticated analyses than those incorporated into Document 4, for comparing performance between Al Jawal and its major competitor in terms of commitment antecedents i.e. Service, Image and Price.

Consequently, the research objectives addressed in the current document (Document 5) are as follows:

1. To ascertain the level of customer commitment currently being experienced by STC in respect of its mobile service provision
2. To ascertain the level of customer commitment currently being experienced by STC’s major competitor in respect of its mobile service provision
3. To ascertain whether levels of commitment vary on a region-by-region basis
4. To refine the questionnaire used in Document 4 so it is suitable for gathering relevant customer intelligence quickly and efficiently on an ongoing basis.
5. To determine the relative contribution of pre-determined antecedents (Image, Price, and Service) to overall expressions of customer commitment
6. To compare the performance of both STC and its major competitor in respect of commitment and its antecedents, Image, Price, and Service.
7. To make recommendations to STC as to how it might improve both its absolute and competitive position in respect of customer commitment and, thus, reduce churn.

#### ***4.3.1 Data processing and analysis***

This section addresses the analyses undertaken in order to address the objectives for Document 5 as listed above. Ultimately, Document 5 analysis focused on 14 questions that were considered reflective of Image, one top-level Price question, six further top-level

questions all considered to comprise an index formative of Service (cf. Diamantopoulos and Winklhofer, 2001 on construction of indexes with formative indicators) and four questions concerning Commitment (at this stage considered formative, but tested later). All Price and Service questions were measured on a 5-point Likert scale, and all Commitment questions were measured on a 10-point Likert scale. Note, that a fifth Commitment question was omitted from the analysis, as this was multiple choice rather than scaled. The relevant questions are highlighted in yellow in Appendix C. Data obtained from the questionnaires were entered into Microsoft Excel 2013 where error-checking and conversion of data into numerical format were undertaken. For example, all Al Jawal customers were coded as 1 whereas competitor customers were coded as 2. The researcher also used Microsoft Excel to create charts based on the data because Excel was deemed superior to SPSS when it comes to developing interactive chart features. Data were arranged into columns for each variables. SPSS version 21 was then used to code variables and set their attributes such as labels, missing values, values, decimals, widths, and types. The data in Microsoft Excel were then duplicated to SPSS for further analyses.

For objective one, which entailed ascertaining the level of customer commitment currently being experienced by STC in respect of its mobile service provision, descriptive statistics were generated using SPSS for the commitment construct. An independent sample t-test was performed to determine whether there was a statistically significant difference in the means of the commitment construct between STC and its competitor. An independent sample t-test is useful when comparison of the scores of two different sample groups is necessary (Pallant, 2013).

The second objective was about ascertaining the level of customer commitment currently being experienced by STC's major competitor in respect of its mobile service provision. To address this objective, descriptive statistics were generated to determine the frequency of responses and the mean for the various indicators of commitment. The select cases procedure in SPSS was used to exclude STC respondents for the purposes of this data analysis procedure. The rationale for the select cases was to ensure that the results generated only related to STC's competitors thereby enhancing accuracy of findings in this respect.

The third objective was about ascertaining whether there were region-based variations in commitment levels. Since there were four regions, an ANOVA test was deemed most appropriate for determining whether respondents scored the commitment reflective indicators differently based on the region they came from. This is because ANOVA test is similar to t-

tests only that it is run when there are at least two (and particularly more than two) groups with the intention to compare mean scores on continuous variables (Pallant, 2013). However, post-hoc analysis was performed to determine the regions that scored commitment differently (Pallant, 2013). Tukey's Honestly Significant Difference (HSD) was used as the follow-up test of the ANOVA to establish region-by-region variation of means in commitment (Lane, 2010). To ensure precision in findings, data for STC was analysed independently from that of STC's major competitor.

Objective 4 was entailed refining of the questionnaire used in Document 4 so it is suitable for gathering relevant customer intelligence quickly and efficiently on an ongoing basis. For this objective, the researcher used Analysis of Moment Structures (AMOS) to develop a simplified model for this objective effectively. Griffith (2010) described AMOS as "an interactive interface) that is useful in building Structural Equation Models (SEMs) and uncovering otherwise concealed relationships while observing graphically how variations in some values influence other values (p.314).

Objective 5 was about determining the relative contribution of pre-determined antecedents to overall expressions of customer commitment. Since Price, Image, and service have been projected in literature as the antecedents of commitment, AMOS was used to establish the predictor power of each of the constructs (antecedents) with respect to commitment. Although this might have been possibly performed using multiple regression in SPSS, AMOS was more appropriate because its intuitive interface allows for the creation of models that closely relate to the real world than SPSS' multivariate analytical methods can (Griffith, 2010).

Through objective 6, the researcher sought to compare the performance of both STC and its major competitor in respect of commitment and its antecedents, Price, service and Image. The results for the Image, service, Price, and commitment for both STC and its major competitor were compared using and independent samples tests in SPSS. The essence was to draw out any statistically significant mean differences ( $p < .05$ ) for each of the scales. Finally, objective 7 was achieved through interpretive analysis of the quantitative findings discussed in the six objectives preceding it.

## **5. Data Analysis and Results**

The purpose of this chapter is to present the results of the analysis of data following the processing and statistical tests described in the last section of the immediate previous chapter. To enhance presentation and readability, the data analysis and results are ordered in accordance with the objectives of the present document.

### **5.1 Commitment towards STC/Al Jawal**

Descriptive frequency statistics were generated to test for the first objective. The researcher began the analysis by selecting the cases where the respondents were STC/Al Jawal subscribers (i.e. subscription = 1) using the ‘if’ criteria in SPSS. The select cases’ procedure resulted in 827 valid cases for analysis. The rationale behind this selection was that the first objective only addressed commitment towards STC exclusively and therefore did not require data pertaining to commitment by subscriber respondents of the competitor. It is worth reiterating that the commitment prompts were scored against a 10-point Likert scale as illustrated at Appendix C.

#### ***5.1.1 Commitment statistics for Al Jawal***

The statistics table for the four items on commitment as captured in the questionnaire indicated that Al Jawal subscribers were committed to staying with STC. The overall impression of Al Jawal’s post-paid services had the highest mean of 9.12 and a skewness score of -2.467. Similarly, all the other commitment types had negative skewness scores i.e. Relative Differentiation ( $M= 8.18$ , skewness= -1.154), motivation to switch from Al Jawal post-paid services ( $M= 7.50$ , skewness= -.762), and Al Jawal post-paid services meeting specific needs of the respondents ( $M= 7.25$ , skewness = -.617). According to Meyers, Gamst, and Guarino (2013), skewness defines the magnitude of asymmetry shown by score distribution. Further, negative skewness like in the case of data pertaining to the first objective portrays a situation in which most of the scores tend towards the comparatively higher variable values.

Concerning kurtosis, Meyers, Gamst, and Guarino (2013) argued that it describes the extent to which the distribution of scores is flattened or compressed concerning the normal curve. The normal curve is known as mesokurtosis and has a kurtosis score of zero. Positive kurtosis and negative kurtosis are referred to as leptokurtosis and platykurtosis respectively. The former implies that the distribution is largely compressed towards the center while the latter is an indication that the distribution is comparatively flattened with respect to the normal curve (Meyers, Gamst, & Guarino, 2013). Leptokurtosis was registered for

commitment scores based on overall Al Jawal impression (4.578). However, Relative Differentiation (-.213), motivation to switch from Al Jawal post-paid services (-1.278), and Al Jawal post-paid services meeting specific needs of the respondents (-1.459) recorded platykurtosis. The high positive kurtosis score for overall Al Jawal impression implies that the distribution could be tending towards the center although the mean score recorded tends towards the highest Likert-point score of 10. Further verification of this appears in the next section where overall Al Jawal commitment results are addressed exclusively and in detail. Thus, in this case it is prudent to contend that the snapshot statistics in Table 1 below preliminarily showed that customer commitment towards Al Jawal (STC) was high.

*Table 1. Commitment Means, Skewness, and Kurtosis*

		Al Jawal Overall Impression (Affective Commitment)	Al Jawal post-paid services meets specific needs (Normative Commitment)	Motivation to switch from Al-Jawal Post paid services (Continuance Commitment)	Commitment: Relevant Differentiation
N	Valid	827	818	827	827
	Missing	0	9	0	0
Mean		9.12	7.25	7.50	8.18
Std. Deviation		2.261	3.494	3.454	2.851
Skewness		-2.467	-.617	-.762	-1.154
Std. Error of Skewness		.085	.085	.085	.085
Kurtosis		4.578	-1.459	-1.278	-.213
Std. Error of Kurtosis		.170	.171	.170	.170

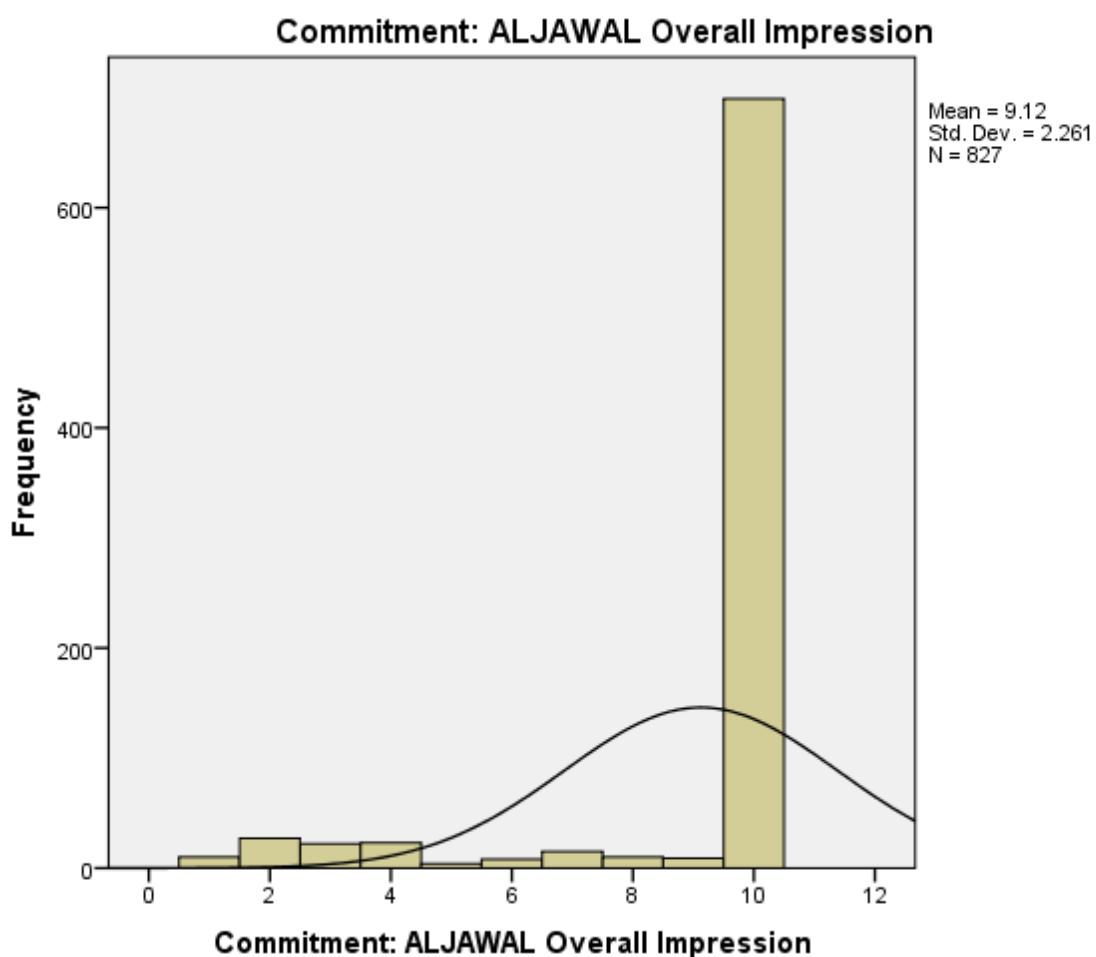
### **5.1.2 Al Jawal Overall Impression (Affective Commitment)**

Most of the respondents indicated that their overall impression of Al Jawal was very positive (n= 699). This accounted for up to 84.5% of all STC subscriber respondents. Despite this high frequency response rate towards a positive overall impression, one concern would be that there are still various subscribers that scored Al Jawal's overall impression negatively with slightly over 10% scoring it at either 5 or less. Table 2 and Figure 3 below show the frequency results concerning the overall impression of Al Jawal.

Table 2. Al Jawal Overall Impression (Affective Commitment)

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 (Very negative)	10	1.2	1.2
	2	27	3.3	4.5
	3	22	2.7	7.1
	4	23	2.8	9.9
	5	4	.5	10.4
	6	8	1.0	11.4
	7	15	1.8	13.2
	8	10	1.2	14.4
	9	9	1.1	15.5
	10 (Very positive)	699	84.5	84.5
Total		827	100.0	100.0

Figure 3. Al Jawal Overall Impression (Affective Commitment)



### 5.1.3 Commitment: Al Jawal post-paid services and meeting specific needs

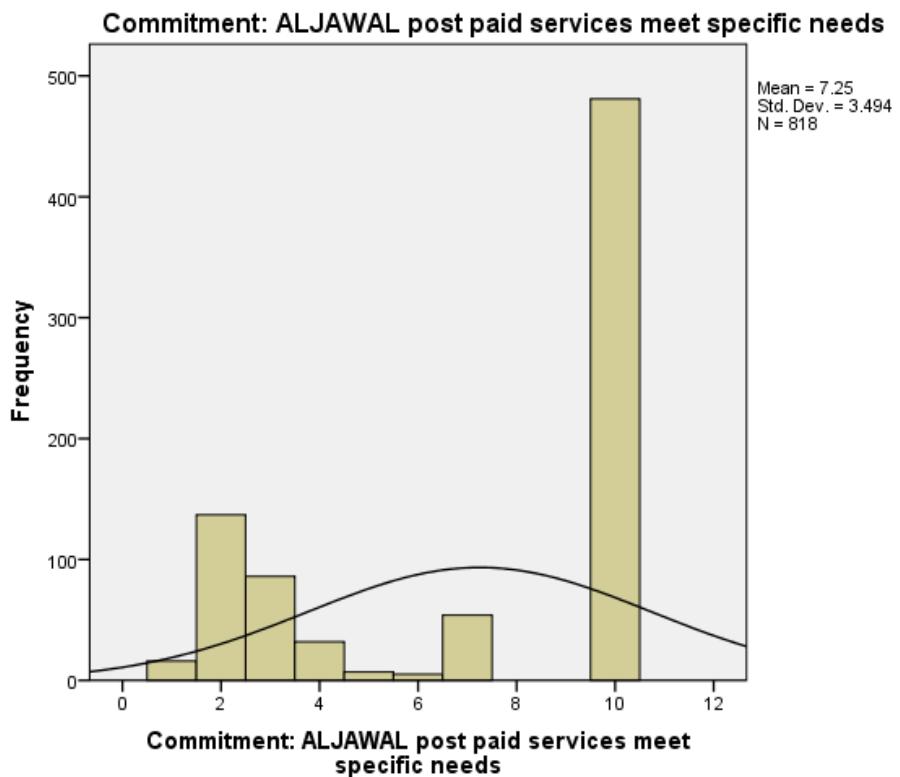
There was a contentious distribution of responses concerning the fact that Al Jawal post-paid services meets the specific needs of the subscribers participating in this quantitative aspect of the research. Although majority of the respondents ( $n= 481, 58.2\%$ ) indicated that Al Jawal post-paid services meets their specific needs perfectly, a significant number of

respondents (n= 271, 33.1%) scored this item at 4 and below. This tended towards the indication that a significant number of respondents were of the opinion that Al Jawal post-paid services did not meet their needs as they would perhaps hope for or expect. These results appear in Table 3 and Figure 4 below in the order mentioned.

*Table 3. Commitment: Al Jawal post-paid services meet specific needs*

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 (Do not meet my needs at all)	16	1.9	2.0
	2	137	16.6	18.7
	3	86	10.4	29.2
	4	32	3.9	33.1
	5	7	.8	.9
	6	5	.6	34.6
	7	54	6.5	41.2
	8	0	0	0
	9	0	0	0
	10 (Meets my needs perfectly)	481	58.2	58.8
Missing	Total	818	98.9	100.0
	0	9	1.1	
Total		827	100.0	

*Figure 4. Commitment: Al Jawal post-paid services meet specific needs*



#### **5.1.4 Commitment: Likelihood to switch from Al Jawal**

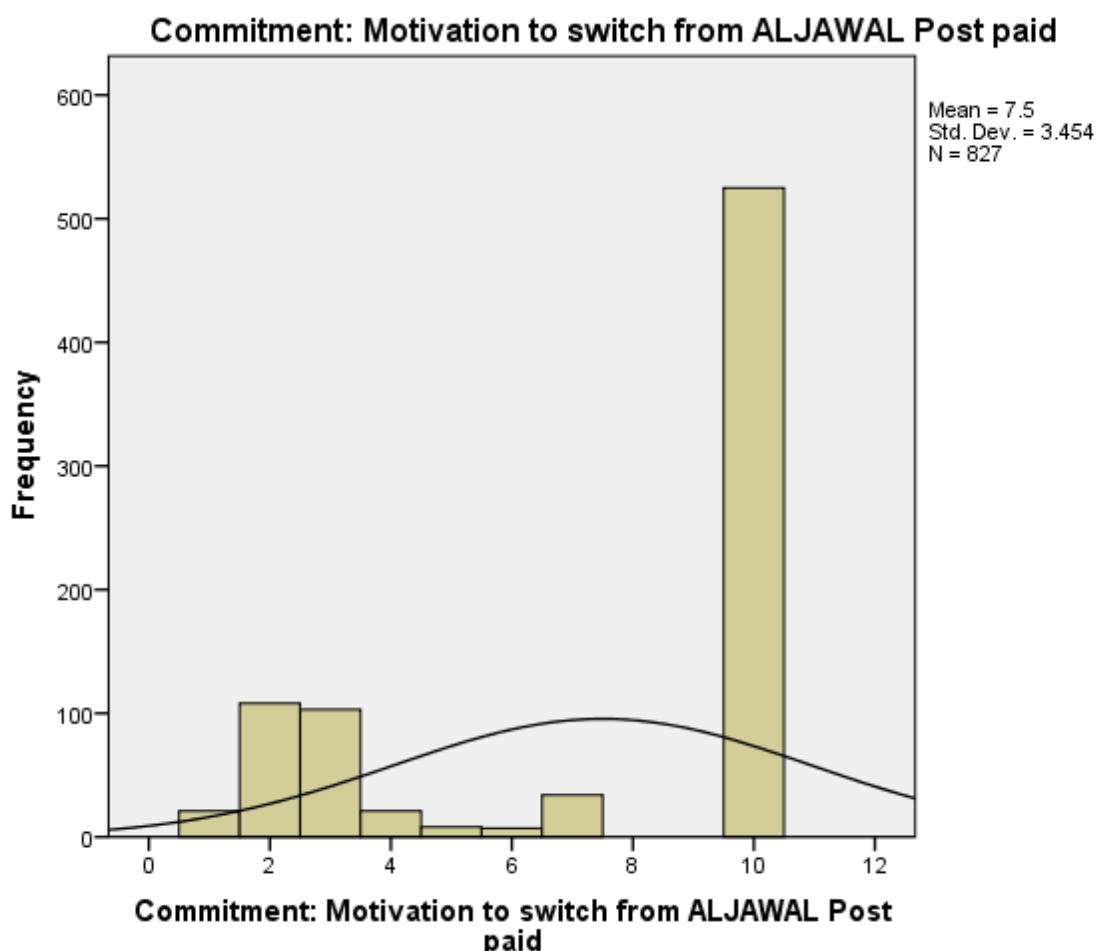
When asked to indicate how likely they were to switch from or stop using Saudi Telecom's Al Jawal post-paid services, 63.5% (n= 525) indicated that they would definitely not switch from or stop using Al Jawal post-paid services. However, respondents scoring this

item and Likert-point 4 and below were accounted for up to 30.6% (n= 253). This trend raises concerns about the likelihood of customer churn from STC based on likelihood to switch. The results on the likelihood to switch appear in Table 5 and Figure 5 below.

*Table 4. Commitment: Switching likelihood from Al Jawal Post-paid services*

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 (Would definitely switch from or stop using Al Jawal)	21	2.5	2.5
	2	108	13.1	13.1
	3	103	12.5	28.1
	4	21	2.5	30.6
	5	8	1.0	31.6
	6	7	.8	32.4
	7	34	4.1	36.5
	8	0	0	0
	9	0	0	0
	10 (Would definitely not switch from or stop using Al Jawal)	525	63.5	63.5
Total		827	100.0	100.0

*Figure 5. Commitment: Motivation to switch from Al Jawal Post-paid*



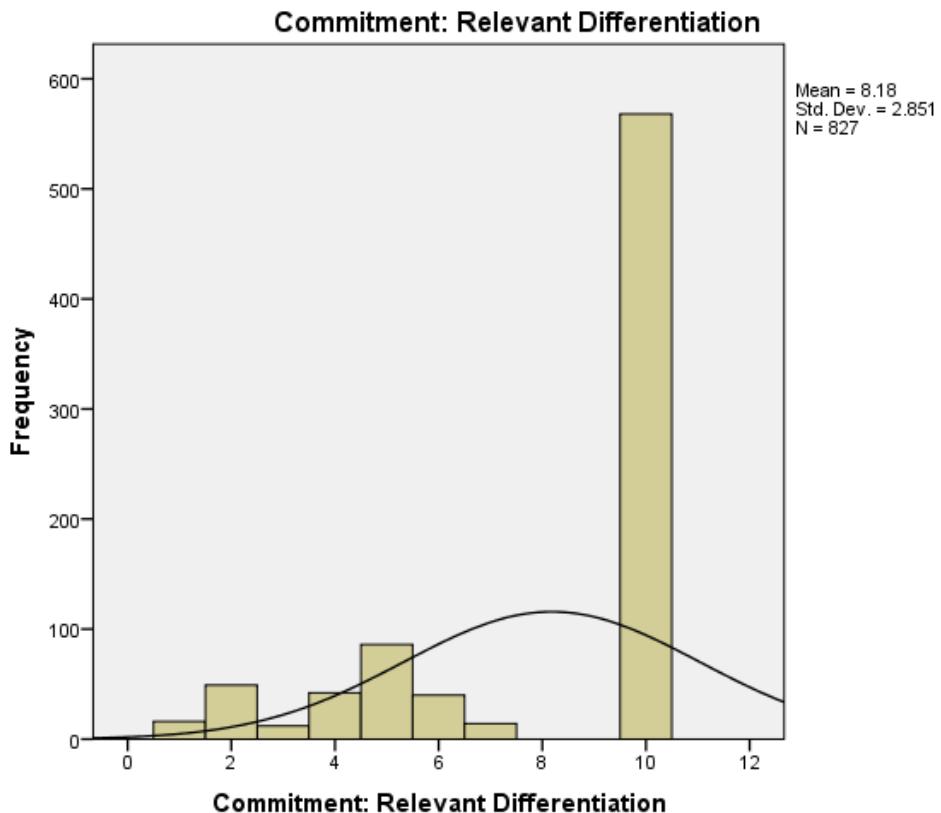
### **5.1.5 Commitment: Al Jawal's relative differentiation**

Respondents were also requested to indicate the extent to which they considered Al Jawal's post-paid services to be better than the other operator's post-paid services in any important ways. The largest number of respondents (n= 568, 68.7%) were of the opinion that Al Jawal's post-paid services were much better than the post-paid services offered by other operators. It is noteworthy that the name of the other operator remained undisclosed. The skewness and kurtosis of this item corroborated these results in the sense that the rest of the respondents scored this item at Likert point 7 and below although majority of the remaining individuals lurked around the midpoint, 5 (n= 86, 10.5%). See Table 5 and Figure 6 below respectively.

*Table 5. Commitment: Relative Differentiation*

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 (Not better than the other operator's post-paid services in any important ways)	16	1.9	1.9
	2	49	5.9	7.9
	3	12	1.5	9.3
	4	42	5.1	14.4
	5	86	10.4	24.8
	6	40	4.8	29.6
	7	14	1.7	31.3
	8	0	0	0
	9	0	0	0
	10 (Much better than the other operator's post-paid services in many important ways)	568	68.7	68.7
Total		827	100.0	100.0

*Figure 6.* Commitment: Relative Differentiation



## 5.2 Commitment towards Competitor

For this objective, all data pertaining to respondents subscribed to STC were excluded using the criterion, subscription = 2. Consequently, there were 833 cases left for analyses in the second objective. As was the case with the first objective, the rationale for selection of cases and the questionnaire items applied.

### 5.2.1 Commitment statistics (Competitor)

The statistics table (Table 6 below) showed that the item with the highest mean was the motivation to switch from competitor ( $M= 7.66$ ), which implied that they were not likely to switch from the competitor. This argument was based on the rationale that this questionnaire item was scored on a 10-point Likert scale where 10 denoted the least likelihood to switch or stop using competitor's post-paid services. The competitor's overall impression recorded the second-highest mean among the four commitment items ( $M= 6.99$ ). The item prompting respondents on whether the competitor's post-paid services met their specific needs registered the third-highest mean ( $M= 6.16$ ). Finally, the competitor's Relative Differentiation had the lowest mean ( $M= 5.76$ ).

*Table 6.* Combined commitment statistics for the competitor

		Commitment: Competitor's Overall Impression	Commitment: Competitor's post-paid services meet specific needs	Commitment: Motivation to switch from Competitor's Post paid	Commitment: Relative Differentiation
N	Valid Missing	833 0	833 0	833 0	833 0
Mean		6.99	6.16	7.66	5.76
Std. Deviation		3.156	3.557	3.373	3.100
Skewness		-.369	-.086	-.943	.076
Std. Error of Skewness		.085	.085	.085	.085
Kurtosis		-1.365	-1.678	-.820	-1.242
Std. Error of Kurtosis		.169	.169	.169	.169

Concerning skewness, the only variable with a positive skewness value was Relative Differentiation (0.076). This skewness value complements the result that the competitor's Relative Differentiation had the lowest mean since a positive skewness value implies that data tends towards the lower side and the converse is true (Meyers, Gamst, & Guarino, 2013). On the other hand, platykurtosis was registered for all the four items, effectively implying that the distribution is comparatively flattened with respect to the normal curve (Meyers, Gamst, & Guarino, 2013). In the four subsequent subsections, the descriptive statistics for each of the four commitment items appear.

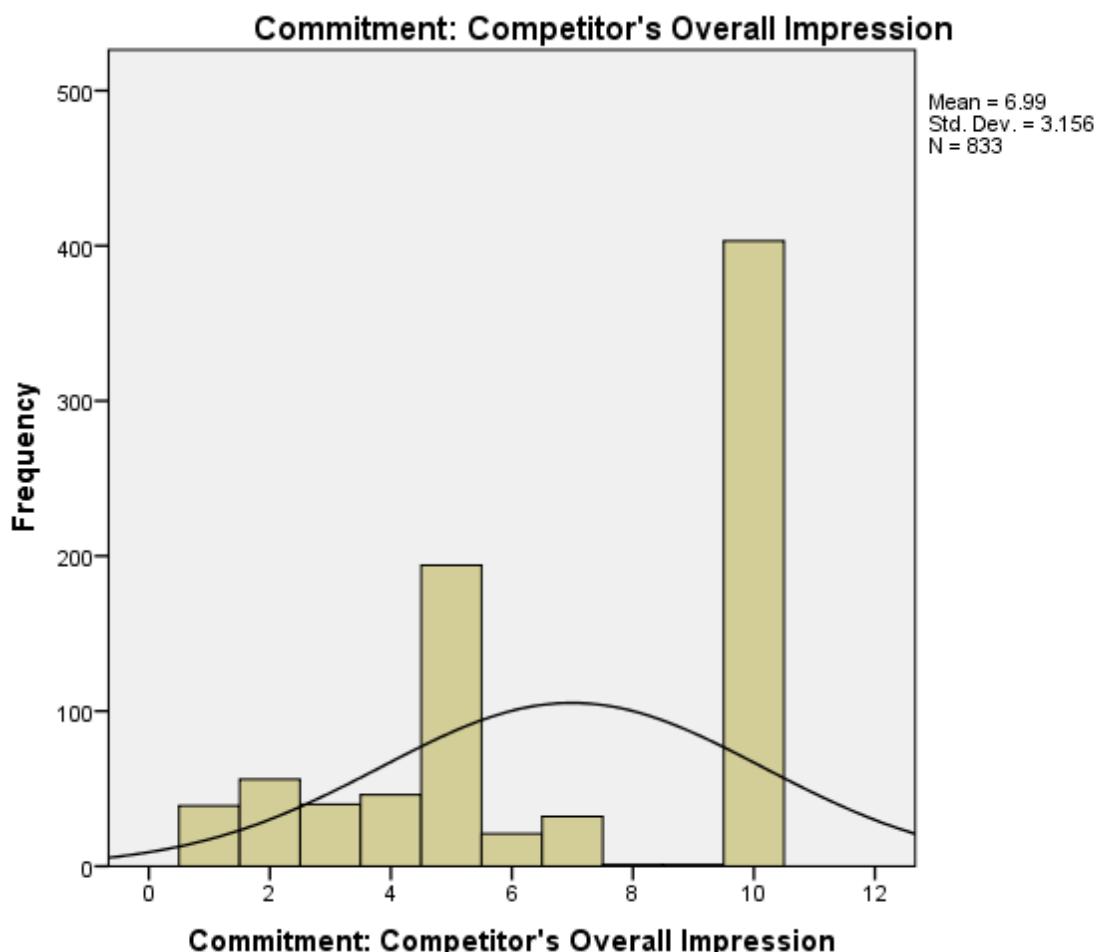
### 5.2.2 *Commitment: Competitor's overall impression*

Although most of the competitor's subscribers indicated a very positive overall impression ( $n= 403$ , 48.4%), the second-highest frequency was at the midpoint 5 ( $n= 194$ , 23.3%). In addition, the number of respondents scoring the competitor's overall impression at Likert-point 4 and below was many (181, 21.7%). This means that the competitor's overall impression was not as highly ranked as that of STC as discussed at section 4.2.2 above. In fact, more than half of the respondents subscribed to the competitor (51.5%) scored the overall impression of the competitor at 7 and below. Detailed results concerning the competitor's overall impression appear in Table 7 below and histogram (Figure 7) demonstrates the distribution of data.

Table 7. Competitor's overall impression

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very negative	39	4.7	4.7
	2	56	6.7	11.4
	3	40	4.8	16.2
	4	46	5.5	21.7
	5	194	23.3	45.0
	6	21	2.5	47.5
	7	32	3.8	51.4
	8	1	.1	51.5
	9	1	.1	51.6
	Very positive	403	48.4	48.4
Total		833	100.0	100.0

Figure 7. Competitor's overall impression



### 5.2.3 Commitment: Competitor's post-paid services and meeting specific needs

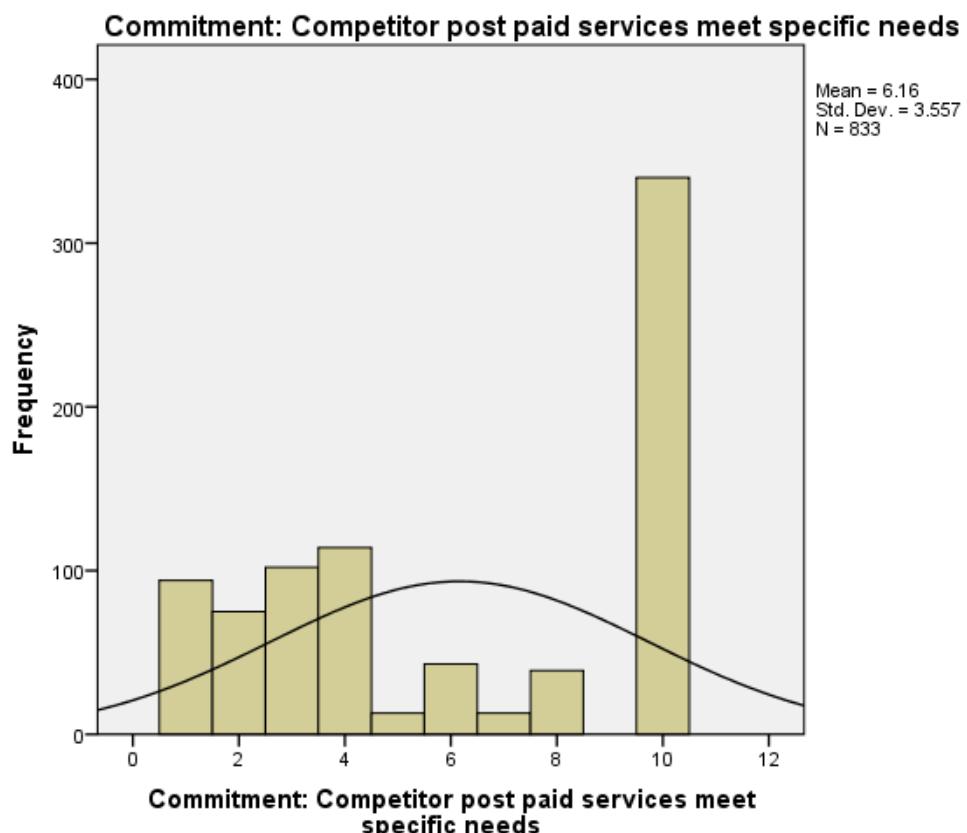
Concerning the extent to which the respondents felt that the competitor's post-paid services met their needs, 40.8% ( $n= 340$ ) were of the opinion that their needs were met perfectly. However, inconsistency in responses was detected considering that the highest combination of respondents ( $n= 385$ , 46.2%) scored this item at 4 and below. This was

another provisional indicator that the competitor's post-paid services were possibly not meeting the needs of their subscribers. Indeed, 11.3% (n= 94) of the respondents subscribed to the competitor's post-paid services indicated that the services did not meet the respondents' needs at all. More details concerning these results appear in Table 8 below while Figure 8 demonstrates the histogram pertaining to the data about this questionnaire item.

*Table 8. Competitor's post-paid services and meeting customer needs*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 (Do not meet my needs at all)	94	11.3	11.3	11.3
	2	75	9.0	9.0	20.3
	3	102	12.2	12.2	32.5
	4	114	13.7	13.7	46.2
	5	13	1.6	1.6	47.8
	6	43	5.2	5.2	52.9
	7	13	1.6	1.6	54.5
	8	39	4.7	4.7	59.2
	9	0	0	0	0
	10 (Meets my needs perfectly)	340	40.8	40.8	100.0
Total		833	100.0	100.0	

*Figure 8. Competitor's post-paid services and meeting customer needs*



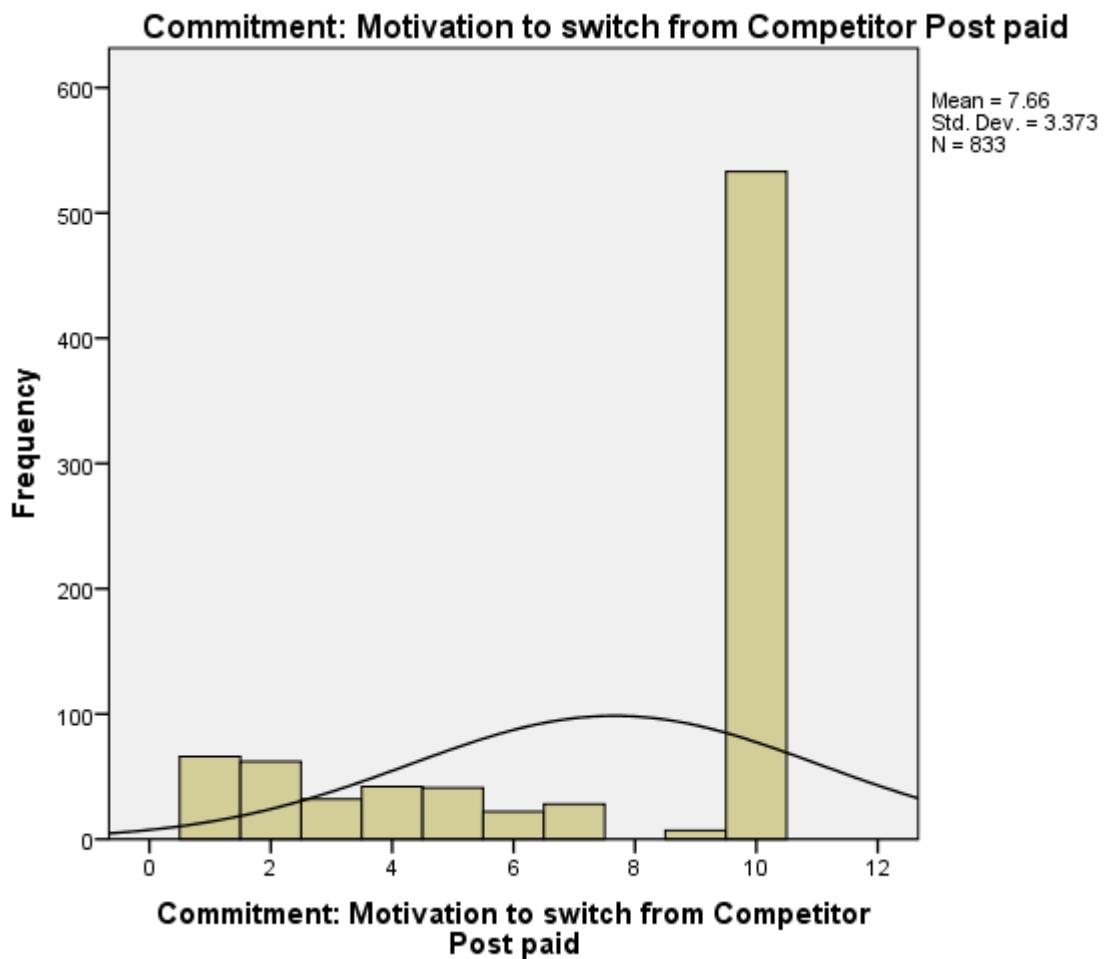
#### **5.2.4 Commitment: Likelihood to switch from competitor**

The results showed that most respondents (n= 533, 64%) would definitely not switch from, or stop using the competitor's post-paid services. This was somewhat controversial considering the results discussed in section 5.2.3 above. The scores on the likelihood to switch were however, spread in near proximity of each other in terms of frequency across the other Likert points. However, it is notable that the second- and third-highest frequencies in this case were those of respondents scoring this item at Likert points 1 and 2 respectively (See Table 9 and Figure 9 below for the results on this item). Whether there is a significant difference between switching intentions among STC and its competitor's respondents on this item, remains subject to confirmation in response to the third research question.

*Table 9. Likelihood to switch from competitor*

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 (Would definitely switch from or stop using my provider's post-paid services)	66	7.9	7.9
	2	62	7.4	15.4
	3	32	3.8	19.2
	4	42	5.0	24.2
	5	41	4.9	29.2
	6	22	2.6	31.8
	7	28	3.4	35.2
	8	0	0	0
	9	7	.8	.8
	10 (Would definitely not switch from or stop using my provider's post-paid services)	533	64.0	64.0
Total		833	100.0	100.0

*Figure 9.* Likelihood to switch from competitor



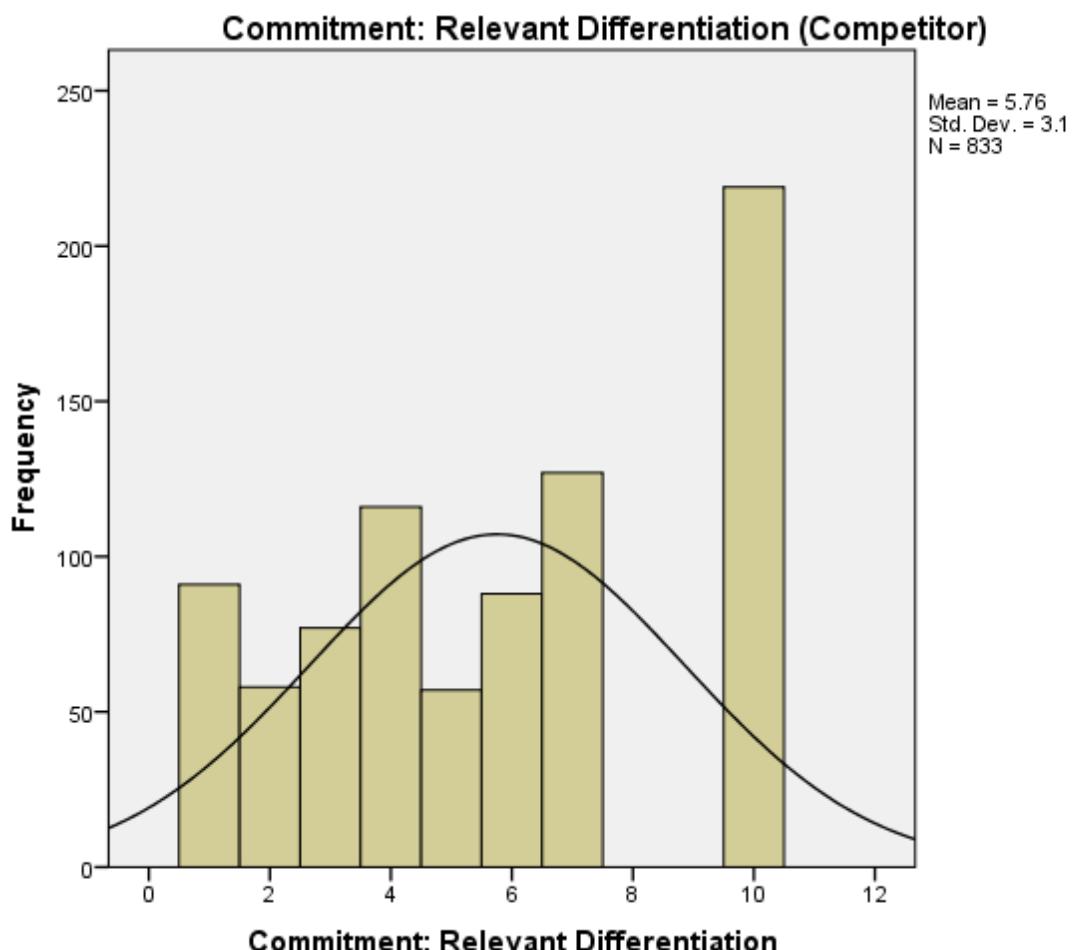
### **5.2.5 Commitment: Competitor's Relative Differentiation**

Majority of competitor's respondents indicating that the post-paid services of the competitor were much better than the other operator's (STC/AI Jawal) post-paid services ( $n=219$ , 26.3%). However, up to 41.1% of the respondents ( $n= 342$ ) scored this item at Likert point 4 and below. Preliminarily and subject to inferential testing, this would be an indication that the post-paid services offered by Al Jawal are superior to those of the competitor in various important ways. Altogether, the second-highest frequency was recorded by respondents scoring the superiority of the competitor's post-paid services over those of STC/AI Jawal at a 7 ( $n= 127$ , 15.2). The results described in this subsection appear at Table 10 and graphically represented at Figure 10 below respectively.

*Table 10.* Competitor's Relative Differentiation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 (Not better than the other operator's post-paid services in any important ways)	91	10.9	10.9	10.9
	2	58	7.0	7.0	17.9
	3	77	9.2	9.2	27.1
	4	116	13.9	13.9	41.1
	5	57	6.8	6.8	47.9
	6	88	10.6	10.6	58.5
	7	127	15.2	15.2	73.7
	8	0	0	0	0
	9	0	0	0	0
	10 (Much better than the other operator's post-paid services in many important ways)	219	26.3	26.3	100.0
Total		833	100.0	100.0	

*Figure 10.* Competitor's Relative Differentiation



### 5.3 Comparison of Commitment to Al Jawal and Its Competitor

The results described under sections 5.1 and 5.2 distinctively addressed each of the commitment items for Al Jawal and its competitor independently. Since the scope of this

study also encompasses the need to compare STC/Al Jawal and its competitor on different constructs, the researcher found it necessary to compare the scores of these two organizations based on the commitment items. Consequently, an independent samples t-test was performed with the four commitment items being the test variables and subscription as the grouping variable at a 95% confidence interval. Missing values were excluded listwise.

The group statistics reaffirmed that STC/Al Jawal's overall impression mean ( $M= 9.13$ ) was higher than that of its competitor ( $M= 6.99$ ). In relation to post-paid services for the two organizations meeting the specific needs of their subscribers, the results showed that Al Jawal's mean score ( $M= 7.25$ ) ranked higher than that of its competitor ( $M= 6.16$ ). Concerning switching motivation or likelihood, the competitor's mean ( $M= 7.66$ ) was slightly higher than that of Al Jawal ( $M= 7.50$ ). Finally, Al Jawal registered a higher mean score on Relative Differentiation ( $M= 8.18$ ) than its competitor did ( $M= 5.76$ ). The comparative group statistics for each of these variables are presented in Table 11 below.

*Table 11. Comparison of Al Jawal and competitor's commitment scores (group statistics)*

Commitment Item	Subscription	N	Mean	Std. Deviation	Std. Error Mean
Overall Impression	Al Jawal	818	9.13	2.256	.079
	Competitor	833	6.99	3.156	.109
Post-paid services meet specific needs	Al Jawal	818	7.25	3.494	.122
	Competitor	833	6.16	3.557	.123
Motivation/liability to switch	Al Jawal	818	7.50	3.456	.121
	Competitor	833	7.66	3.373	.117
Relative Differentiation	Al Jawal	818	8.18	2.850	.100
	Competitor	833	5.76	3.100	.107

The independent samples test revealed that the means of overall impression for STC and its competitor violated the assumption of homogeneity of variance as the Levene's Test for Equality of Variances was statistically significant ( $F= 401.040$ ,  $p = .000$ ). The implication is that equal variances were not assumed. Altogether, the means of the Al Jawal and its main competitor on the overall impression variable were statistically significant ( $df= 1507.374$ ,  $t= 15.885$ ,  $p= .000$ ). This implies that the overall impression of STC/Al Jawal subscribers is statistically significantly higher than that of its competitor's subscribers.

For the commitment variable concerning whether the post-paid services of the two service providers meet the specific needs of their subscribers, equal variances was assumed. This is because the Levene's Test for Equality of Variances were not statistically significant ( $F= 2.344$ ,  $p= .126$ ) being higher than the .05 significance point. Altogether, the means for

the two organizations were statistically significantly different ( $df= 1649$ ,  $t= 6.265$ ,  $p= .000$ ). This confirmed the preliminary report that STC/Al Jawal post-paid services meet their subscribers' specific needs in a more superior way to that of its competitor's.

Equal variances was not assumed for the commitment variable on motivation or likelihood of switching or stopping usage of post-paid services by the two organizations ( $F= 5.293$ ,  $p= .022$ ). The results showed that the means for the two service providers concerning this form of commitment were not statistically significantly different ( $df= 1646.009$ ,  $t= -.953$ ,  $p= .341$ ). Considering that the descriptive statistics showed that most respondents had no intention to switch from either service provider's post-paid services, it is therefore safe to infer that the levels of commitment to remain with current service provider (or otherwise) was relatively the same in the case of both STC/Al Jawal and its competitor.

With respect to Relative Differentiation (the perception that either subscriber is better than its competitor is), equal variances was not assumed following a statistically significant score of Levene's Test for Equality of Variances ( $F= 5.243$ ,  $p= .022$ ). Nonetheless, the results confirmed the preliminary indication in the descriptive statistics discussed under section 5.2.5 that Al Jawal's was better than its competitor in many relevant areas was. This is because the means on Relative Differentiation for the two organizations were statistically significantly different ( $df= 1641.840$ ,  $t= 16.573$ ,  $p= .000$ ). The results of the independent samples test are displayed in Table 12 below.

*Table 12.* Independent samples test for commitment variables between Al Jawal and its competitor

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Al Jawal Overall Impression (Affective Commitment)	Equal variances assumed	401.040	.000	15.838	1649	.000	2.142	.135	1.876	2.407
	Equal variances not assumed			15.885	1507.374	.000	2.142	.135	1.877	2.406
Commitment: Al Jawal post-paid services meet specific needs	Equal variances assumed	2.344	.126	6.265	1649	.000	1.087	.174	.747	1.428
	Equal variances not assumed			6.266	1648.999	.000	1.087	.174	.747	1.428
Motivation to switch from Al-Jawal Post paid services (Continuance Commitment)	Equal variances assumed	5.293	.022	-.954	1649	.340	-.160	.168	-.490	.169
	Equal variances not assumed			-.953	1646.009	.341	-.160	.168	-.490	.169
Commitment: Relative Differentiation	Equal variances assumed	5.243	.022	16.561	1649	.000	2.428	.147	2.141	2.716
	Equal variances not assumed			16.573	1641.840	.000	2.428	.147	2.141	2.716

#### 5.4 Region-based variance of commitment

The results presented under this section address the third objective. Since the principal organization for this research was STC, data concerning the competitor were excluded using the select cases' procedure for the purposes of statistical operations performed for this objective. A one-way ANOVA was performed on the four commitment variables as the dependent variables and region as the independent variable (factor). Missing cases were excluded listwise to ensure that such missing values did not play any role in determining the outcome of the means for either of the commitment variables. Tukey's and Games-Howell tests were used for assumptions of equal variances and that unequal variances respectively as a significance level of 0.05.

The results displayed in the ANOVA table (Table 13) showed that there were statistically significant differences between the commitment variable on Al Jawal meeting the specific needs of the subscribers ( $F= 4.702$ ,  $p= .003$ ) and on Relative Differentiation ( $F= 5.646$ ,  $p= .001$ ). However, no region-based variations in between-groups' means were detected for overall service provider impression ( $F= .242$ ,  $p= .867$ ) and motivation or likelihood to switch ( $F= .609$ ,  $p= .609$ ). See Table 13 below for the ANOVA results.

*Table 13.* Al Jawal's region-based commitment ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Commitment: Overall service provider impression	Between Groups	3.702	3	1.234	.242	.867
	Within Groups	4153.302	814	5.102		
	Total	4157.004	817			
Commitment: How service provider's post-paid services meet specific needs	Between Groups	169.953	3	56.651	4.702	.003
	Within Groups	9806.669	814	12.048		
	Total	9976.622	817			
Commitment: Motivation/Likelihood to switch from current service provider	Between Groups	21.856	3	7.285	.609	.609
	Within Groups	9738.643	814	11.964		
	Total	9760.499	817			
Commitment: Relative Differentiation	Between Groups	135.229	3	45.076	5.646	.001
	Within Groups	6499.264	814	7.984		
	Total	6634.494	817			

According to DeCoster and Claypool (2004), a significant F-statistic indicates that there is a difference in the means of at least two categories of the factor (independent variable). However, it does not explicitly indicate where such mean differences may be. Decoster and Claypool (2004) recommended addressing this limitation through post-hoc tests. This was performed accordingly in this study. Since only two of the commitment variables showed statistically significant region-based differences (see Table 13 above), it was only prudent for the researcher to look at the two in the post hoc tests' multiple comparisons tables (Table 14a and Table 14b).

The results showed that the means of Central and Eastern regions concerning the extent to which service provider's post-paid services meet the specific needs of their subscribers were significantly different. The mean difference was in the sense that the Central region had a higher mean than the Eastern region as denoted by the Mean Difference (I-J) where I= Central and J= Eastern (1.339, p= .002). Another statistically significant difference in commitment means on this variable was registered between the Southern and Eastern region (Southern – Eastern = 1.111, p= .038). Since the Mean Differences (I – J) for both significant results implicated the Eastern region and the differences were positive in both cases where J denoted the Eastern region, it is then evident that subscribers from Eastern region recorded the lowest mean score on Al Jawal meeting their specific needs. Indeed, the mean difference between the Western and Eastern regions was positive (I – J = .781) although not statistically significant. See Table 14 a below.

*Table 14a.* Post hoc test results for region-based comparison of service provider meeting specific needs

			Sum of Squares	df	Mean Square	F	Sig.
Commitment: How service provider's post-paid services meet specific needs	Tukey HSD	Central	.558	.300	.247	-.22	1.33
		Southern	.228	.369	.926	-.72	1.18
		Eastern	1.339	.368	.002	.39	2.29
		Central	-.558	.300	.247	-1.33	.22
		Western	-.330	.357	.792	-1.25	.59
		Eastern	.781	.356	.126	-.14	1.70
	Games-Howell	Central	-.228	.369	.926	-1.18	.72
		Southern	.330	.357	.792	-.59	1.25
		Western	1.111	.416	.038	.04	2.18
		Eastern	-1.339	.368	.002	-2.29	-.39
		Central	-.781	.356	.126	-1.70	.14
		Southern	-1.111	.416	.038	-2.18	-.04
Relative Differentiation: How service provider's post-paid services meet specific needs	Tukey HSD	Western	.558	.292	.224	-.19	1.31
		Central	.228	.363	.923	-.71	1.17
		Eastern	1.339	.377	.003	.36	2.31
		Central	-.558	.292	.224	-1.31	.19
		Western	-.330	.360	.797	-1.26	.60
		Eastern	.781	.375	.162	-.19	1.75
	Games-Howell	Central	-.228	.363	.923	-1.17	.71
		Southern	.330	.360	.797	-.60	1.26
		Western	1.111	.433	.052	-.01	2.23
		Eastern	-1.339	.377	.003	-2.31	-.36
		Central	-.781	.375	.162	-1.75	.19
		Southern	-1.111	.433	.052	-2.23	.01

With respect to Relative Differentiation, the mean difference between the central and Eastern regions (Central – Eastern = -1.041) proved statistically significant ( $p= .003$ ). Another statistically significant mean difference was realised between the Western and Eastern regions (Western – Eastern = -.883,  $p= .013$ ). Finally, the mean difference between the Southern and the Eastern regions for Relative Differentiation of Al Jawal (Southern – Eastern = -1.273) was also statistically significant ( $p= .001$ ). As demonstrated in Table 14 below, it is clear that Al Jawal subscribers from the Eastern region registered the highest mean than their counterparts in other regions. Consequently, this is an indication that STC/Al Jawal subscribers from the Eastern regions are more convinced that STC/Al Jawal is superior to its competitor in important ways (Relative Differentiation) as shown in Table 14b below.

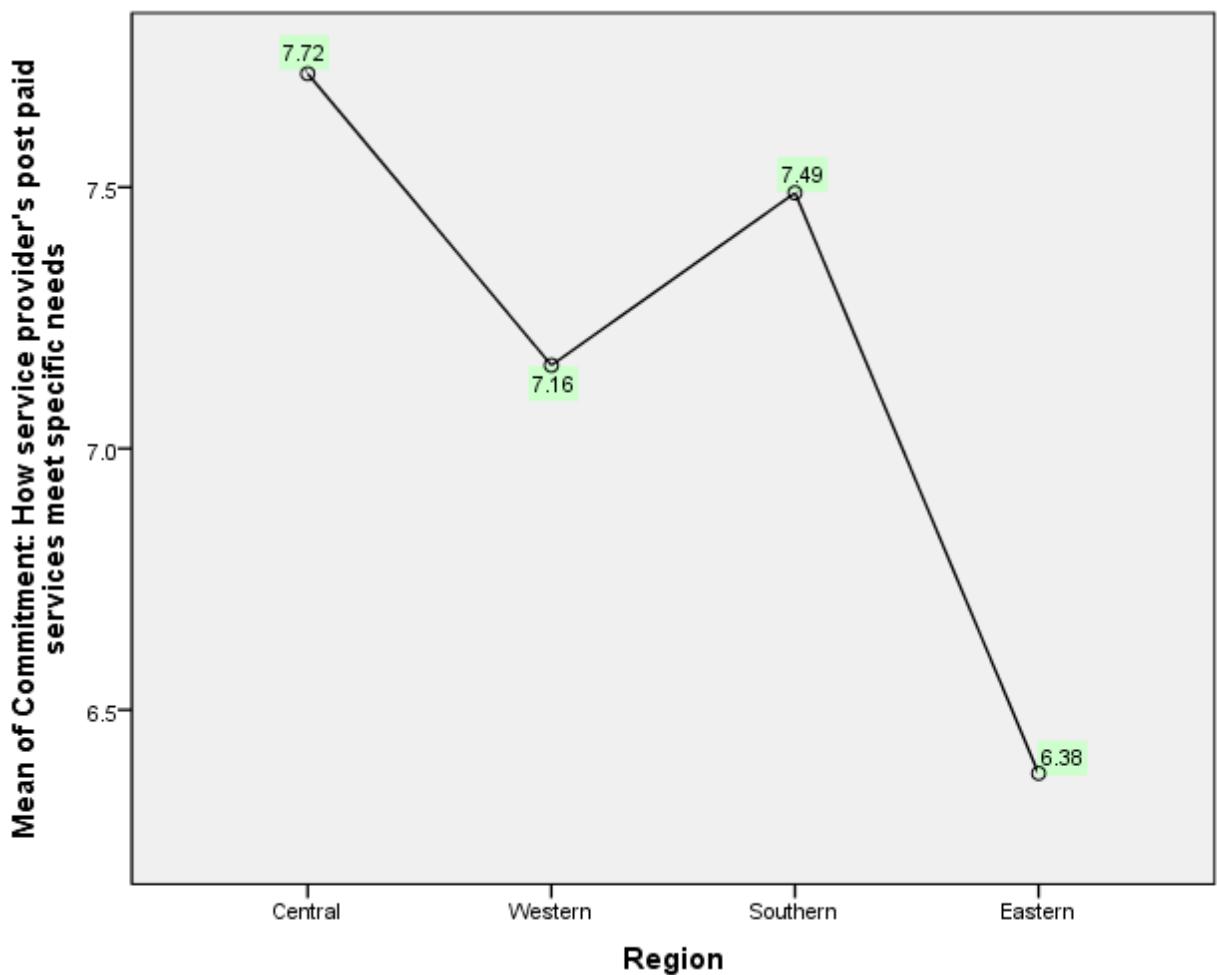
*Table 15b.* Post hoc test results for region-based comparison of relative differentiation

		Western	-.158	.245	.917	-.79	.47
	Central	Southern	.232	.300	.866	-.54	1.01
		Eastern	-1.041*	.300	.003	-1.81	-.27
		Central	.158	.245	.917	-.47	.79
	Tukey HSD	Western	.390	.291	.536	-.36	1.14
		Eastern	-.883*	.290	.013	-1.63	-.14
		Central	-.232	.300	.866	-1.01	.54
Commitment: Relative Differentiation	Southern	Western	-.390	.291	.536	-1.14	.36
		Eastern	-1.273*	.338	.001	-2.14	-.40
		Central	1.041*	.300	.003	.27	1.81
	Eastern	Western	.883*	.290	.013	.14	1.63
		Southern	1.273*	.338	.001	.40	2.14
		Western	-.158	.251	.922	-.81	.49
	Central	Southern	.232	.328	.894	-.61	1.08
		Eastern	-1.041*	.260	.000	-1.71	-.37
		Central	.158	.251	.922	-.49	.81
	Games-Howell	Western	.390	.315	.603	-.43	1.21
		Eastern	-.883*	.245	.002	-1.51	-.25
		Central	-.232	.328	.894	-1.08	.61
	Southern	Western	-.390	.315	.603	-1.21	.43
		Eastern	-1.273*	.323	.001	-2.11	-.44
		Central	1.041*	.260	.000	.37	1.71
	Eastern	Western	.883*	.245	.002	.25	1.51
		Southern	1.273*	.323	.001	.44	2.11

\*. The mean difference is significant at the 0.05 level.

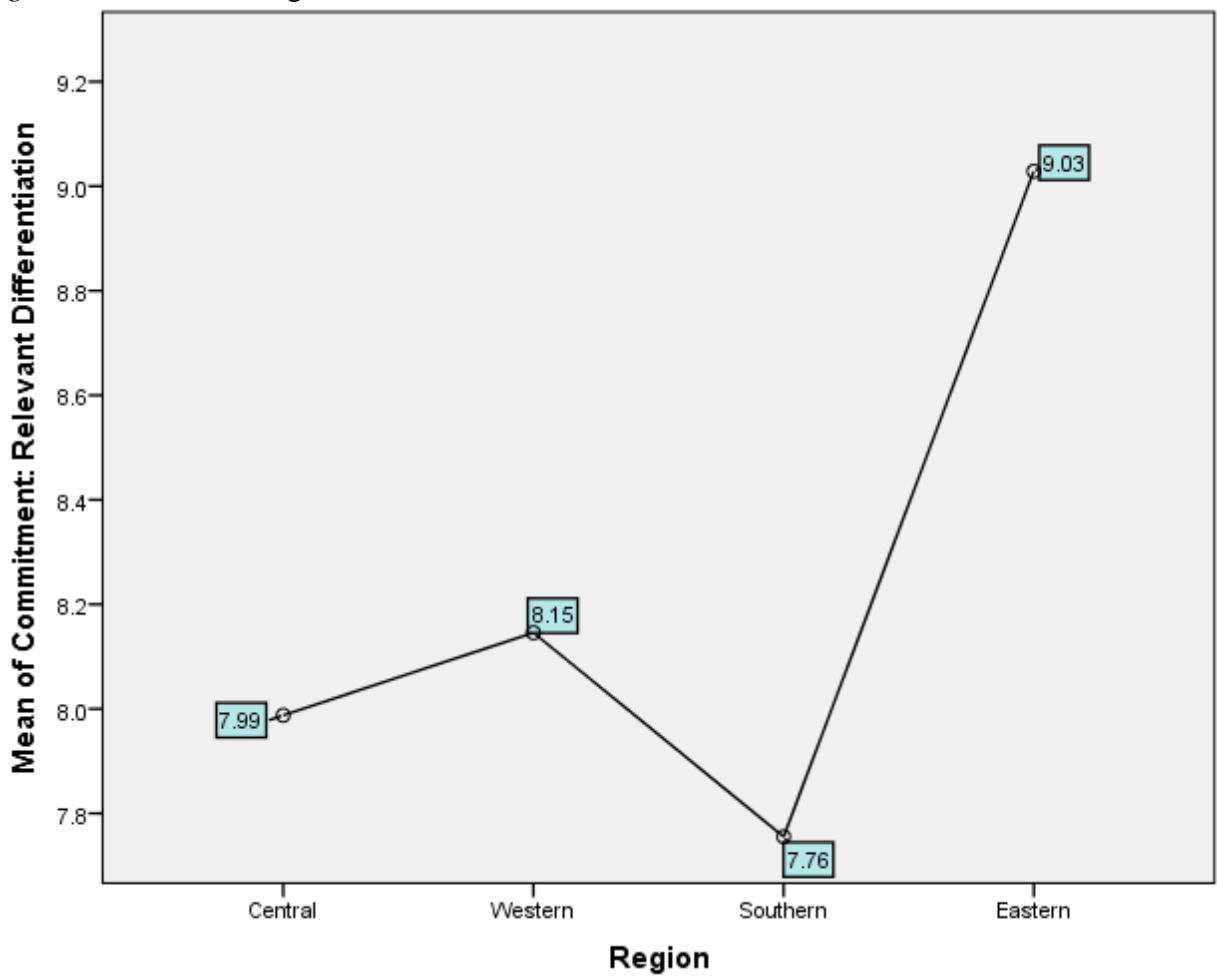
The mean plot in Figure 11 below illustrates the post hoc multiple comparison results for the commitment of subscribers to Al Jawal based on the perception that it was meeting their specific needs. This is because the plotted points for the mean of the variable in the Eastern region ( $M= 6.739$ ) was lower than that of the Central ( $M= 7.72$ ), Southern ( $M= 7.49$ ), and Western ( $M= 7.16$ ) in descending mean ranking order respectively.

*Figure 11.* Mean plot for region-based commitment on Al Jawal meeting specific subscriber needs



Concerning the statistically significant differences in the means of STC/Al Jawal's Relative Differentiation from competition as discussed in the post hoc test analysis, the mean plot in Figure 12 below illustrates the variation. Evidently, subscribers from the Eastern region rated Al Jawal's Relative Differentiation from its competitor highest and significantly so ( $M= 9.03$ ). The descending order of means ranked the Western ( $M= 8.15$ ), Central ( $M= 7.99$ ), and Southern ( $M= 7.76$ ) respectively.

Figure 12. Al Jawal's region-based commitment on Relative Differentiation



### 5.5 Image, Price, and Service as Antecedents of Commitment

The results presented in this section relate to the fifth objective. Prior to commencing analysis involving Image in this respect, it was important to perform factor reduction with a view to reduce data redundancy among highly correlated reflective indicators. From the questionnaire at Appendix C, there were 14 items in total (reflective indicators) representing three different aspects of Image (reputation, brand perception and perception of Service attributes – see Figure 1, Conceptual Framework), one Price indicator (tariff plan), and six Service formative indicators.

The rationale behind using factor analysis was based on the recommendation that factor analysis is useful in examining the structure of overlapping variation across the predictors (Leeflang *et al.*, 2000). However, the only issue with factor analysis rests in the theoretical explanation of the components yielded in the end (Greene, 2000). In the case of this study, the theoretical underpinnings for the interpretation of the components were derived from the literature reviewed (for Image and commitment components). Moreover, the

elucidation of the conceptual framework adopted for this document was also useful in classifying the components into fixed number of factors.

### **5.5.1 Factor analysis for commitment**

The conceptual framework in this study illustrated affective, normative, and continuance commitment as the three types of commitment hence the three factors were set as desired in the Factor analysis procedure. Consequently, factor analysis using Varimax rotation for a maximum of 25 rotations was performed on the four commitment variables with a view to reduce them to three in line with the conceptual framework presented at section 2.4 in the second chapter. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's Test of Sphericity were invoked to test for the suitability of the data pertaining to the four commitment variables in detection of a structure. The KMO measure of sampling adequacy index (.507) slightly exceeded the recommended value (0.5), as recommended by Hair *et al.* (2010). In addition, the value of the Bartlett's test of Sphericity was considerably big (65.939, df= 6) and statistically significant ( $p= .000$ ) as shown in Table 15 below. The implication of this result is the rejection of the null hypothesis postulating that the correlation coefficients' matrix is an identity matrix. Therefore, the four variables were related and suitable for structure detection.

*Table 16.* KMO and Bartlett's test for factor analysis on commitment

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.507
Approx. Chi-Square		65.939
Bartlett's Test of Sphericity	df	6
	Sig.	.000

The communalities table showed that the initial communalities for the extraction was 1 for all variables. This is usually so because the complete factors' set is specifically designed to explain the variability in the complete set of items (DeCoster & Claypool, 2004). The extraction communalities approximate the variance within each of the four variables that can be explained by the factors within the factor solution. Smaller values in the extraction communalities are an indication that a variable does not fit well within the factor solution, and perhaps ought to be dropped from the analysis (Hair *et al.*, 2010). Relative Differentiation had the lowest extraction communality value (.586) as shown in Table 16 below although the value was acceptable for continuation in analysis.

*Table 17.* Communalities for factor analysis on commitment

Variable	Initial	Extraction
Overall service provider impression (Affective Commitment)	1.000	.618
How service provider's post paid services meet specific needs (Normative Commitment)	1.000	.980
Motivation/Likelihood to switch from current service provider (Continuance Commitment)	1.000	1.000
Commitment: Relative Differentiation	1.000	.586

Extraction Method: Factor analysis.

The total variance explained table (Table 17) showed that the first three factors could account for over 79% (79.61%) of the variability within the original variables. This was an indication that three latent influences were associated with commitment although there was still room for considerable unexplained variation. The extraction of sums of squared loadings and the rotation sus of squared loadings' sections of the table showed that there was no loss of variation accounted for by the initial solution because of latent factors that were unique to the original variables or variability that was unexplainable by the factor model. This argument is rooted in the understanding that the cumulative percent variance before and after rotation of squared loadings was equal for the three factors (79.61%). However, there were changes in all the three factors as shown in the extracted and rotated sums of squared loadings. For example, factor one was extracted at 1.199, but later rotated to 1.180, which was a reduction. Similarly, factor 2 had a slightly lower rotated sum of square loadings upon rotation (1.004) down from 1.047. However, factor 3 had a higher total sum of square loadings upon rotation (1.000) than before rotation (.938).

*Table 18.* Total variance explained for Al Jawal commitment factors

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.199	29.976	29.976	1.199	29.976	29.976	1.180	29.496	29.496
2	1.047	26.176	56.153	1.047	26.176	56.153	1.004	25.111	54.607
3	.938	23.458	79.610	.938	23.458	79.610	1.000	25.003	79.610
4	.816	20.390	100.000						

Extraction Method: Factor analysis.

The component matrix table shown in Table 18 below indicated that both overall service provider (Al Jawal) impression and Relative Differentiation loaded highest into the first component at .736 and .754 respectively. Motivation or likelihood to switch loaded highest into the second component (.723). Similarly, the commitment factor on the extent to

which the service provider (Al Jawal) meets the specific needs of the subscribers loaded highest into the second component (.723).

*Table 19.* Component matrix for Al Jawal commitment factors

Variable	Component		
	1	2	3
Overall service provider impression (Affective Commitment)	.736	-.111	.253
How service provider's post paid services meet specific needs (Normative Commitment)	.233	.713	-.646
Motivation/Likelihood to switch from current service provider (Continuance Commitment)	-.186	.723	.666
Commitment: Relative Differentiation	.754	.066	.117

Extraction Method: Factor analysis.

a. 3 components extracted.

The rotated components matrix, whose rotation converged in four iterations, showed that overall service provider (Al Jawal) impression and commitment loaded highest into the first component with .780 and .755 respectively. Nonetheless, the loading factor value for both overall impression and Relative Differentiation increased from .736 and from .754 respectively. The factor on service provider (Al Jawal) meeting the specific needs of the consumer loaded highest into the second component with a rotated factor loading of .990 up from .713. Finally, motivation or likelihood to switch from current service provider recorded a higher rotated factor loading into the third component (.999) than the initial factor loading before rotation of .723 in factor 2. Table 19 below displays these results.

*Table 20.* Rotated component matrix for Al Jawal commitment factors

	Component		
	1	2	3
Commitment: Overall service provider impression	.780	-.091	-.029
Commitment: How service provider's post-paid services meet specific needs	.026	.990	.021
Commitment: Motivation/Likelihood to switch from current service provider	-.022	.021	.999
Commitment: Relative Differentiation	.755	.128	.000

Extraction Method: Factor analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 4 iterations.

The theorization and eventual naming of the three commitment types extracted from the various commitments items was based on literature by Jones *et al.* (2009, p.17) indicating that the three commitment dimensions can be viewed as “want to stay” (affective), “should stay” (calculative/continuous), and “have to stay” (normative). The overall provider impression and Relative Differentiation are types of commitments that make the subscriber

want to stay. Consequently, the first component was renamed to Affective Commitment for this study's subsequent analysis. Indeed, Colgate *et al.* (2007) argued that Affective Commitment originates from positive attitudes towards the company (Image).

The capacity of the post-paid services by a service provider to meet the specific needs of a subscriber relates to the commitment based on rationalized motives. Various authors (such as Bolton, Lemon, & Verhoeff, 2004; Colgate *et al.*, 2007; Jones *et al.*, 2009) describe this type of commitment as calculative/continuance. Thus, the second component was renamed to continuance commitment for the purposes of this study.

Finally, the lack of motivation or low likelihood to switch from the current service provider as represented in the questionnaire prompt and later in the factor analysis procedure denotes a "have to stay" type of commitment. Gustafsson, Johnson, and Roos (2005) contended that this commitment captures the social mutual exchange norm and referred to it as Normative Commitment. On this basis, the third extracted component following the factor analysis procedure on commitment was renamed to, and saved as, Normative Commitment for the purposes of further analysis in this study.

### **5.5.2 Factor analysis for Image**

Factor analysis using Varimax rotation based on Eigen values exceeding 1 was performed for the 14 reflective index for the Image construct as derived from the questionnaire. The KMO value (.581) and Bartlett's Test of Sphericity index (1977.872, p=.000) showed that the data from the 14 Images was suitable for factor analysis. See Table 20 below.

*Table 21. KMO and Bartlett's tests for Image factor analysis*

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.581
Approx. Chi-Square	1977.872
Bartlett's Test of Sphericity	
Df	91
Sig.	.000

Five factors had Eigen values exceeding 1 and cumulatively accounted for 52.785% of the variance both before and after rotation. This means that there was no variation loss attributable to latent factors that were unique to the initial values or any variability that the factor model could not account for effectively. However, the rotated factor model adjusted all the individual factors with the first two factors recording reduced totals to 1.639 and 1.553 from the initial 2.038 and 1.666 respectively. On the other hand, the last three factors recorded increased totals of 1.536, 1.425, and 1.237 from the initial 1.431, 1.190, and 1.065

respectively. See Table 21 for the total variance explained and the rotated extraction of the five factors.

*Table 22. Total variance for Image factor analysis factors explained*

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.038	14.554	14.554	2.038	14.554	14.554	1.639	11.710	11.710
2	1.666	11.902	26.455	1.666	11.902	26.455	1.553	11.096	22.806
3	1.431	10.219	36.675	1.431	10.219	36.675	1.536	10.969	33.775
4	1.190	8.499	45.174	1.190	8.499	45.174	1.425	10.176	43.951
5	1.065	7.611	52.785	1.065	7.611	52.785	1.237	8.833	52.785
6	.980	6.999	59.784						
7	.947	6.761	66.545						
8	.877	6.263	72.808						
9	.793	5.664	78.472						
10	.708	5.054	83.527						
11	.664	4.744	88.270						
12	.602	4.298	92.568						
13	.558	3.983	96.551						
14	.483	3.449	100.000						

Extraction Method: Factor analysis.

Upon rotation and convergence in seven iterations, some variables shifted as adjustments were made to the factor model. The protocol for interpreting the items-to-factors in the matrix was selection of items with a minimum loading of 0.4 and with no more than half that loading on to any other factor. Consequently, Component 1 comprised two items, which related to prompts about perceived attention to customer needs (.768) and wide range of products and services (.659). Three variables concerning perceived commitment to quality (.725), brand innovativeness (.763), and personnel's professionalism (.506) loaded into component 2. Component 3 yielded three variables, which included perceived use of latest technology (.666) and improving brand (.751). Provision of fast services (.669) and great contribution to country development (.633) loaded into the fourth component. Finally, component 5 comprised of perceived top ranking in supply of telecommunication services (.742) and good reputation/name (.599), as illustrated in Table 22 below.

Table 23. Rotated component matrix for Image factor analysis factors

	Component				
	1	2	3	4	5
Is a leading supplier of telecommunication services	.127	.006	-.052	-.225	<b>.742</b>
Attends to the needs of customers like you	<b>.768</b>	-.067	.079	.147	-.049
Has a wide range of products and services	<b>.659</b>	.261	.108	.028	.216
Is committed to quality	.213	<b>.725</b>	.189	-.013	-.020
Is An Innovative Brand	-.155	<b>.763</b>	-.183	.097	-.077
Uses the latest technology	.188	-.076	<b>.666</b>	-.090	-.058
Is An Improving Brand	-.054	.116	<b>.751</b>	.003	-.035
Values Its Customers	.193	.177	.288	-.557	.013
Is staffed with knowledgeable personnel	-.362	.199	.427	-.108	.252
Is staffed with professional personnel	.047	<b>.506</b>	.183	-.299	.253
Provides Fast Services	.093	-.045	.255	<b>.669</b>	-.125
Provides Efficient Services	-.514	.002	.105	.224	.316
Good Reputation/Name	-.148	.006	-.022	.157	<b>.599</b>
Contributes Greatly to Country Development	.159	.157	-.252	<b>.633</b>	.158

Extraction Method: Factor analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 7 iterations.

The variables that loaded into the first component were about giving customers what they want by attending to their needs and provision of wide range of products and services. Thus, Al Jawal customers perceive it as a company that gives customers what they want and therefore the naming of this first component as “gives customers what they want”. The second component’s variables were about commitment to quality, brand innovativeness, and professional personnel and were collectively named “commitment to high service provision standards”. The variables that loaded into the third component related to perceived use of latest technology and brand improvement, which relate to improvement/innovation Image. The researcher figured that fast service provision and contribution to country development relate to perceived commitment towards national progress. This led to the naming of the fourth component as “commitment to national progress”. Finally, factor 5 was named reputation Image since it comprised of variables about good reputation/name and top ranking in service provision. In other words, it appears that for customers, a supplier of telecommunications services can be judged based on the extent to which it is a company that:

- 1) Gives customers what they want
- 2) Is committed to high standards of service provision
- 3) Tries hard to improve or be innovative for customers
- 4) Is committed to national progress
- 5) Has a strong reputation

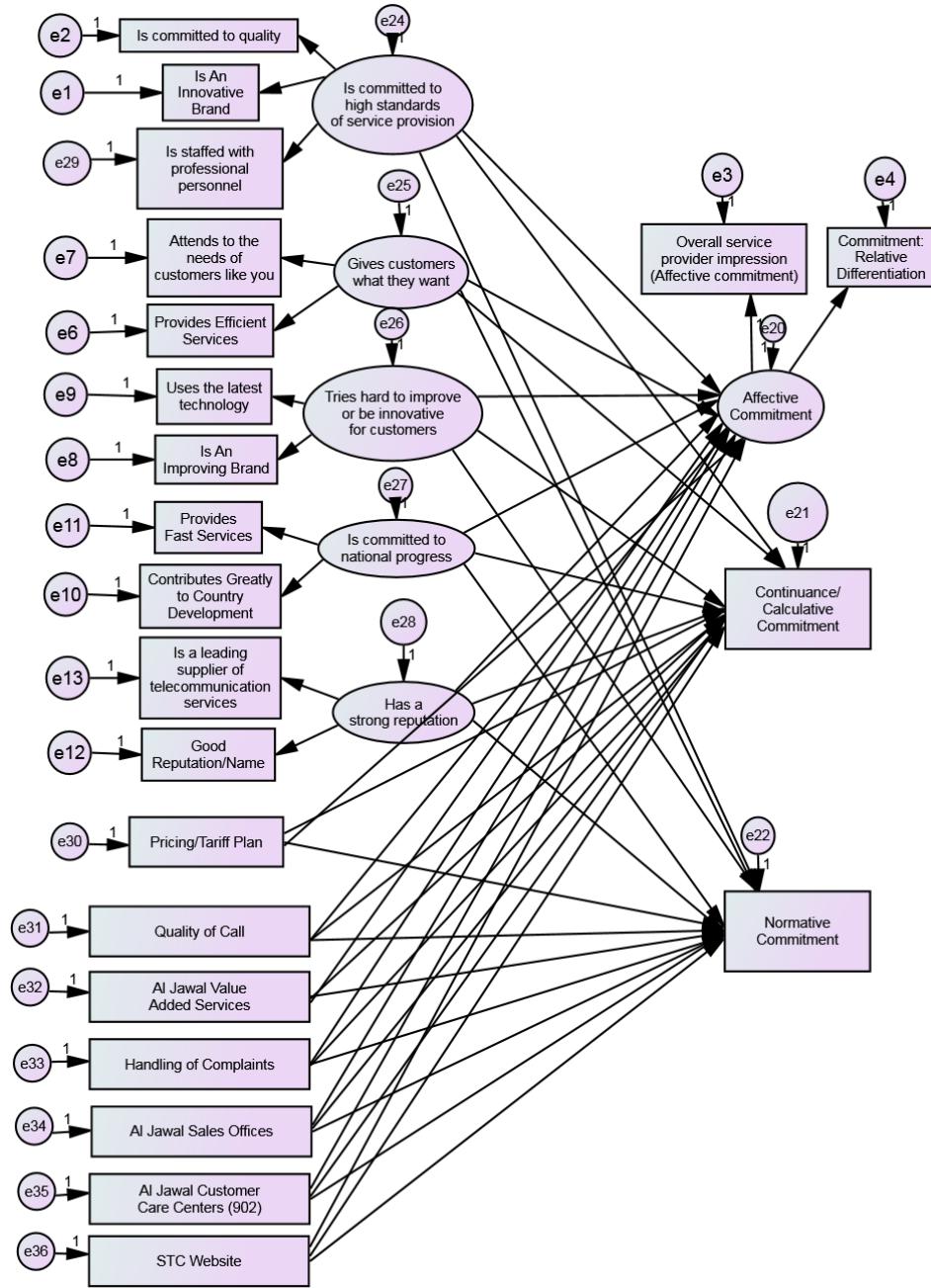
However, it is worth noting that based upon the Document 5 literature review, the researcher’s original theoretical interpretation was that there would be three factors related to

reputation, brand perception, and perception of Service attributes as illustrated through the conceptual framework (Figure 1). However, the outcome of the factor analysis indicated that the Image construct is more complex than this, so the new five-factor structure now replaces the original theoretical supposition.

### ***5.5.3 Contribution of Image, Price, and Service to commitment impressions***

A structural equation model was constructed in AMOS version 21. AMOS provides an interactive interface for building structural equation models. It offers a more intuitive interface and enables users to construct models that are increasingly more realistic in terms of reflecting complex relationships with the capacity to use observed variables (McCormick, Salcedo, & Poh, 2015). This enables AMOS to perform complex, but mutually supportive functions that offer robust interpretation of theoretical conceptualisations using Confirmatory Factor Analysis (CFA) to evaluate how theoretically conceptualised models and actual models differ or fit. In addition, AMOS identifies underlying relationships that are statistically significant, the direction, and the strength of the relationship within a constructed model (McCormick, Salcedo, & Poh, 2015). The three commitment factors extracted during the factor analysis procedure described at length at section 5.5.1 above were loaded as observed (Continuance/Calculative Commitment (CommitSwitch) and Normative Commitment) and unobserved (Affective Commitment), endogenous variables. The five Image factors extracted following the factor analysis procedure described at Section 5.5.2 were also loaded as unobserved endogenous, latent variables together with the original six Service attributes and one Price variable were loaded into the AMOS. Error terms were created for different variables as illustrated in Figure 13 below. In the end, the recursive model comprised of 56 variables distributed as 22 observed and 34 unobserved variables. Of the 56 variables, 28 were exogenous while 28 were endogenous.

Figure 13. SEM Model for commitment types and Image, Service, and Price antecedents



The maximum likelihood option was used for the estimation of all model fit and parameter indices. The number of distinct sample moments was 275 whereas the number of distinct parameters for estimation was 127, which rendered the degrees of freedom (df) to 148. A Chi-square value of 1210.753 and a probability level of .000 (df= 182) were revealed for the model, which implied that the data used in the model fits it, but with a large sample size this is always likely to be the case so cannot be relied upon as a definitive indicator of fit (Barret, 2007). The model fit indices were used in measuring the degree to which the covariance matrix deduced from the hypothetical model differs from the covariance matrix

deduced from the population sample (Hair *et al.*, 2010). A Root Mean Square Error of Approximation (RMSEA) value below the recommended 0.05 mark (RMSEA = .000) at 95% confidence interval was one of the confirmations for model fitness. Model fit indices for baseline comparisons included the Normed Fit Index (NFI), the Relative Fit Index (RFI), the Incremental Fit Index (IFI), the Tucker-Lewis Index (TFI), and the Comparative Fit Index (CFI). Respectively, these baseline comparisons' indices yielded coefficient values of 0.336, 0.077, 0.374, .089 and 0.345. Although these values were not all as close to 1 as recommended by Hair et al. (2010), controversy related to fit indices as definers of model fitness looms in literature. For example, Barrett (2007) argued that fit indices add nothing to analysis while Hayduk *et al.* (2007) caution against stern dependence on model fit indices' cut-offs. Bagozzi and Yi (2012), summarising the extant literature, suggest that a combination of a significant Chi-square probability (<0.05), RMSEA ≤ 0.07, NFI ≥ 0.92 and CFI ≥ 0.93, collectively provide sound evidence of fit. Consequently, evidence for fit of the model under consideration is mixed. The baseline comparisons results appear in Table 23 below while the results concerning the RMSEA index appear in Table 24 subsequently.

*Table 24.* Baseline comparisons for commitment model fitness

<b>Model</b>	<b>NFI</b>	<b>RFI</b>	<b>IFI</b>	<b>TLI</b>	<b>CFI</b>
	<b>Delta1</b>	<b>rho1</b>	<b>Delta2</b>	<b>rho2</b>	
<b>Default model</b>	.336	.077	.374	.089	.345
<b>Saturated model</b>	1.000		1.000		1.000
<b>Independence model</b>	.000	.000	.000	.000	.000

*Table 25.* Model's RMSEA index

<b>Model</b>	<b>RMSE</b>	<b>LO</b>	<b>HI</b>	<b>PCLOS</b>
	<b>A</b>	<b>90</b>	<b>90</b>	<b>E</b>
<b>Default model</b>	.082	.077	.086	.000
<b>Independence model</b>	.086	.082	.089	.000

The standardised regression weights (Table 27) yielded various results confirming the predictor power of commitment by some variables and the absence of such capacity in some variables. The results of the standardised regression weights associated with Affective Commitment revealed two statistically significant predictor variables based on statistically significant Critical Ratio (CR) values. These included the Image construct that entailed Al Jawal trying hard to improve or be innovative for customers (CR= 2.185, p= .003) and rating of Al Jawal sales offices (CR= 2.144, p= .029) at 0.05 (one-tailed) significance level. Based on the standardised regression weights, Al Jawal's Image construct denoting trying hard to improve or being innovative for customers accounted for 11.9% variance in Affective

Commitment. This implied that when Al Jawal tries hard to improve or be innovative for customers, their Affective Commitment went up and vice versa. However, Al Jawal Sales offices' rating accounted for 10% variance in Affective Commitment. This implied that Affective Commitment increased with an increase in the rating of Al Jawal's sales offices.

With respect to Continuance/Calculative Commitment, none of the variables exhibited significant CR scores thereby implying that none of the variables in the model could predict Continuance/Calculative Commitment among Al Jawal consumers. However, the rating of Al Jawal's sales offices ( $CR = -2.183$ ,  $p = .029$ ) emerged as a significant predictor of Normative Commitment accounting for a 7% negative variance in Normative Commitment (see Table 25 below for these and more results). Although having a strong reputation accounted for more variance percent in Normative Commitment (15.7%), it was dropped because its (unstandardized) regression weight was fixed at -1.281. It is noteworthy that the table below has been modified to reduce complexity and reflect the results most relevant to the hypothesised conceptual framework.

*Table 26. Standardised regression weights for commitment model*

Antecedent (Independent) Variables	Commitment (Dependent) Variable		
	Affective Commitment	Continuance/Calculative Commitment	Normative Commitment
<b>Image</b>			
Image Factor 1 (Is committed to high standards)	-.008	-.074	-.034
Image Factor 2 (Gives customers what they want)	-.017	-.002	.118
Image Factor 3 (Tries hard to improve/innovate)	.119	-.007	-.007
Image Factor 4 (Is committed to national progress)	-.033	-.005	-.001
Image Factor 5 (Has a strong reputation)	-.070	.098	.157
<b>Price</b>			
	-.023	.005	-.010
<b>Service</b>			
Quality of call	.010	.044	.025
Al-Jawal value-added services	.000	.046	.052
Handling of complaints	-.022	.032	.037
Al-Jawal sales offices	.100	-.038	-.070
Al-Jawal customer care center (902)	-.071	-.035	.019
STC website	.006	-.007	-.029

\*Legend: **Yellow** = Significant Relationships

Although the various statistically significant variables revealed capacity to predict the affective and continuance affective, the results of the Squared Multiple Correlations (Table 26 below) revealed considerable weakness in such predictor power. For Continuance/Calculative Commitment, none of the variables was found fit to predict it and

the squared multiple correlations' estimate was .023. This means that all the independent/antecedent variables in the model accounted for 2.3% variation in Continuance/Calculative Commitment. Normative Commitment yielded a squared multiple correlations' estimate of .042, which meant that all the independent/antecedent variables could only account for 4.2% of its variance. Finally, the independent/antecedent variables could only explain 3.7% of Affective Commitment's variance based on an estimate score of 0.037. However, the squared multiple correlations revealed an estimate of .561 for overall impression, which was an endogenous variable to Affective Commitment. This meant that the model could account for up to 56.1% of variance in overall service provider impression for Al Jawal.

*Table 27. Squared multiple correlations for commitment types*

	Estimate
Al Jawal Value Added Services (VAS)	.000
STC Website (Web)	.000
Al Jawal Customer Care Centres (902) (CCCs902)	.000
Al Jawal Sales Offices (SalesOffices)	.000
Handling of Complaints (Complaints)	.000
Quality of Call (CallQuality)	.000
Pricing/Tariff Plan (Tariff)	.000
Has a strong reputation (Img5)	.000
Is committed to national progress (Img4)	.000
Tries hard to improve or be innovative for customers (Img3)	.000
Gives customers what they want (Img2)	.000
Is committed to high standards of service provision (Img1)	.000
<b>Affective Commitment (Affective)</b>	<b>.037</b>
Is staffed with professional personnel (ProPersonnel)	1.013
<b>Normative Commitment (CommitNds)</b>	<b>.042</b>
<b>Continuance/Calculative Commitment (CommitSwitch)</b>	<b>.023</b>
Is a leading supplier of telecommunication services (Supplier)	.203
Good Reputation/Name (Reputation)	.103
Provides Fast Services (FastServices)	1.242
Contributes Greatly to Country Development (CountryDev)	.026
Uses the latest technology (Technology)	1.682
Is An Improving Brand (BImproving)	.094
Attends to the needs of customers like you (CustNeeds)	.103
Provides Efficient Services (EfficientServices)	1.029
Commitment: Relative Differentiation (CommitRelDiff)	.030
Overall service provider impression (Affective Commitment) (CommitImpr)	.561
Is committed to quality (Quality)	.256
Is An Innovative Brand (BInnovative)	.002

## 5.6 Comparing STC's and Competitor's performance based on commitment and its antecedents

The results described under this section relate to the sixth objective. Independent samples t-tests were performed for each of the four original commitment types, the Price/tariff variable, the six formative indicators pertaining to Service, and the five Image factors generated after the factor analysis procedure described under section 5.5.2 above. During the independent samples t-test procedures, missing values were excluded listwise. To ease readability and enhance presentation of results, each of the comparative tests was performed independently and the findings reported under distinct subsections.

### 5.6.1 Comparing Service performance between STC and its competitor

The results of an independent samples t-test performed on the six Service formative indicators revealed that STC performed significantly higher than its competitor in all constructs did. This inference was based on the understanding that STC/Al Jawal had significantly higher means in rating of quality of call ( $M=4.17$  against competitor's  $3.64$ ,  $t= 10.220$ ,  $df= 1658$ ,  $p= .000$ ), Value Added Services ( $M= 4.08$  against  $3.97$ ,  $t= 2.637$ ,  $df= 1658$ ,  $p= .000$ ), handling of complaints ( $M= 3.52$ , against  $M= 3.32$ ,  $t= 4.802$ ,  $df= 1658$ ,  $p= .000$ ), sales offices' rating ( $M= 4.19$ , against,  $M= 3.93$ ,  $t= 5.713$ ,  $df= 1658$ ,  $p= .000$ ), Customer Care Centres' rating ( $M= 4.09$ , against  $M= 3.89$ ,  $t= 4.566$ ,  $df= 1658$ ,  $p= .000$ ), and website rating ( $M= 4.04$ , against  $M= 3.87$ ,  $t= 3.762$ ,  $df= 1658$ ,  $p= .000$ ). The interpretation of these findings is that STC/Al Jawal offers superior services to its subscribers than its major competitor. See Tables 28 and 29 below for more detailed results about performance comparison based on service delivery.

*Table 28. Comparison of STC/Al Jawal and its competitor in Service performance (group statistics)*

	Subscription	N	Mean	Std. Deviation	Std. Error Mean
Quality of Call	ALJAWAL	827	4.17	.799	.028
	Competitor	833	3.64	1.271	.044
Value Added Services	ALJAWAL	827	4.08	.806	.028
	Competitor	833	3.97	.958	.033
Handling of Complaints	ALJAWAL	827	3.52	.740	.026
	Competitor	833	3.32	.958	.033
Sales Offices	ALJAWAL	827	4.19	.794	.028
	Competitor	833	3.93	1.062	.037
Customer Care Centres	ALJAWAL	827	4.09	.752	.026
	Competitor	833	3.89	1.031	.036
STC Website	ALJAWAL	827	4.04	.824	.029
	Competitor	833	3.87	1.027	.036

*Table 29.* Comparison of STC/Al Jawal and its competitor in Service performance (independent samples t-test results)

	Levene's Test for Equality of Variances	t-test for Equality of Means								
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Quality of Call	Equal variances assumed	214.563	.000	10.220	1658	.000	.533	.052	.431	.635
	Equal variances not assumed			10.236	1402.550	.000	.533	.052	.431	.635
Value Added Services	Equal variances assumed	12.240	.000	2.637	1658	.008	.115	.043	.029	.200
	Equal variances not assumed			2.638	1614.339	.008	.115	.043	.029	.200
Handling of Complaints	Equal variances assumed	43.027	.000	4.802	1658	.000	.202	.042	.119	.284
	Equal variances not assumed			4.807	1563.955	.000	.202	.042	.119	.284
Sales Offices	Equal variances assumed	43.592	.000	5.713	1658	.000	.263	.046	.173	.353
	Equal variances not assumed			5.719	1540.287	.000	.263	.046	.173	.353
Al Jawal Customer Care Centres (902)	Equal variances assumed	57.167	.000	4.566	1658	.000	.202	.044	.115	.289
	Equal variances not assumed			4.571	1521.936	.000	.202	.044	.116	.289
STC Website	Equal variances assumed	30.638	.000	3.762	1658	.000	.172	.046	.082	.262
	Equal variances not assumed			3.765	1588.332	.000	.172	.046	.082	.262

### **5.6.2 Comparing Price/tariff plan performance between STC and its competitor**

STC/Al Jawal's mean for Price/tariff plan ( $M= 3.62$ ) was higher than the mean of its major competitor (3.54), as illustrated in the group statistics in Table 30 below. However, the independent samples test results appearing in Table 31, showed that this difference of 0.08 was not statistically significant ( $t= 1.635$ ,  $df= 1658$ ,  $p= .102$ ). Therefore, the subscriber rating for both STC/Al Jawal and its major competitor's pricing/tariff plan is relatively the same.

*Table 30.* Comparison of STC/Al Jawal and its competitor in Price/tariff plan performance (group statistics)

	Subscription	N	Mean	Std. Deviation	Std. Error Mean
Pricing/Tariff Plan	ALJAWAL	827	3.62	.758	.026
	Competitor	833	3.54	1.188	.041

*Table 31.* Comparison of STC/AI Jawal and its competitor in Price/tariff plan performance (independent samples test results)

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Pricing/Tariff Plan	Equal variances assumed	152.701	.000	1.635	1658	.102	.080	.049	-.016	.176
	Equal variances not assumed			1.638	1414.750	.102	.080	.049	-.016	.176

### **5.6.3 Comparing image performance between STC and its competitor**

For the purposes of this question, the two service providers were compared based on the 14 original reflective indicators as opposed to the five factors obtained upon factor analysis on image. The rationale behind this was to ensure that the comparison results were based on original, standalone data for each reflective indicators. The competitor had a higher mean than STC on the attributes indicating that the service provider is an improving brand (STC's  $M= 4.22$ ; Competitor's  $M= 4.26$ ), values its customers (STC's  $M= 4.15$ ; Competitor's  $M= 4.20$ ), and is staffed with professional personnel (STC's  $M= 4.16$ ; Competitor's  $M= 4.25$ ). Interestingly, both STC and its Competitor scored equally on the attribute indicating that the provider is staffed with knowledgeable personnel ( $M= 4.24$ ). The means of the 14 image attributes for STC and its major competitor appear in Table 32 below.

Table 32. STC and Competitor means for the 14 image attributes

	Subscription	N	Mean	Std. Deviation	Std. Error Mean
Is a leading supplier of telecommunication services	ALJAWAL	827	<b>4.36</b>	.625	.022
	Competitor	833	<b>4.31</b>	.674	.023
Attends to the needs of customers like you	ALJAWAL	827	<b>4.36</b>	.670	.023
	Competitor	833	<b>4.27</b>	.797	.028
Has a wide range of products and services	ALJAWAL	827	<b>4.23</b>	.757	.026
	Competitor	833	<b>4.16</b>	.844	.029
Is committed to quality	ALJAWAL	827	<b>4.25</b>	.726	.025
	Competitor	833	<b>4.15</b>	.910	.032
Is An Innovative Brand	ALJAWAL	827	<b>4.25</b>	.805	.028
	Competitor	833	<b>4.15</b>	.852	.030
Uses the latest technology	ALJAWAL	827	<b>4.26</b>	.729	.025
	Competitor	833	<b>4.24</b>	.764	.026
Is An Improving Brand	ALJAWAL	827	<b>4.22</b>	.820	.029
	Competitor	833	<b>4.26</b>	.794	.028
Values Its Customers	ALJAWAL	827	<b>4.15</b>	.742	.026
	Competitor	833	<b>4.20</b>	.750	.026
Is staffed with knowledgeable personnel	ALJAWAL	827	<b>4.24</b>	.695	.024
	Competitor	833	<b>4.24</b>	.764	.026
Is staffed with professional personnel	ALJAWAL	827	<b>4.16</b>	.781	.027
	Competitor	833	<b>4.25</b>	.788	.027
Provides Fast Services	ALJAWAL	827	<b>4.30</b>	.699	.024
	Competitor	833	<b>4.12</b>	.876	.030
Provides Efficient Services	ALJAWAL	827	<b>4.27</b>	.707	.025
	Competitor	833	<b>4.24</b>	.804	.028
Good Reputation/Name	ALJAWAL	827	<b>4.34</b>	.712	.025
	Competitor	833	<b>4.29</b>	.767	.027
Contributes Greatly to Country Development	ALJAWAL	827	<b>4.48</b>	.670	.023
	Competitor	833	<b>4.36</b>	.654	.023
				Means are equal	
				Competitor has higher mean than STC	
				STC has higher mean than competitor	

The attribute on the service provider being staffed with professional personnel was the only image attribute where the competitor's mean was significantly higher than STC's ( $p=.020$ ) based on the independent samples t-test results. The t-test results (see Table 33 below) showed that STC:

1. Attends to the needs of customers better than the competitor (STC's  $M= 4.36$ ; Competitor's  $M= 4.27$ ;  $p= .013$ )
2. Is more committed to quality than the competitor (STC's  $M= 4.25$ ; Competitor's  $M= 4.15$ ;  $p= .012$ )
3. Is more innovative than the competitor (STC's  $M= 4.25$ ; Competitor's  $M= 4.15$ ;  $p= .014$ )

4. Provides faster services than the competitor (STC's M= 4.30; Competitor's M= 4.12; p= .000)
5. Contributes greatly to country development than the competitor (STC's M= 4.48; Competitor's M= 4.36; p= .000)

*Table 33.* Independent samples test results for STC/Competitor image attributes

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Is a leading supplier of telecommunication services	Equal variances assumed	4.330	.038	1.586	1658	.113	.051	.032	-.012	.113
	Equal variances not assumed			1.586	1650.289	.113	.051	.032	-.012	.113
Attends to the needs of customers like you	Equal variances assumed	7.382	.007	2.496	1658	<b>.013</b>	.090	.036	.019	.161
	Equal variances not assumed			2.497	1614.180	<b>.013</b>	.090	.036	.019	.161
Has a wide range of products and services	Equal variances assumed	5.062	.025	1.812	1658	.070	.071	.039	-.006	.148
	Equal variances not assumed			1.812	1641.291	.070	.071	.039	-.006	.148
Is committed to quality	Equal variances assumed	11.408	.001	2.509	1658	<b>.012</b>	.101	.040	.022	.181
	Equal variances not assumed			2.511	1584.318	<b>.012</b>	.101	.040	.022	.181
Is An Innovative Brand	Equal variances assumed	1.950	.163	2.463	1658	<b>.014</b>	.100	.041	.020	.180
	Equal variances not assumed			2.464	1653.902	<b>.014</b>	.100	.041	.020	.180
Uses the latest technology	Equal variances assumed	.011	.916	.575	1658	.565	.021	.037	-.051	.093
	Equal variances not assumed			.575	1655.443	.565	.021	.037	-.051	.093
Is An Improving Brand	Equal variances assumed	.701	.403	-1.051	1658	.293	-.042	.040	-.119	.036
	Equal variances not assumed			-1.051	1655.421	.293	-.042	.040	-.119	.036
Values Its Customers	Equal variances assumed	1.824	.177	-1.347	1658	.178	-.049	.037	-.121	.022

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
	Equal variances not assumed			-1.347	1657.975	.178	-.049	.037	-.121	.022
Is staffed with knowledgeable personnel	Equal variances assumed	5.019	.025	.015	1658	.988	.001	.036	-.070	.071
	Equal variances not assumed			.015	1645.411	.988	.001	.036	-.070	.071
Is staffed with professional personnel	Equal variances assumed	2.780	.096	-2.338	1658	<b>.020</b>	-.090	.039	-.166	-.015
	Equal variances not assumed			-2.338	1657.995	<b>.020</b>	-.090	.039	-.166	-.015
Provides Fast Services	Equal variances assumed	14.181	.000	4.652	1658	<b>.000</b>	.181	.039	.105	.257
	Equal variances not assumed			4.656	1585.374	<b>.000</b>	.181	.039	.105	.257
Provides Efficient Services	Equal variances assumed	6.355	.012	.828	1658	.408	.031	.037	-.042	.104
	Equal variances not assumed			.828	1634.320	.408	.031	.037	-.042	.104
Good Reputation/Name	Equal variances assumed	5.809	.016	1.356	1658	.175	.049	.036	-.022	.121
	Equal variances not assumed			1.356	1650.739	.175	.049	.036	-.022	.121
Contributes Greatly to Country Development	Equal variances assumed	1.268	.260	3.653	1658	<b>.000</b>	.119	.032	.055	.182
	Equal variances not assumed			3.652	1656.472	<b>.000</b>	.119	.033	.055	.182
		Not Significant								
		STC's mean is significantly higher than that of the Competitor								
		Competitor's mean is significantly higher than STC's								

## **6. Discussion of Findings**

This chapter contains discussions about the findings presented in the previous section. The purpose of the chapter is to extrapolate the rationalisation of the results and situate them in the context of previous literature concerning customer churn, commitment, and the antecedents of commitment, as measured and explored through this study.

The descriptive statistics involving means and frequencies about the various commitment items as generated for the first objective revealed that STC subscribers had a highly positive impression of STC based on the high mean scores. When compared with the performance of its major competitor on the same commitment type, it was inferred that STC had a significantly better overall impression to its subscribers than its major competitor did. The findings testing for the capacity of Image, Price, and Service as antecedents and predictors of the three forms of commitment also revealed that reputation Image was a significant predictor of Continuance/Calculative Commitment. Thus, combining the findings on STC's superiority in overall impression and the role reputation Image plays in enhancing Continuance/Calculative Commitment, this is empirical proof that the high overall impression relates to reputation Image of the company and its role in influencing Continuance/Calculative Commitment among subscribers.

Indeed, Rahman (2014) indicated the relative synonymy in the definition of company Image as the overall impression the public holds with respect to the company. The higher STC overall impression over that of the competitor could count as a competitive advantage based on Gupta's (2002) findings demonstrating that corporate reputation sets a company apart from competition and constitutes a competitive advantage. In addition, Eshghi, Kumar, and Gangui (2008) also found that reputation created a superior impression and is an important customer satisfaction predictor. The findings of these previous studies corroborate the explanation that STC's superior impression can be attributed to higher reputation that has been influential in increasing customer satisfaction and Continuance/Calculative Commitment.

In fact, this inference is further affirmed by the results showing that STC met its customer's needs better than its major competitor. This could further explain why STC had a significantly higher Relative Differentiation and overall impression. Previous studies by various researchers (such as Malik, Ghafoor, & Iqbal, 2012; Haque *et al.*, 2006; Wen-Yeh *et al.*, 2004) have demonstrated that by meeting the needs of the customers (customer satisfaction), a company's Image/reputation tends to rank highly above competition and

customer regard such a company highly (overall impression). On the other hand, reputation of a seller or service provider in this case affects the quality perceptions of the products or services offered according to Cabral (2000).

Despite STC ranking significantly higher in terms of overall impression, customer satisfaction, and Relative Differentiation, the findings showing that the motivation to switch (churn) from STC and its major competitor was relatively the same was interesting. Expectations based on literature (Min & Wan 2009) would have been that since STC had significantly higher means in these dimensions, then the likelihood to churn would be significantly lower for STC than for its competitor. However, this finding can be rationalised based on previous literature on loyal behaviour that could be traceable to subscriber inertia and therefore the lack of need to switch. As Kuusik and Varblane (2009) explained, loyal behaviour resulting from inertia implies that customers do not switch to other providers because of the comfort or the comparatively low significance of operation.

Therefore, it is possible that both STC and competitor customers remain loyal and unwilling to switch because they see no need for substitutes (Kuusik & Varblane, 2009). This coincides with literature about cognitive loyalty approach (Oliver, 1999), that loyalty depth does not supersede mere performance when the transaction is mundane - implying that satisfaction is never processed (such as utility provision or trash pickup). However, the findings of this study in this respect disagree with the suggestion by Hofmeyr and Rice (2000) indicating that customers may not switch brands when they are dissatisfied available alternatives strike them as equally bad or worse than their current brands. This is because the results of this study demonstrate that STC already ranks higher than its major competitor does in various areas including Service, Image and commitment, yet the likelihood of churn remains comparatively the same with that of the competitor. Whether this could be because of lack of information about appealing brand characteristics as posited by Wernerfelt (1991) is worth investigation in future studies.

The results concerning the various commitment types showed that the largest percentage of variance of the three commitment types could not be accounted for by the variables used as predictors and comprising of Image's five factors, Service's formative indicators, and pricing/tariff plan. Of great interest was the revelation that none of the predictors loaded into the model could significantly predict Continuance/Calculative Commitment. Although this was not empirically tested for and ascertained in this study, it is possible that the significant predictor variables for both normative and Affective

Commitment types could predict Continuance/Calculative Commitment under the mediation of normative and Affective Commitment.

Another interesting finding was the indication that the model could account for up to 56.1% variance in overall Al Jawal impression despite the model accounting for only 3.7% of Affective Commitment. The interpretation of this would be that overall Al Jawal impression as perceived by Al Jawal consumers is the most important commitment determinant for them. In other words, the better the overall impression customers perceive towards Al Jawal, the higher the level of Affective Commitment.

Notably, Price/tariff plan did not qualify as a significant predictor for any type of commitment in this study. Rahman (2014) argued that Price indicates service quality and therefore influences higher customer satisfaction. There is a possibility that pricing/tariff plan as loaded in this study's model may not have wielded direct influence over any of the commitment measures. This finding negates the results achieved by Peng and Wang (2006) indicating that Price is the major cause for customer churn. This variation in findings could be due to contextual variations in Saudi Arabia or even the fact that the current research did not measure churn directly. Instead, commitment types were measured as antecedents of churn.

Nonetheless, pricing/tariff plan may be less significant in the Saudi case especially considering that results in this study indicated that both STC and its competitors' overall impression had high means, differences notwithstanding. This rationale concurs with the findings reported by Munnukka (2008) showing that subscriber could be less sensitive to alterations in mobile tariffs when the network quality of the service provider is rated highly and vice versa. This finding contradicts an earlier finding by Bolton *et al.* (2004) demonstrating that price fairness only affects the customer relationship length with calculative commitment. The small percentage of variance explained by the predictor variables for Affective Commitment and Continuance/Calculative Commitment may also be found in possible correlation between the six Service and five Image reflective indicators with Price. This is because the effect on any of the commitment types may have been indirect and resulting from a correlative path that may have not identified in this study.

The findings pertaining to the region-based differences in commitment levels towards STC showed that subscribers from the Eastern region were more convinced that STC was more relevantly differentiated from its competitors. Interestingly, the same subscribers from the Eastern region had the lowest mean on the prompt about the STC/Al Jawal meeting their

specific needs. This means that the commitment levels of Eastern region subscribers does not depend on how well they believe STC meets their specific needs. Considering that subscribers from the Eastern region expressed that STC was relevantly differentiated from its competitors, it is then possible that their commitment to STC and their failure to switch is based on lack of better alternatives to STC's services as reported by Hofmeyr and Rice (2000). Previous literature could explain this finding based on Oliver's (1999) cognitive loyalty approach whereby loyalty of the Eastern region subscribers may be based on brand belief and cognition is founded on vicarious or previous knowledge or on present information based on their experience with STC.

### **6.1 Modification of the Churn Prediction Model**

The structural model initially developed for this study (see Figure 13) reflects a theoretical perspective on the antecedents of churn. However, based on the findings of this study (see section 6. immediately above) it has now been possible to generate a simplified model adjusted to reflect the outcomes of empirical analysis. In the model illustrated further below (see Figure 14), the items showing a meaningful contribution to understanding the likelihood of customer churn have been retained. On the other hand, other items have been discarded as described in the three subsequent paragraphs below.

Although Continuance/Calculative Commitment did not register a significant predictor, its established strong positive correlation with both Affective Commitment and Normative Commitment is demonstrated in the AMOS correlation matrix results rendered its consideration as influential in churn prediction. On the other hand, the factor reduction process for commitment variables as described at Section 5.5.1 demonstrated that affective commitment factors included overall impression and relative differentiation. This explains the inclusion of these two variables as reflective indicators of affective commitment in the refined model.

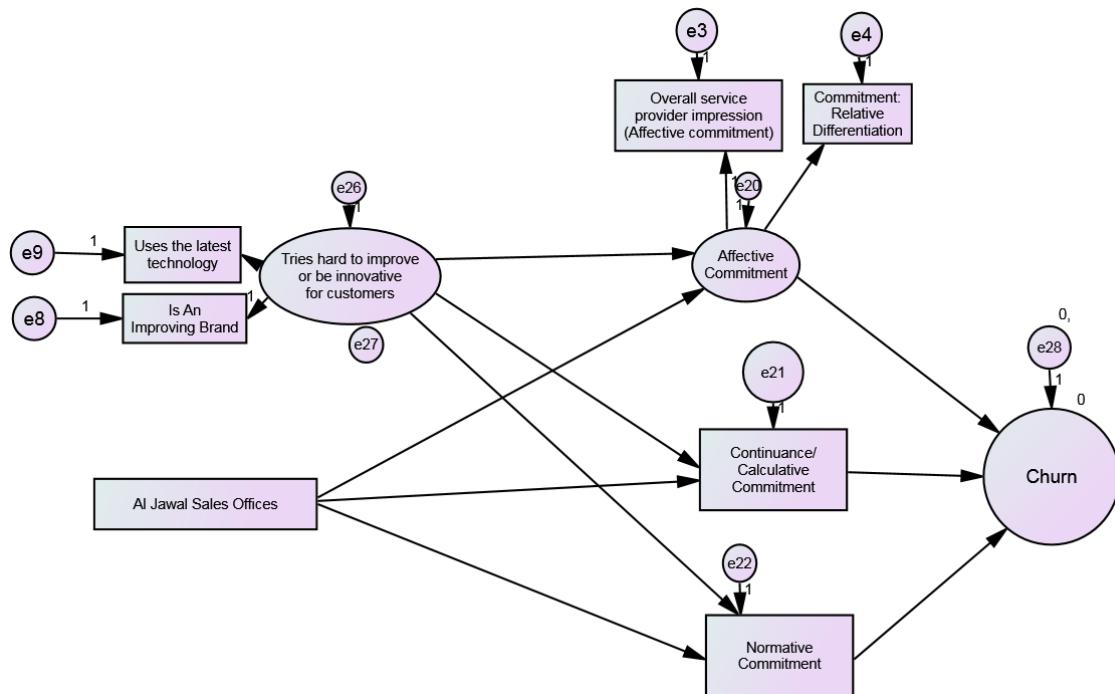
The variables that proved significant in predicting Affective Commitment (sales offices rating and Image construct indicating effort to improve or be innovative for customers) and Normative Commitment (sales offices rating) are indicated as addressing the respective commitment type. In other words, all satisfaction attributes that were found to have no effect on the commitment variables were excluded from the refined model. Since the rating of the Al Jawal sales offices was found to influence both normative and affective commitment types, it was included in the refined model with the single-headed path arrows originating from the variable towards the three commitment types. Notably, the 'Service'

construct originally comprised six attribute-related items all considered as formative indicators, but of these only one – ‘Al-Jawal Sales Offices’ – was found to have a significant relationship to Commitment. Similarly, price did not record significant relationship to commitment and was therefore excluded from the refined model.

On the other hand, the perception that ‘STC tries hard to improve or be innovative for the customers’ was also found to be a significant predictor of affective commitment. However, this was an unobserved variable originating from the factor reduction procedure explained at Section 5.5.2. Although the factor reduction procedure reduced the original 14 image indicators to 5 factor items (see Section 5.5.2), four of the other image constructs did not register a significant relationship to commitment except one - ‘STC tries hard to improve or be innovative for the customers’. As seen in the said section, two items loaded into this construct i.e. use of the latest technology and being an improving brand. Thus, for the purposes of the refined AMOS model, these two items were entered as reflective indicators to the unobserved construct representing the perception that ‘STC tries hard to improve or be innovative for the customers’. Finally, as theorised through the conceptual framework, it is expected that satisfaction would help predict commitment and commitment would serve as a predictor of churn.

The modified model based on the empirical findings of this study is illustrated in Figure 14 below.

*Figure 14.* Modified model for churn prediction



Upon running the model in AMOS, the model comprised 20 variables, distributed as seven observed, 13 unobserved, 11 endogenous, and 9 exogenous. The Chi-square fit for the model was 21.239 ( $p = 0.031$ ) and the degrees of freedom stood at 11. The RMSEA score for the model was (RMSEA = .000) at 95% confidence interval, while the baseline comparison scores were all very close to 1 (NFI = .893, RFI = .728, IFI = .945, TLI = .847, CFI = .940) as recommended by Hair et al. (2010) and Bagozzi and Yi (2012). The RMSEA and baseline comparison results appear in Tables 34 and 35 below respectively.

*Table 34. RMSEA scores for the modified churn prediction model*

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.034	.010	.055	.891
Independence model	.086	.075	.097	.000

*Table 35. Baseline comparison scores for the modified churn prediction model*

Model	NFI	RFI	IFI	TLI	CFI
	Delta1	rho1	Delta2	rho2	
Default model	.893	.728	.945	.847	.940
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

It is noteworthy that this refined model is the most efficient for the evaluation of the factors that appear to influence churn ultimately. However, the model specified at Figure 13 is most likely the most effective in getting a collective and more overarching representation of the various factors that affect commitment and the intricate underlying associations between different variables. The comprehensive nature of the original model at Figure 13 allows for the assessment of all aspects of the organisation. However, the reduced model illustrated at Figure 14 is more efficient as respondents are less likely to suffer questionnaire fatigue. In addition, one only needs to analyse and report less data, which would be less time consuming and less complex. Thus, the reduced model may be more useful for regular research that requires addressing specific aspects of commitment. On the other hand, the longer model would be useful for overarching research that seeks to uncover changing trends in factors affecting consumer commitment and any changes in underlying measures of impact on commitment.

## 6.2 Questionnaire Refinement

Different results discussed in the six sections and their constituent subsections preceding the current one formed the basis for the refinement of the questionnaire used in Document 4 so it is suitable for gathering relevant customer intelligence quickly and efficiently on an ongoing basis at STC. The relevance of this refinement is traceable to the

fourth objective in the current document and the need for practical applicability at STC. The screening questions from the original questionnaire (Appendix C) i.e. S1 through S4 were retained to ensure participation in the survey would be by qualified respondents deemed to offer the most relevant customer intelligence information for STC to predict churn. The 14 Image reflective indicators were grouped based on the five factors generated through the factor analysis procedure while the commitment questions were renamed according to the three commitment types (affective, normative, and continuance/calculative) conceptualised in the model indicated above.

Some formative indicators of Service such as website rating were also dropped from the modified questionnaire recommended for adoption by STC. The aspect of Price/tariff plan was dropped from the modified questionnaire, as the findings of this study did not support its relevance in churn prediction in the mobile services' industry in Kingdom of Saudi Arabia. Owing to the findings showing that there were significant variations on commitment across the four regions, a new questionnaire item prompting for the region from which a respondent comes was added to the list of demographic information. In the end, a more refined and shorter questionnaire was developed (Appendix D). Moreover, the design of the modified questionnaire can be self-administered thereby reducing the need for STC to incur significant interviewer costs while conducting surveys about churn prediction. It is worth noting that original Arabic translations were retained in the modified questionnaire to ensure participation of Arabic speaking respondents.

## **7. Conclusions, Recommendations, and Reflections**

This chapter draws the research presented in this document together by presenting inferences deduced from the findings and discussions of the findings presented in chapters 6 and 7 above. The conclusions precede the recommendations and appear in paragraphs distinct to the objectives of this study. The quantitative piece of research presented in the current document is a continuation and enhancement of research performed and reported in four documents preceding this one. A survey used to collect data and discussed in document 4 of the project informed the findings of the current study. Therefore, the present document served as a means for refining the questionnaire developed in Document 3 and used for descriptive findings only in Document 4. Data analysis informing the findings presented in the current document was performed using SPSS and advance structural modelling and testing of the conceptual model was performed using AMOS software to help refine the questionnaire and make it as parsimonious as practicable, for ready and regular application as a top-level diagnostic tool at STC. The following research objectives have been addressed in the current document:

1. To ascertain the level of customer commitment currently being experienced by STC in respect of its mobile service provision
2. To ascertain the level of customer commitment currently being experienced by STC's major competitor in respect of its mobile service provision.
3. To ascertain whether levels of commitment vary on a region-by-region basis
4. To refine the questionnaire used in Document 4 so it is suitable for gathering relevant customer intelligence quickly and efficiently on an ongoing basis.
5. To determine the relative contribution of pre-determined antecedents (Image, Price, and Service) to overall expressions of customer commitment
6. To compare the performance of both STC and its major competitor in respect of commitment and its antecedents, Image, Price, and Service.
7. To make recommendations to STC as to how it might improve both its absolute and competitive position in respect of customer commitment and, thus, reduce churn.

### **7.1 Conclusions**

Concerning the first objective, the level of commitment currently being experienced by STC in relation to its mobile service provision was found to be high in terms of overall impression, meeting of specific subscriber needs, and Relative Differentiation. The likelihood/motivation by STC consumers to switch was, however, found to be worryingly

high based on the arithmetic mean. Through the findings of the second objective, the findings of the first objective were reaffirmed through inferential statistics when compared to its major competitor. It was found that STC had significantly higher overall impression, meeting of specific customer needs, and Relative Differentiation. However, the likelihood/motivation of switching from STC by its subscribers was found to be arguably equal. Similarly, the results of the sixth objective indicated that STC/Al Jawal's overall impression, Relative Differentiation, and meeting of customer needs was superior to that of its competitor. However, the likelihood to switch was not significantly different from the competitor's. Thus, it is concluded that subscribers may switch between STC/Al Jawal and its competitor or other competitors in market at a nearly equal likelihood and the motivation to switch/stay was the same for both STC and competitor subscribers. The reasons for these results remain unclear at this juncture. They signal the need for undertaking further research that would perhaps be qualitative to find explanations for these results.

Concerning the third objective, the findings showed that the means of Central and Eastern regions concerning the extent to which Al Jawal's post-paid services meet the specific needs of their subscribers were significantly different with the Eastern region recording the lowest mean score on Al Jawal meeting their specific needs. This was despite STC/Al Jawal subscribers from the Eastern region indicating higher conviction that STC/Al Jawal is superior to its competitor in important ways (Relative Differentiation). This quantitative research could not provide empirical evidence for the rationalisation of why STC's Eastern region subscribers were convinced that STC/Al Jawal is superior to its competitor in important ways, yet score STC/Al Jawal lowest in terms of meeting their specific needs. Thus, there is need for further research (especially qualitative) to explore the reasons for these contrasting findings.

The accomplishment of the fourth objective led to the development of a leaner, more precise questionnaire that STC can readily utilise in garnering customer intelligence about churn about the most significant factors for measuring commitment as a predictor of mobile service customer churn. The development of the modified questionnaire was based on all the findings addressing the other objectives and especially objective 5. The findings pertaining to objective 5 led to the inference that rating of Al Jawal (STC) sales offices and the perception that Al Jawal was trying to improve or be innovative for its customers were the most significant predictors of Affective Commitment, even though their contribution to variance was not as strong as might have been expected. In addition, the perception that Al Jawal was

trying to improve or be innovative for its customers was found to be significant predictors of Normative Commitment. None of the variables loaded into the model proved significant in predicting Continuance/Calculative Commitment. Concerning objective 6, it was found that Al Jawal (STC) performed significantly better than the competitor in Affective Commitment and Normative Commitment, across all Service dimensions, and in terms of pricing/tariff plan.

This study provided insightful and interesting findings concerning subscribers in Saudi Arabia. However, the study left several questions unanswered and provoked the formulation of new questions concerning consumer commitment in the Saudi telecommunications' market. This would then imply the need for further inquiry into issues concerning customer commitment in a market that has experienced little by way of competition considering the longstanding, market domination by STC.

## **7.2 Recommendations**

In line with objective 7 and drawing from the findings, discussions, and conclusions, the following recommendations are made:

1. STC/Al Jawal needs to focus consistently on ensuring that the services offered at their sales offices remain exceedingly superior and satisfactory to their subscribers as sales office rating builds Affective Commitment. It is recommended that professionalism and customer care at the sales offices is boosted through relevant personnel training in delivery of superior services. The researcher expects that this would not be a difficult recommendation to implement considering STC already conducts formal and non-formal personnel training by department. However, the introduction of new training concepts into customer care training may present with new challenges and resistance from employees. To overcome this challenge, STC management would need to incentivise such training and qualify its completion as an added advantage for future promotions, for example.
2. Although there is little indication of a major likelihood for customer switch, either from STC/Al Jawal or from the major competitor, Al Jawal needs to remain alert to the possibility of further competition entering the market, or to consumers becoming more sophisticated and more sensitive to variations in service quality and/or Image. Thus, STC/Al Jawal's quality of call needs to be kept above that of its competitors to ensure that subscribers develop Affective Commitment and subsequently have lesser motivation for churning. This would probably imply

more investment in terms of network infrastructure and human resource such as engineering experts to ensure that STC coverage increases across Saudi Arabia besides being high quality. Projected challenges include the time and resources required to ensure timely delivery of guaranteed call quality.

3. Through innovative products and continuous attempts at improving services, STC/Al Jawal can safeguard subscribers' perceptions concerning its overall impression that it is a market leader with significant relative differentiation from competition. Engaging subscribers in consistent dialogue through various platforms including, but not limited to, new media is recommended to ensure that complaint-response turnaround is reduced significantly as efficient service delivery increases significantly. One of the ways to determine areas of improvement would be to administer the reduced version questionnaire in this research regularly to measure commitment. In addition, STC may organise open forums and exhibitions to engage with consumers and get their feedback. Finally, STC is a consistent user of social media platforms especially Facebook and Twitter and could therefore use such platforms to invite customer views and thereby engage in mutually beneficial dialogue.
4. STC/Al Jawal should continually pursue a balanced approach recognising that Price/tariff plan, quality of service at sales offices, and improvement or innovation may be important would appear to be a useful way forward. This is because, although the findings of this study did not rank Price/tariff plan as being significant to the STC/Al Jawal subscriber as it did rating in sales offices and the perception that STC/Al Jawal was trying hard to improve or be innovative for the customer in influencing customer commitment and therefore churn, STC/Al Jawal should continue to focus on quality/customer care as well as tariff plans..

### **7.3 Reflection on the Conduct of Research**

The execution of this sequential research as a long-term study in phases of both qualitative and quantitative research made the findings of this study more informative and centred on consumer experiences especially those that had switched from Al Jawal. Whereas this benefit applied, it is also likely that the time difference between collecting the qualitative data, collecting the quantitative data, and then undertaking analyses for Document 5 was somewhat too long to the extent that consumer insights and perceptions concerning Image, Service, and Price had evolved over time. This could probably explain why the qualitative

research findings tallied with most recent literature in portraying Image, Service, and Price as significant predictors of commitment while the quantitative study found otherwise. However, this provided a learning experience for the researcher because when the process of conducting the qualitative research phase commenced and the eventual development of the questionnaire, the researcher was not entirely aware of how Document 5 would be configured. Granted the outputs of Document 5 were not as robust as the researcher might have hoped is an indication that more rigorous processes, focused more on statistical rigour than on organisational demands, could have been applied at earlier research phases. Given another chance, the researcher would approach the research differently by dividing the sample between individuals that had switched completely, partially switched, and those that had not switched from Al Jawal at all. This is because of the likelihood that experiences and perceptions of commitment among switched subscribers and those that have stayed may differ significantly. Thus, combining the samples into one study without such categorisation may have rendered the results less robust.

#### **7.4 Recommendations for Further Research**

First, there is need for further research to investigate whether there were underlying methodological research issues in this study that might have led to the emergence of Price/tariff plan, most Image and service attributes as insignificant in the prediction of Continuance/Calculative Commitment. Such issues may include, but not limited to, errors in data collection, respondents misunderstanding the questions, response bias or problems to do with the design of the questionnaire. In line with this, the researcher would want to pursue another research study using the original questionnaire developed in Document 3 and administer the questionnaire himself to investigate such trends in the findings of the current study. This would help in establishing whether the little robustness of quantitative findings based on the AMOS model was traceable to problems in the data collection process such as respondents failing to understand the questions perfectly despite explanations by the interviewers. Secondly, the quantitative findings showed that subscribers from the Eastern region scored STC/Al Jawal lowly on the dimension of meeting their specific needs, but highly on the overall impression that it is superior to its competitors. There is need for qualitative research to establish the rationale behind these conflicting findings. Thirdly, the quantitative findings showed that subscribers may switch between STC/Al Jawal and its competitor or other competitors in market at a nearly equal likelihood and the motivation to switch/stay was the same for both STC and competitor subscribers. The reasons for these

findings remain unclear and signal the need for undertaking further research that would perhaps be qualitative to find explanations for these results. Finally, further research using the refined questionnaire would be necessary to determine its appropriateness and relevance to STC in determining the level of commitment and underlying influential factors, as predictors of churn and, clearly, determining a measure of churn that can be used to test the effectiveness of our predictive models would be of substantial value.

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## Appendix

### Appendix A

# Initial Set of Questions

#### **STC Image – For First Week of December 2007**

1. Image of a telecommunication company like STC means whether it is a leading supplier in the country, innovative in developing its services to suit local need, committed to maintain and continuously improve its quality of service, and has good reputation locally and internationally, etc. Do you believe that;  
STC is a;
  - a. leading supplier in the country,
  - b. innovative in developing its services to suit local need,
  - c. committed to maintain and continuously improve its quality of service, and
  - d. has good reputation locally and internationally?

#### **Commitment to STC – For Third Week of December 2007**

1. What is your overall opinion of **ALJAWAL** post-paid services?
2. How well do **ALJAWAL** post-paid services meet your specific needs?
3. How likely you are to switch from or stop using Saudi Telecom's **ALJAWAL** post-paid services?
4. Assume for a moment that there are more than 2 mobile service providers operating in the Kingdom. In this case, which one of the following statements best describes your opinion about mobile phone services?
  - a. One mobile services provider is better than the others and it is important to me to use that provider
  - b. Some mobile services providers are better than others and it is important that I use one of those
  - c. Some mobile services providers are better than others, but it's not that important which one I use
  - d. All the mobile services providers are about the same, so it doesn't matter to me which one I use

#### **Quality of Call & Network Coverage – For Second Week of January 2008**

1. Overall, how would you rate the call quality of **ALJAWAL**'s mobile lines? In giving your answer please think of the overall quality of call, your experience of subscribing to **ALJAWAL** lines, as well as any interaction that you've had with **ALJAWAL** service. Would you say that the call quality of **ALJAWAL**'s lines is Excellent, Very Good, Good, Fair or Poor?
2. Now I'd like you to rate some specific aspects of the call quality of **ALJAWAL**'s mobile lines. For these questions, we will be using a rating scale of "Excellent," "Very Good," "Good," "Fair," or "Poor." How would you rate **ALJAWAL**'s call quality in terms of...?
  - a. Call quality in Indoors
  - b. Call quality when Walking
  - c. Call quality in moving Vehicles
  - d. Call quality in built up Areas

#### **Service Awareness – For Fourth Week of January 2008**

1. Overall, how would you rate **ALJAWAL**'s value added services? In giving your answer please think of the value added services and your experience of subscribing to **ALJAWAL** lines, as well as any interaction that you've had with **ALJAWAL** with regards to value added services. Would you say that **ALJAWAL**'s value added services are Excellent, Very Good, Good, Fair or Poor?
2. Now I'd like you to rate the **ALJAWAL** value added services that you are aware of. For rating these services we will be using a rating scale of "Excellent," "Very Good," "Good," "Fair," or "Poor." How would you rate **ALJAWAL**'s .....service?
  - a. Voice Mail
  - b. International Roaming
  - c. SMS (Al Miursal)
  - d. Fax
  - e. JAWALNet
  - f. Abwab
  - g. WAP
  - h. Mawjood and Mawjood Extra
  - i. Interactive media SMS
  - j. MMS
  - k. Family and friends
  - l. Call Me Service
  - m. Call Barring

- n. Location Based Services (LBS)
- o. Friend Finder service
- p. Budget Control Service
- q. 3G Video Call Service
- r. 3G TV Service
- s. Multi SIM

#### **Handling of Complaints – For Second Week of February 2008**

1. Have you made a complaint about your **ALJAWAL** line/s or service in the past 12 months?
2. What type of complaint did you make about your **ALJAWAL** lines or service in the past 12 months?
  - a. Delay in obtaining the connection
  - b. Errors in the bill
  - c. The billed amount was incorrect
  - d. They disconnected the line even though I settled my bill
  - e. They disconnected the **ALJAWAL** line
  - f. Bills are not received regularly
  - g. I asked them to disconnect the line, but they did not
  - h. High prices of calls
  - i. Delay in providing a requested service
  - j. Delay in providing access to international Zero
  - k. Other (specify)
3. How did you make your complaint(s) regarding your **ALJAWAL** line?
  - a. Called 902 (special number for complaints)
  - b. Went to an Aljawal Sales office
  - c. Called a friend or relative
  - d. Who works for **SAUDI TELECOM/AIJAWAL**
  - e. On-line
  - f. Other (specify): .....

- g. CAN'T REMEMBER
- 4. Overall, how would you rate **ALJAWAL's** handling of complaints? In giving your answer please think of the handling of complaints and your experience of subscribing to **ALJAWAL** lines, as well as any other interaction you've had with **ALJAWAL** with regard to handling complaints. Would you say that **ALJAWAL's** handling of complaints is Excellent, Very Good, Good, Fair or Poor?

#### **Pricing / Tariff Plan – For Fourth Week of February 2008**

- 1. Overall, how would you rate **ALJAWAL's** pricing/tariff plans? In giving your answer please think of the pricing/tariff plans and your experience of subscribing to **ALJAWAL** lines, as well as any other interaction you've had with **ALJAWAL** with regards to the pricing/tariff plan. Would you say that **ALJAWAL's** pricing/tariff plans are Excellent, Very Good, Good, Fair or Poor?
- 2. Now I'd like you to rate some specific attributes related to **ALJAWAL's pricing/tariff plans**. For these questions we will be using a rating scale of "Excellent," "Very Good," "Good," "Fair," or "Poor." How would you rate **ALJAWAL's pricing/tariff plans** in terms of...?
  - a. Initial Activation set-up charges for SIM Cards
  - b. Monthly Subscription Fee
  - c. Domestic Calling Rates
  - d. International calling rate
  - e. Domestic SMS Rates
  - f. International SMS Rates
  - g. Rate for Abwab services
  - h. Rates for JAWALNet
  - i. MMS rates
  - j. Rate for Live TV
  - k. International Roaming Rates
  - l. Rate for Video Calls
  - m. Rate for Location Based Services (LBS)

#### **Performance of Sales Offices – For Second Week of March 2008**

1. Have you ever visited an **ALJAWAL** Sales Offices? Yes or No.
2. What was the purpose of your visit to the sales office?
  - a. Issuance of Jawal line / SIM card
  - b. To pay the bill
  - c. To get mobile bill
  - d. To inquire about some services
  - e. To change the Jawwal chip
  - f. To get replacement SIM Card
  - g. To ask for distinctive number
  - h. Reviewing an error in the bill / reviewing the bill
  - i. To obtain a replacement bill for a lost one
  - j. To get Multi SIM card
  - k. Other(specify)
3. Overall, how would you rate **ALJAWAL** Sales Offices? In giving your answer please think of your experience at the **ALJAWAL** Sales Offices and any other interaction you've had with **ALJAWAL** Sales Offices. Would you say that the Sales Offices are Excellent, Very Good, Good, Fair or Poor?
4. Now I'd like you to rate some specific attributes related to the **ALJAWAL Sales Offices**. For these questions we will be using a rating scale of "Excellent," "Very Good," "Good," "Fair," or "Poor." How would you rate the **ALJAWAL Sales Offices** in terms of...?
  - a. Overall layout of the **ALJAWAL** Sales Offices i.e. being able to easily find the section you require
  - b. Convenient, accessible location of offices
  - c. Reception welcoming and directing clients to the correct divisions
  - d. Waiting times – length of queues
  - e. Staff knowledge of the products and services
  - f. Staff helpfulness
  - g. Staff being presentable in appearance
  - h. Staff being courteous and polite
  - i. Staff offering their full attention without allowing interruptions
  - j. Convenient working hours

- k. Cleanliness of the offices
- l. Availability of informative materials / brochures at visible locations in the **ALJAWAL** Sales Office
- m. Adequate parking facilities

### **Performance of Call Centres – For Fourth Week of March 2008**

1. Have you ever used the services of the **ALJAWAL** Customer Care Centre (902)? Yes or No.
2. Overall, how would you rate **ALJAWAL** Customer Care Centre (902)? In giving your answer please think of your experience with **ALJAWAL** Customer Care Centre and any other interaction you've had with **ALJAWAL** Customer Care Centre. Would you say that the **ALJAWAL** Customer Care Centre is Excellent, Very Good, Good, Fair or Poor?
3. Now I'd like you to rate some specific attributes related to the **ALJAWAL Customer Care Centre (902)**. For these questions we will be using a rating scale of "Excellent," "Very Good," "Good," "Fair," or "Poor." How would you rate the **ALJAWAL Customer Care Centre** in terms of...?
  - a. Speed and ease of contacting the 902 Centre
  - b. The IVR being able to meet the purpose of the call
  - c. The IVR's options being clear and easily understood
  - d. The 902 agent's knowledge of Aljawal's activities and services
  - e. The 902 Centre meeting all your needs for **ALJAWAL** services
  - f. The clarity of the agent's voice
  - g. The accuracy of the agent in explaining the services
  - h. Speed of resolving your financial disputes on your bill
  - i. Method of resolving your financial disputes on your bill
  - j. Speed of delivering the service through calling 902
  - k. Speed of delivering the service through **902** in comparison to visiting the **Aljawal Sales Office**
  - l. The responsiveness of the agent who delivered the service
  - m. The agent's understanding of your problem
  - n. Ability of 902 agent to promote the different services offered by Al Jawal
  - o. The ease of the procedures of applying for a Al Jawal line through 902

- p. Behaviour of the 902 agent who answered your call.
- q. Waiting/on-hold time on the phone

#### **STC Web Sites – For Second Week of April 2008**

1. Have you ever visited the **SAUDI TELECOM** website? Yes or No.
2. Overall, how would you rate the **SAUDI TELECOM** website? In giving your answer please think of all the features of **SAUDI TELECOM**'s website. Would you say that **SAUDI TELECOM**'s website is Excellent, Very Good, Good, Fair or Poor?
3. Now I'd like you to rate some specific attributes related to the **SAUDI TELECOM** website. For these questions we will be using a rating scale of "Excellent," "Very Good," "Good," "Fair," or "Poor." How would you rate the **SAUDI TELECOM** website in terms of Design and layout, Ease of browsing, Ease of navigation, and Speed of surfing, finding relevant information, Speed of page, Loading?

## Appendix B - PARTICIPATING MOBILE CUSTOMERS – INTERVIEWS

Week of Interview	Attribute Interviewed On / Group Discussion	Numbers Interviewed	Apologies	Interview Overview and Main Issues Raised
1 <sup>st</sup> – 7 <sup>th</sup> Dec'07	Image	10	0	<ul style="list-style-type: none"> <li>• Before each interview the participating member was explained the definition of the image in simple words, like; leading supplier, innovative, committed to quality, good reputation, etc.</li> <li>• All except Sultan understood the meaning of ‘Image’ in this context. Sultan with very little exposure to modern world and also being uneducated was unable to understand the meaning of image. He was not asked for any response to this question.</li> <li>• Abdurahman mentioned that attending customers need, fast and efficient delivery of service, and contributing to the development of the country at the same time is most important for a business.</li> <li>• Abdullah, Reema and Zaid - not concerned about the STC image. High quality service and a competitive rate are most important to them.</li> <li>• Reema - “What’s image got to do with me? I want good service at a better rate.”</li> <li>• Sarah - believes image also depends on the education, knowledge and professionalism of the personnel, and also whether it provides a wider range of services and products or not.</li> </ul> <p>ACTION ITEMS FOR THE RESEARCHER:</p> <ul style="list-style-type: none"> <li>• Update questionnaire by adding attending customers need, fast and efficient delivery of service, and contributing to the development of the country factors to the image question for in depth</li> </ul>

				<p>perspective analysis of the participants.</p> <ul style="list-style-type: none"> <li>• Analyse and evaluate relationship of education, knowledge and professionalism of the personnel with image.</li> <li>• Analyse and evaluate STC's ability of adopting and offering service related to latest technology factor.</li> <li>• Deduce a suitable measuring scale for gauging members' response.</li> </ul>
15 <sup>th</sup> – 21 <sup>st</sup> Dec'07	Commitment	10	0	<ul style="list-style-type: none"> <li>• In relation to this attributes the researcher explained the terms impression, needs, and motivation to the members before each interview.</li> <li>• Participating members were explained the definition of the commitment in simple words, and also in Arabic.</li> <li>• The researcher asked the participants the first three initial questions one by one and expected response in statement form, but realized that since responses could come in different words and forms, it would be difficult to standardize them for analysis. The researcher decided to measure responses on a scale from 1 to 10. Where '1' - the lower most end and '10' - the upper most end of the scale. All other numbers between 1 and 10 respective weighting.</li> <li>• Bandar, Abdurahman and Sarah - very nationalistic response to the question, 'Assume for a moment that there are more than 2 mobile service providers operating in the Kingdom. In this case, which one of the following statements best describes your opinion about mobile phone services?' Members expressed their disappointment - as Saudi they have no choice but need to switch to a foreign company for better service.</li> <li>• Farah - "My commitment belongs to those who look after my interest in terms of quality of service and rate."</li> <li>• Talal interviewed with an updated set of these questions - prompt in responding to the questions.</li> </ul>

				<ul style="list-style-type: none"> <li>Talal – need a set of questions to explore and assess the commitment level of the participants. Both brain stormed for half an hour and came up with the idea of addition of a question to indicating the extent to which ALJAWAL better than competitor.</li> </ul> <p><b>ACTION ITEMS FOR THE RESEARCHER:</b></p> <ul style="list-style-type: none"> <li>Update the questions to add responses on a scale from 1 to 10. Where '1' - the lower most end and '10' - the upper most end of the scale. All other numbers between 1 and 10 respective weighting</li> <li>Add questions to explore and assess the commitment level of the participants and to indicating the extent to which ALJAWAL better than competitor</li> </ul>
6 <sup>th</sup> – 12 <sup>th</sup> Jan'08	Quality of Call & Network Coverage	10	0	<ul style="list-style-type: none"> <li>Asked questions on overall quality of call, experience of subscribing to ALJAWAL lines, as well as any interaction that subscribers had with ALJAWAL service.</li> <li>Asked questions on some specific aspects of the call quality of ALJAWAL's mobile lines, like; call quality in indoors, when walking, in moving vehicles, and in built up areas.</li> <li>Abdullah, Reema, Talal and Khaled - dissatisfied in the overall quality of call at certain time of the day, usually at peak (business hours) times. Often calls just drops and it is irritating.</li> <li>Tala - 'I pay the rates on time but they don't deliver as promised.'</li> <li>Almost all the participants encounter very poor signal in built up areas, may be due to signal interactions, the quality of call in moving vehicle is bad.</li> <li>The researcher explained the reason of poor call quality to the participants.</li> <li>Abdurahman experiences noise and sudden drop of call while</li> </ul>

				<p>roaming.</p> <ul style="list-style-type: none"> <li>The researcher realized that participants that has experience with both STC and its competitor could be asked questions to compare the operators.</li> </ul> <p><b>ACTION ITEMS FOR THE RESEARCHER:</b></p> <ul style="list-style-type: none"> <li>Investigate Sultan's case of losing signal on his way to and from home.</li> <li>Forward the issue of noise and sudden drop of call while roaming to concerned department for investigation.</li> <li>Formulate and add question to compare the operators for participants that has experience with both STC and its competitor.</li> </ul>
20 <sup>th</sup> – 26 <sup>th</sup> Jan'08	Service Awareness	9	1	<ul style="list-style-type: none"> <li>Members were explained the definition of the 'value added services' (VAS) with examples and local simple Arabic words.</li> <li>The researcher was surprised to reveal that a very small percentage of the participants were aware about the services except few popular services like; SMS, MMS, call waiting, and call forwarding.</li> <li>Except Abdurahman, the research had to spend a lot of time explaining the 19 services currently offered by STC.</li> <li>Abdurahman - unsatisfactory customer service is the cause of the subscribers not being familiar with the available services. He also stated - usually very hard to get through to the desired option by dialling the single Customer Care 902 number. Usually 30 to 60 minutes waiting, the CSRs are often unfriendly.</li> <li>Due to unfamiliarity of the services, little response on 'How would you rate ALJAWAL's value added services in terms of... (Various options as in the Appendix – B)?'. It is important to keep this question in the final questionnaire.</li> </ul>

				<ul style="list-style-type: none"> <li>• Dr. Khaled - without comparing the VAS between the operators it may be difficult to compare subscribers' reason for defecting to the other operator. A question to be added on this.</li> </ul> <p><b>ACTION ITEMS FOR THE RESEARCHER:</b></p> <ul style="list-style-type: none"> <li>• Discuss the questions in the last two group sessions.</li> <li>• Formulate and add a question to compare VAS offered by operators.</li> </ul>
10 <sup>th</sup> – 16 <sup>th</sup> Feb'08	Handling of Complaints	10	0	<ul style="list-style-type: none"> <li>• Researcher observed an utter dissatisfaction of the participants on STC while talking about complaints.</li> <li>• 'Complaining to STC is like talking to a deaf.' was stated by few participants. This was shocking for the researcher.</li> <li>• Some of the common complaint reasons, like; delayed connection, erroneous bill, incorrect billed amount, line disconnected for no reason, bills not received regularly, high call rate, were identified and listed in the question by the researcher.</li> <li>• Khaled - often receives bills higher than his credit limit.</li> <li>• Abdurahman - number of his mobile chips was blocked for no reason. He was told to change the mobile chip at the cost of certain fee.</li> <li>• Bander - service was not activated upon bill payment.</li> <li>• In a competitive environment, it is not enough to know about STC. Information on competitor is also very essential. To get little exposure on the situation complaints with the competitor's two more simple questions were asked to the participants.</li> </ul> <p><b>ACTION ITEMS FOR THE RESEARCHER:</b></p> <ul style="list-style-type: none"> <li>• Evaluate the 'Complaining to STC is like talking to a deaf.' situation with customer care departments.</li> </ul>

				<ul style="list-style-type: none"> <li>• Formulate and add a question to compare VAS offered by operators.</li> <li>• Inform concerned group for investigation of the reason for faulty bill.</li> </ul>
24 <sup>th</sup> Feb – 2 <sup>nd</sup> Mar'08	Pricing / Tariff Plan	10	0	<ul style="list-style-type: none"> <li>• Abdurahman - “STC Mobile service rates are much higher compared to other countries in the Middle East. It is an additional cost to the business that ordinary people are paying.”</li> <li>• Abdurahman - agreed that the prices are competitive with respect to the competitors. Asked to compare the pricing with the quality of service. He agreed that considering the quality of service, it is good value for money. Especially due to the enormous size of STC network and huge number of international gateways. It is always easy to get through to the called party without any delay.</li> <li>• Farah, Talal, Zaid and Sultan - are looking for better value for their money and feels that they are unfairly been over charged for their mobile service, more than other countries in the region.</li> <li>• Talal - certain services like, change number, change SIM, new connection, etc. should be free.</li> <li>• Khaled and Sarah - certain charges are more - like, Initial Activation set-up charges for SIM Cards, International Calling Rates, Rate for Location Based Services (LBS), and International Roaming Rates compared to charges in the neighbouring countries. The attribute responses were scaled on Excellent, Very Good, Good, Fair or Poor.</li> </ul> <p>ACTION ITEMS FOR THE RESEARCHER:</p> <ul style="list-style-type: none"> <li>• Add rates for JAWALNet, rate for Live TV, and rate for Video Calls to compare.</li> </ul>

10 <sup>th</sup> – 16 <sup>th</sup> Mar'08	Visiting Sales Offices	8	2	<ul style="list-style-type: none"> <li>• Aspects starting from the layout of the sales office through to adequate parking facility were included.</li> <li>• Participants pointed out long waiting hours only to face unfriendly staff with inadequate knowledge of product and services.</li> <li>• Knowledge of the product and services, helpfulness, presentation, courtesy and politeness of the staff were separately included in evaluating in depth staff performance.</li> <li>• Participants expressed individual sales office visiting experience during their interview.</li> <li>• Talking about their experience couple of years back, most of the participants were very unhappy with the service of the sales representatives.</li> <li>• Participants noticed positive changes, like; organized layout, introduction of queuing ticket for service eliminating waiting line, comfortable seating arrangement, etc. in the sales offices.</li> <li>• Abdullah - ‘Only time will tell how well they change. We will wait and see.’</li> <li>• Sultan - comes from the countryside, he is not well dressed like city people. Few years back, he was very badly treated by the sales people in one of the sales offices. That is why since he subscribed to STC mobile recently he prefers to get his service through Call Centre by calling 902.</li> <li>• Sultan - ‘Even there (in Call Centre), it is no good. You need to wait hours just to get a chance to talk to a representative. Moreover, I get confused when asked to press numbers. Many times I ended up with wrong option.’</li> <li>• The researcher’s personal experience confirms Sultan’s experience.</li> </ul> <p>ACTION ITEMS FOR THE RESEARCHER:</p>
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				<ul style="list-style-type: none"> <li>• Confirm the reasons for confusion in selecting the right option through interactive voice response (IVR).</li> </ul>
24 <sup>th</sup> – 30 <sup>th</sup> Mar'08	Using Customer Care Centre	10	0	<ul style="list-style-type: none"> <li>• Explained to the members how three Call Centres (Riyadh, Jeddah and Dammam) are supporting all the customers 24 hours a day and 7 days a week. These Call Centres provides pre and post-sale support for all the mobile services offered by STC. Automated Call Distribution (ACD) and Interactive Voice Response (IVR) technologies are used to channel the calls to the right Customer Service Representative (CSR) or agents for quick and efficient support.</li> <li>• Participants expressed discomfort in using IVR technology due to unfamiliar options and words.</li> <li>• Abdullah, Reema, and Sultan - preferred to talk to a call agent rather than interacting with a machine. Justification is that interacting with a machine has no flexibility that they have with a call agent.</li> </ul> <p>ACTION ITEMS FOR THE RESEARCHER:</p> <ul style="list-style-type: none"> <li>• The issue of long waiting period in 902 calling queue was noted and informed to the concerned department for action.</li> </ul>
7 <sup>th</sup> – 13 <sup>th</sup> Apr'08	Using STC Website	10	0	<ul style="list-style-type: none"> <li>• All except Sultan uses computer at their work or educational institutions</li> <li>• Most of those that uses computer do not use ‘STCONLINE’ for self-customer care service.</li> <li>• Only Abdullah, Farah and Abdurahman use ‘STCONLINE’ site.</li> <li>• Majority of the participants never tried to use STCONLINE.</li> <li>• Some have heard about it through advertisement and from friends, but they did not bother to use it due to the complexity of</li> </ul>

				<p>registering through the internet prior to using it.</p> <ul style="list-style-type: none"> <li>The researcher was convinced that there was adequate advertising about this site. It is due to low internet access coupled with local culture that the mobile users have not efficiently used the STC eCare site.</li> </ul>
19 <sup>th</sup> Apr'08	First Group Discussion	10	0	<ul style="list-style-type: none"> <li>The researcher gave a final set of questionnaire to the participants for completion.</li> <li>The set of questionnaires were collected after completion.</li> <li>The researcher went through 25% of the revised set of questionnaire.</li> <li>He again explained (in Arabic if necessary) key terminologies to the participants.</li> <li>Participants' views on the questions during the interviews were shared among the members.</li> </ul>
20 <sup>th</sup> Apr'08	Second Group Discussion	9	1	<ul style="list-style-type: none"> <li>The researcher went through 75% of the revised set of questionnaire.</li> <li>Discussed Service Awareness questions to clarify understanding and agree.</li> <li>Participants' views on the questions during the interviews were shared among the members.</li> </ul> <p>THE MEETING ENDED AFTER DINNER</p>

## Appendix C - FINAL FIELD VERSION

30.04.2008

 الاتصالات السعودية	<p><b>Defected Mobile Customer Survey</b> December 2007 – April 2008 <b>ALJAWAL CUSTOMERS</b> عملاء الجوال</p>	 الاتصالات السعودية
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Good morning/afternoon. My name is Yahya Al Kahtani and I'm an employee of Saudi Telecom Company. I am currently conducting a survey on telecommunications amongst a group of defected customers to obtain their experiences, views and opinions on the services offered.

صباح/مساء الخير. اسمي ..... وأعمل لـ ..... وهي شركة تعمل في مجال أبحاث السوق في المملكة العربية السعودية. نجري دراسة مع الجمهور حاليا حول الاتصالات لمعرفة تجاربهم ووجهات نظرهم وآرائهم في الخدمات المقدمة بهدف تطويرها و الارتقاء من مستوى تقديم خدماتها .

Respondent

Name:

اسم المحبب:

House/Villa No \_\_\_\_\_ الفيلا /البيت رقم :

Building/Compound \_\_\_\_\_ العماره/المجمع:

Street

Name: \_\_\_\_\_

اسم الشارع

Area: \_\_\_\_\_

المنطقة

Zip

Code

الرمز البريدي

P.O. Box No: \_\_\_\_\_ ص ب E-mail address: \_\_\_\_\_ عنوان  
البريد الإلكتروني

Tele # (Home): \_\_\_\_\_ رقم الهاتف (المنزل) Mobile Number \_\_\_\_\_ رقم  
الجوال

Interviewer's code number:	107-109	رقم الباحث:
----------------------------	---------	-------------

Date of interview: \_\_\_\_\_ تاريخ المقابلة

Time of interview: \_\_\_\_\_ وقت المقابلة :

Length of Interview \_\_\_\_\_ مدة المقابلة

Checked by: \_\_\_\_\_ تمت المراجعة من قبل

First of all I'd like to ask you some few basic questions in order to verify whether or not you can participate in this study.

أولاً، أود أن أطرح عليك أسئلة بسيطة لكي أتحقق ما إذا كنت مناسباً للمشاركة في هذه الدراسة أم لا.

## SCREENING QUESTIONNAIRE

### الاستماره الانتقامية

**S1.** Do you or any of your close relatives work in any of the following professions? **READ OUT**  
 11 - هل تعمل أو يعمل أي من أقربائك المقربين في أي من المهن التالية؟ اقرأ على المجيب.

		110		
Terminate Interview  أنه مقابلة	1	Marketing Research	أبحاث التسويق	
	2	Advertising	الإعلان	
	3	Telecommunication	الاتصالات	
Continue  استمر	4	Others	غيرها	

**S2.** Have you participated in a research survey regarding telecommunication over the past 6 months?  
 21- هل شاركت في دراسة تسويفية حول الاتصالات خلال الستة أشهر الماضية؟

		111		
Yes	نعم	1	Terminate Interview	أنه مقابلة
No	لا	2	Continue	استمر

**S3.** Have you ever been a postpaid customer of the other operator?  
 21- هل كنت عميلاً على الإطلاق للجوال مؤجلة الدفع من المشغل الآخر؟

		128		
Yes	نعم	1		
No	لا	2		

**S4.** To what extent do you know the other operator's post paid tariffs? **READ OUT AND SHOW CARD**

71- إلى أي مدى تعرفت خدمات الجوال مؤجلة الدفع لدى المشغل الآخر؟ اقرأ وابرز البطاقة

		other operator المشغل الآخر		
		129		
I know all the other operator's post paid tariffs	أعرف كل تعرفات الخدمة مؤجلة الدفع لدى المشغل الآخر	1		
I know some of the other operator's post paid tariffs	أعرف بعض تعرفات الخدمة مؤجلة الدفع لدى المشغل الآخر	2		
I do not know any of the other operator's post-paid tariffs	لا أعرف أيها من تعرفات الخدمة مؤجلة الدفع لدى المشغل الآخر	3		

**S5.** Are you the prime user of this ALJAWAL line? **(MENTION ALJAWAL NUMBER RECORDED ON THE FIRST PAGE)**

81- هل أنت المستخدم الرئيسي لخط الجوال هذا؟ (اذكر رقم الجوال المسجل على الصفحة الأولى)

ALJAWAL
الجوال

121			
Yes	نعم	1	CONTINUE
No	لا	2	ASK TO TALK TO PRIME USER AND START INTERVIEW AGAIN

S6. Record gender of respondent

٩١- سجل جنس المجيب

127			
Male	ذكر	1	
Female	أنثى	2	

SECTION B: IMAGES	القسم ج : الصور الذهنية
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- B1. I am going to read a list of statements that might be used to describe **ALJAWAL**. As I read each statement, please indicate whether you "strongly agree", "agree", "neither agree nor disagree", "disagree", or "strongly disagree".

How much do you agree or disagree that **ALJAWAL ....?** SHOW CARD AND READ OUT EXCEPT FOR DK; ROTATE STARTING POINT

ج ١٠ - سوف أقرأ عليك قائمة عبارات يمكن استعمالها لوصف الجوال. فحينما أقرأ عليك كل عبارة، رجاء قل لي ما إذا كنت موافقاً بشدة، أو موافقاً أو لا أنت موافق ولا أنت غير موافق أو غير موافق أو غير موافق إطلاقاً.

فإلى أي مدى أنت موافق أو غير موافق أن الجوال ...؟ ابرز البطاقة و اقرأ القائمة ما عدا لا اعرف. بناوب نقطة البداية .

Asking Order نقطة البداية (✓)			Strongly Agree موافق بشدة	Agree موافق	Neither agree nor disagree لا أنا موافق ولا أنا غير موافق	Disagree غير موافق	Strongly disagree غير موافق إطلاقاً	Don't know لا أعرف
	Is a leading supplier of telecommunication services	رائدة في مجال خدمات الاتصالات	1	2	3	4	5	6 507
	Attends to the needs of customers like you	تلبي احتياجات العملاء متراك	1	2	3	4	5	6 508
	Has a wide range of products and services	لديها تشكيلة واسعة من المنتجات والخدمات	1	2	3	4	5	6 509
	Is committed to quality	ملتزمة بالجودة	1	2	3	4	5	6 510
	Is an innovative brand	شركة مبتكرة لخدمات جديدة	1	2	3	4	5	6 511
	Uses the latest technology	تستخدم أحدث التقنيات	1	2	3	4	5	6 512

	Is an improving brand	شركة متطرفة	1	2	3	4	5	6	<b>513</b>
	Values its customers	تقدر عمالتها وتحرص عليهم	1	2	3	4	5	6	<b>514</b>
	Is staffed with knowledgeable personnel	لديها موظفون يعروفون عملهم	1	2	3	4	5	6	<b>515</b>
	Is staffed with professional personnel	لديها موظفون محترفون	1	2	3	4	5	6	<b>516</b>
	Provides fast services	تقديم الخدمات بسرعة	1	2	3	4	5	6	<b>517</b>
	Provides efficient services	تقديم الخدمات بكفاءة	1	2	3	4	5	6	<b>518</b>
	Good reputation/name	ذات سمعة جيدة	1	2	3	4	5	6	<b>519</b>
	Contributes greatly to the development of the country	تساهم كثيراً في تنمية البلاد.	1	2	3	4	5	6	<b>520</b>

### SECTION C: COMMITMENT QUESTIONS

القسم د: أسئلة عن الولاء

#### C1a. Overall Impression

What is your overall opinion of ALJAWAL post-paid services? Please use this 10-point scale, where "1" means your overall impression of ALJAWAL post-paid services is **VERY NEGATIVE** and "10" means your overall impression of ALJAWAL post-paid services is **VERY POSITIVE**.

You may use any number from 1 to 10 to express your opinion. **SHOW CARD**

الكتي الانطباع - ١- د

ما هو رأيك الإجمالي عن خدمات الجوال مؤجلة الدفع؟ فضلاً استعمل هذا المقياس المكون من 10 نقاط حيث يعني "1" أن انطباعك الإجمالي عن خدمات الجوال سلبي جداً ويعني "10" أن انطباعك الإجمالي عن خدمات الجوال مؤجلة الدفع إيجابي جداً علماً بأنه يمكنك استعمال أي رقم من 1 إلى 10 لتعبير عن رأيك . ابرز البطاقة

	Very negative سلبي جداً									Very positive إيجابي جداً	
	1									10	
ALJAWAL SERVICES ... خدمات الجوال	1	2	3	4	5	6	7	8	9	0	<b>543</b>

#### C1b. Needs

How well do ALJAWAL post-paid services meet your specific needs? Please use this 10-point scale where "1" means ALJAWAL post-paid services **DO NOT MEET YOUR NEEDS AT ALL** and "10" means ALJAWAL post-paid services **MEET YOUR NEEDS PERFECTLY**. You may use any number from 1 to 10 to express your opinion. **SHOW CARD**

د1ب - الاحتياجات

إلى أي مدى تفي خدمات الجوال مؤجلة الدفع باحتياجاتك المحددة؟ الرجاء استعمال هذا المقياس المكون من 10 نقاط حيث يعني "1" إلى أي مدى تفي خدمات الجوال لا تفي باحتياجاتك على الإطلاق ويعني "10" أن خدمات الجوال مؤجلة الدفع تفي باحتياجاتك تماماً، علماً بأنه يمكنك استعمال أي رقم من 1 إلى 10 لتعبير عن رأيك . ابرز البطاقة

	Do not meet my needs at all لا تفي باحتياجاتي على الإطلاق									Meet my needs perfectly تفي باحتياجاتي جاتي تماما	
	1									10	
ALJAWAL SERVICES خدمات الجوال	1	2	3	4	5	6	7	8	9	0	548

### C1c. Motivation to switch

How likely you are to switch from or stop using Saudi Telecom's **ALJAWAL** post-paid services? Please use this 10-point scale where "1" means you **DEFINITELY WOULD SWITCH FROM OR STOP USING ALJAWAL** post-paid services and "10" means you **DEFINITELY WOULD NOT SWITCH FROM OR STOP USING ALJAWAL** post-paid services. You may use any number from 1 to 10 to express your opinion. **SHOW CARD**

التغيير إلى الدافع - 1d ج

ما مدى احتمال أن تغير أو تتوقف عن استعمال خدمات الجوال أو أن تتحول إلى شركة أخرى؟ الرجاء استعمال هذا المقياس المكون من 10 نقاط حيث يعني "1" "مؤكد أنك ستحول أو ستتوقف عن استعمال خدمات الجوال ويعني" 10 "مؤكد أنك لن تتحول أو تتوقف عن استعمال خدمات الجوال، علما بأنه يمكنك استعمال أي رقم من 1 إلى 10 لتعبير عن رأيك. ابرز البطاقة

	Definitely would switch from or stop USING مؤكد أنني سأتحول أو سأتوقف عن الاستعمال									Definitely would not switch from or stop USING مؤكد أنني لن أتحول أو أتوقف عن الاستعمال	
	1									10	
ALJAWAL SERVICES خدمات الجوال	1	2	3	4	5	6	7	8	9	10	553

### C1d. Indifference

Assume for a moment that there are more than 2 mobile service providers operating in the Kingdom. لنفترض أنه يعمل في المملكة العربية السعودية حالياً أكثر من 2 مقدم لخدمات الجوال.

In this case, which one of the following statements best describes your opinion about mobile phone services? **SHOW CARD AND READ OUT**

التفضيل - 1d د

أي عبارة من العبارات التالية تصف رأيك بصورة أفضل خدمات الاتصالات بالجوال؟ ابرز البطاقة واقرأ على المجيب.

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One mobile services provider is better than the others and it is important to me to use that provider	مقدم واحد لخدمات الاتصالات بالجوال أفضل من بقية مقدمي الخدمة و يهمني التعامل مع مقدم الخدمة هذا	1
Some mobile services providers are better than others and it is important that I use one of those	بعض مقدمي خدمات الاتصالات بالجوال أفضل من غيرهم وبهمني التعامل مع أحد مقدمي الخدمة هؤلاء	2
Some mobile services providers are better than others, but it's not that important which one I use	بعض مقدمي خدمات الاتصالات بالجوال أفضل من غيرهم ولكن لا يهمني مع أي مقدم خدمة أتعامل	3
All the mobile services providers are about the same, so it doesn't matter to me which one I use	جميع مقدمي خدمات الاتصالات بالجوال سواء وبالتالي لا يهمني مع أي مقدم خدمة أتعامل	4

#### C1d. Relative difference

Based on what you know or have heard, please indicate the extent to which you think **ALJAWAL's value added services are not better or much better than the other operator's post-paid value added services in ways that are important to you.** Please use this 10-point scale, where "1" means you think the **ALJAWAL** value added services are **NOT BETTER** than the other operator's post-paid value added services in ways that are important to you and "10" means you think the **ALJAWAL** value added services are **MUCH BETTER** than the other operator's post-paid value added services in ways that are important to you. You may use any number from 1 to 10 to express your opinion. **SHOW CARD**

و4- بناء على ما تعرفه أو سمعته، الرجاء الإشارة إلى مدى اعتقادك أن الخدمات الإضافية مؤجلة الدفع لدى الجوال ليست أفضل أو أفضل كثيراً من الخدمات الإضافية مؤجلة الدفع لدى المشغل الآخر من ناحية جوانب مهمة إليك. الرجاء استعمال هذا المقاييس المكون من 10 نقاط حيث يعني "1" أنك تعتقد أن الخدمات الإضافية مؤجلة الدفع لدى الجوال ليست أفضل من الخدمات الإضافية مؤجلة الدفع لدى المشغل الآخر من ناحية جوانب مهمة إليك ويعني "10" أنك تعتقد أن الخدمات الإضافية مؤجلة الدفع لدى الجوال أفضل كثيراً من الخدمات الإضافية مؤجلة الدفع لدى المشغل الآخر من ناحية جوانب مهمة إليك، علماً بأنه يمكنك استعمال أي رقم من 1 إلى 10 لتعبير عن رأيك. ابرز البطاقة

	Not better than the other operator's post-paid value added services in any important ways ليست أفضل من خدمات المشغل الآخر الإضافية مؤجلة الدفع من ناحية أي جوانب مهمة									Much better than the other operator's post-paid value added services in many important ways أفضل كثيراً من خدمات المشغل الآخر الإضافية مؤجلة الدفع من ناحية جوانب كثيرة مهمة	
	1									10	
AL JAWAL SERVICES خدمات الجوال	1	2	3	4	5	6	7	8	9	0	652

<b>MAJOR SERVICE AREAS</b>	<b>مجالات الخدمة الرئيسية</b>
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Next, I'd like you to rate ALJAWAL services performance in some service areas. In answering these questions please use your experiences as well as what have you heard about these service areas.

الآن، أريد منك أن تقيم أداء الجوال في بعض مجالات الخدمة . للإجابة على هذه الأسئلة، رجاء استعمل تجاربك وما سمعت عن مجالات الخدمة هذه .

<b>SECTION D: QUALITY OF CALL &amp; NETWORK COVERAGE</b>	<b>القسم هـ: جودة مكالمات الجوال</b>
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- D1. Overall, how would you rate the call quality of ALJAWAL's mobile lines? In giving your answer please think of the overall quality of call, your experience of subscribing to ALJAWAL lines, as well as any interaction that you've had with ALJAWAL service. Would you say that the call quality of ALJAWAL's lines is .....? **SHOW CARD AND READ OUT**

هـ1- بشكل عام، كيف تقيم جودة مكالمات الجوال ؟ للإجابة، رجاء فكر في جودة المكالمات بشكل عام وتجربتك مع الاشتراك للجوال وأي تعامل آخر جرى بينك وبين خدمة الجوال؟ هل تقول إن جودة مكالمات الجوال.....؟ ابرز البطاقة واقرأ القائمة

		ALJAWAL الجوال
		<b>607</b>
Excellent	ممتازة	1
Very Good	جيدة جداً	2
Good	جيدة	3
Fair	مقبولة	4
Poor	ردئية	5

- D2. Now I'd like you to rate some specific aspects of the call quality of ALJAWAL's mobile lines. For these questions we will be using a rating scale of "Excellent," "Very Good," "Good," "Fair," or "Poor." How would you rate ALJAWAL's call quality in terms of...? **SHOW CARD AND READ OUT EXCEPT FOR DK.**

هـ2 - الآن أريد منك أن تقيم أوصافاً محددة متعلقة بجودة مكالمات الجوال . لهذه الأسئلة، سوف نستعمل مقياساً مكوناً من " ممتازة " أو " جيدة جداً " أو " مقبولة " أو " ردئية ". كيف تقيم جودة مكالمات الجوال من ناحية.....؟ ابرز البطاقة واقرأ القائمة ما عدا لا أعرف.

Excelle nt ممتازة	Very Good جيدة جداً	Good جيدة	Fair مقبولة	Poor ردئية	D K لا أعرف
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Call quality in Indoors	جودة المكالمات داخل المباني	1	2	3	4	5	6	<b>611</b>
Call quality when Walking	جودة المكالمات أثناء المشي	1	2	3	4	5	6	<b>612</b>
Call quality in moving vehicles	جودة المكالمات في السيارات المتحركة	1	2	3	4	5	6	<b>613</b>

	Call quality in built up Areas	جودة المكالمات في المناطق التي توجد فيها مباني	1	2	3	4	5	6	<b>614</b>
--	--------------------------------	--	---	---	---	---	---	---	------------

- D3. Based on what you know or have heard, please indicate the extent to which you think **ALJAWAL's Network coverage is not better or much better** than the other operator's **Network coverage** in ways that are important to you. Please use this 10-point scale, where "1" means you think the **ALJAWAL** call reception is **NOT BETTER** than the other operator's **Network coverage** and "10" means you think **ALJAWAL's** call reception is **MUCH BETTER** than the other operator's **Network coverage**. You may use any number from 1 to 10 to express your opinion. **SHOW CARD**

هـ 3- بناء على ما تعرفه أو سمعته، الآن الرجاء الإشارة إلى مدى اعتقادك أن تغطية شبكة الجوال ليست أفضل أو أفضل كثيراً من استقبال تغطية شبكة المشغل الآخر من ناحية جوانب مهمة إليك. الرجاء استعمال هذا المقاييس المكون من 10 نقاط حيث يعني "1" أنك تعتقد أن تغطية شبكة الجوال ليست أفضل من تغطية شبكة المشغل الآخر، ويعني "10" أنك تعتقد أن تغطية شبكة الجوال أفضل كثيراً من تغطية شبكة المشغل الآخر ، علما بأنه يمكنك استعمال أي رقم من 1 إلى 10 لتعبير عن رأيك. ابرز البطاقة

	Not better than the other operator's Network coverage in any important ways ليس أفضل من تغطية شبكة المشغل الآخر من ناحية أي جوانب مهمة								Much better than the other operator's Network coverage in many important ways أفضل كثيراً من تغطية شبكة المشغل الآخر من ناحية جوانب كثيرة مهمة	
	1								10	
AL JAWAL SERVICES خدمات الجوال	1	2	3	4	5	6	7	8	9	0 <b>628</b>

## SECTION E: SERVICE AWARENESS

- E1.** Overall, how would you rate **ALJAWAL's** value added services? In giving your answer please think of the value added services and your experience of subscribing to **ALJAWAL** lines, as well as any interaction that you've had with **ALJAWAL** with regards to value added services. Would you say that **ALJAWAL's** value added services are .....? **SHOW CARD AND READ OUT**

1 - بشكل عام، كيف تقيم خدمات الجوال الإضافية؟ للإجابة، رجاء فكر في الخدمات الإضافية وتجربتك مع الاشتراك للجوال وأي تعامل آخر جرى بينك وبين الجوال فيما يخص الخدمات الإضافية؟ هل تقول إن خدمات الجوال الإضافية .....؟ ابرز البطاقة واقرأ القائمة على المجيب.

		ALJAWAL الجوال
		<b>630</b>
Excellent	ممتازة	1
Very Good	جيدة جداً	2
Good	جيدة	3
Fair	مقبولة	4
Poor	ردئة	5

- E2.** Now I'd like you to rate the **ALJAWAL** value added services that you are aware of [CHECK A2a]. For rating these services we will be using a rating scale of "Excellent," "Very Good," "Good," "Fair," or "Poor." How would you rate **ALJAWAL's** .....service? **INTERVIEWER READ OUT EACH SERVICE RESPONDENT AWARE OF; SHOW CARD AND READ OUT**

2 - الآن أريد منك أن تقيم أوصافاً محددة متعلقة بخدمات الجوال الإضافية التي تعرفها (انظر A2a). لهذه الأسئلة، سوف نستعمل مقياساً مكوناً من "ممتازة" أو "جيدة جداً" أو "جيدة" أو "مقبولة" أو "ردئة". كيف تقيم خدمة **الجوال** .....؟ الباحث: اقرأ على المجيب كل خدمة يعرفها.

ابرز البطاقة واقرأ القائمة

	Aware Of (From A2a) يعرف (من A2a)	Excelle nt ممتازة	Very Goo d جيدة جداً	Good جيدة	Fair مقبو لة	Poo r ردئة	D K لا أع رف		
Voice Mail	البريد الصوتي	1	1	2	3	4	5	6	2107
International Roaming	التجوال الدولي	2	1	2	3	4	5	6	2108
SMS (Al Miursal)	الرسائل القصيرة (مرسال)	3	1	2	3	4	5	6	2109
Fax	فاكس	4	1	2	3	4	5	6	2110
JAWALNet	جوال نت	5	1	2	3	4	5	6	2111
Abwab	أبواب	6	1	2	3	4	5	6	2112
WAP	الواي	7	1	2	3	4	5	6	2113
Mawjood and Mawjood Extra	موجود و موجود إكسترا	8	1	2	3	4	5	6	2114
Interactive media SMS	الرسائل التبادلية	9	1	2	3	4	5	6	2115
MMS	رسائل الوسائط المتعددة	10	1	2	3	4	5	6	2116
Family and friends	الأهل والأصدقاء	11	1	2	3	4	5	6	2117
Call Me Service	خدمة كلمني	12	1	2	3	4	5	6	2118
Call Barring	منع المكالمات	13	1	2	3	4	5	6	2119
Location Based Services (LBS)	خدمات تحديد المواقع	14	1	2	3	4	5	6	2120
Friend Finder	خدمة البحث عن	15	1	2	3	4	5	6	2121

service	الأصدقاء								
Budget Control Service	خدمة التحكم على الميزانية	16	1	2	3	4	5	6	2122
3G Video Call Service	خدمة الاتصال المرئي بالجيل الثالث	17	1	2	3	4	5	6	2123
3G TV Service	خدمة تلفزيون الجوال بالجيل الثالث	18	1	2	3	4	5	6	2124
Multi SIM	الشريحة المتعددة	19	1	2	3	4	5	6	2125

#### SECTION F: HANDLING OF COMPLAINTS

القسم ح : التعامل مع الشكاوى

F1. Have you made a complaint about your **ALJAWAL** line/s or service in the past 12 months?

ح1 - هل قدمت شكوى عن خط/خطوط أو خدمة الجوال خلال الـ 12 شهرا الماضية؟

ALJAWAL الجوال		تابع الم مقابلة		
707		انتقل إلى القسم التالي		
Yes	نعم	1	CONTINUE	
No	لا	2	GO TO NEXT SECTION	

F2a. What type of complaint did you make about your **ALJAWAL** lines or service in the past 12 months? Did you make any other complaints in the past 12 months? DO NOT PROMPT

ح2أ - ما نوع الشكوى التي قدمتها عن خطوط أو خدمة الجوال خلال الـ 12 شهرا الماضية؟ هل قدمت أية شكاوى أخرى خلال الـ 12 شهرا الماضية؟ لا تلقين المجيب الإجابة

Delay in obtaining the connection	التأخير في الحصول على الخدمة	1	709
Errors in the bill	أخطاء في الفاتورة	1	710
The billed amount was incorrect	مبلغ المبلغ الفاتورة لم يكن صحيحا	1	711
They disconnected the line even though I settled my bill	فصلوا الخدمة مع أنني سددت الفاتورة	1	712
They disconnected the <b>ALJAWAL</b> line	فصلوا خدمة الجوال	1	713
Chip got blocked	انغلقت الشريحة	1	714
I paid the <b>ALJAWAL</b> invoice, but they did not re-activate the service	سددت فاتورة الجوال الخاص بي ولكنهم لم يعيدوا الخدمة	1	715
They asked me to pay the installation fees again	طلبوا مني دفع أجور التأسيس مرة أخرى	1	716
Bills are not received regularly	لا أستلم الفواتير بشكل منتظم	1	717
I asked them to disconnect the line, but they did not	طلبت منهم فصل الخدمة، ولكنهم لم يفصلوها	1	718
High prices of calls	ارتفاع أجور المكالمات	1	719
Delay in providing a requested service	التأخير في توفير خدمة طلبها	1	720
Delay in providing access to international Zero	التأخير في الحصول على الصفر الدولي	1	721
Bills are higher than my credit limit	الفواتير أكثر من الحد الائتماني الخاص بي	1	722
Other (specify)	غيره (حدد)		723-24

F2b. How did you make your complaint(s) regarding your **ALJAWAL** line? DO NOT PROMPT

ح2ب - كيف شكت من خدمة الجوال؟ لا تلقين المجيب الإجابة.

	ASK
--	-----

Called 902 (special number for complaints)	اتصلت بـ ( 902 الرقم الخاص بالشكاوى )	<b>729</b>	1		
Went to an Aljawal Sales office	ذهبت إلى مكتب مبيعات الجوال	<b>730</b>	1	Which one? أين؟	..... <b>739-43</b>
Called a friend or relative who works for <b>SAUDI TELECOM/AIJAWAL</b>	اتصلت بصديق أو قريب يعمل لدى الاتصالات السعودية/ الجوال	<b>731</b>	1		
On-line	على الانترنت		1		
Other (specify): ..... .....	آخر (حدد)..... .....	<b>732-33</b>			
CAN'T REMEMBER	لا أتذكر	<b>734</b>			

**F3.** Overall, how would you rate **ALJAWAL's** handling of complaints? In giving your answer please think of the handling of complaints and your experience of subscribing to **ALJAWAL** lines, as well as any other interaction you've had with **ALJAWAL** with regard to handling complaints. Would you say that **ALJAWAL's** handling of complaints is .....? **SHOW CARD AND READ OUT**

ح3 - بشكل عام، كيف تقيم تعامل الجوال مع الشكاوى ؟ للإجابة، رجاء فكر في تعامل الجوال مع الشكاوى وتجربتك مع الاشتراك لخدمة الجوال وأي تعامل آخر جرى بينك وبين الجوال فيما يخص التعامل مع الشكاوى؟ هل تقول إن تعامل الجوال مع الشكاوى .....؟ ابرز البطاقة واقرأ القائمة على المجيب

<b>ALJAWAL</b> الجوال		<b>850</b>
Excellent	ممتازة	1
Very Good	جيدة جدا	2
Good	جيدة	3
Fair	مقبولة	4
Poor	ردئية	5

#### SECTION G: PRICING/TARIFF PLAN

#### القسم ط: الأسعار/خطة الأسعار

**G1.** Overall, how would you rate **ALJAWAL's** pricing/tariff plans? In giving your answer please think of the pricing/tariff plans and your experience of subscribing to **ALJAWAL** lines, as well as any other interaction you've had with **ALJAWAL** with regards to the pricing/tariff plan. Would you say that **AIJAWAL's** pricing/tariff plans are .....? **SHOW CARD AND READ OUT**

ط1 - بشكل عام، كيف تقيم تسعيرة/تعرفات الجوال؟ للإجابة، رجاء فكر في تسعيرة/تعرفات الجوال وتجربتك مع الاشتراك للجوال وأي تعامل آخر جرى بينك وبين الجوال فيما يخص تسعيرة/تعرفات الجوال؟ هل تقول إن تسعيرة/تعرفات الجوال .....؟ ابرز البطاقة واقرأ القائمة على المجيب.

<b>ALJAWAL</b> الجوال		<b>907</b>
Excellent	ممتازة	1
Very Good	جيدة جدا	2
Good	جيدة	3
Fair	مقبولة	4
Poor	ردئية	5

**G2.** Now I'd like you to rate some specific attributes related to **ALJAWAL's pricing/tariff plans**. For these questions we will be using a rating scale of "Excellent," "Very Good," "Good," "Fair," or "Poor." How would you rate **ALJAWAL's pricing/tariff plans** in terms of...? **SHOW CARD**

AND READ OUT EXCEPT FOR DK; ROTATE STARTING POINT ACROSS RESPONDENTS; INTERVIEWER: NOTE THAT RESPONDENT CAN SUBSCRIBE TO \* VIDEO CALL AND TV SERVICES ONLY IF HE/SHE HAS A 3G SIM CARD AND A HANDSET WHICH IS CAPABLE OF 3.5 G – CHECK Q A1a.

ط2أ- الآن أريد منك أن تقيم أوصافاً محددة متعلقة بـتسعيرة/تعرفات الجوال لهذه الأسئلة، سوف نستعمل مقاييساً مكوناً من "ممتازة" أو "جيدة جداً" أو "جيدة" أو "مقبولة" أو "ردئية". كيف تقيم تسعيرة/تعرفات الجوال من ناحية.....؟ ابرز البطاقة واقرأ القائمة على المجيب ما عدا لا أعرف . ناوب نقطة البداية بين المجيبين. الباحث: لاحظ أن المجبوب يستطيع الاشتراك الاتصال المرنى والخدمات التلفزيونية فقط إذا كان لديه شريحة الجيل الثالث وجوال به ميزة الجيل الثالث (3.5) (انظر س 11)

		Excelle nt ممتازة	Very Good جيدة جداً	Good جيدة	Fair مقبولة	Poor ردئية	DK لا أعرف		
	Initial Activation set-up charges for SIM Cards	أجر تفعيل شرائح الجوال	1	2	3	4	5	6	<b>912</b>
	Monthly Subscription Fee	أجر الاشتراك الشهري	1	2	3	4	5	6	<b>913</b>
	Domestic Calling Rates	أجر المكالمات الداخلية	1	2	3	4	5	6	<b>914</b>
	International calling rate	أجر المكالمات الدولية	1	2	3	4	5	6	<b>915</b>
	Domestic SMS Rates	أجر الرسائل القصيرة الداخلية	1	2	3	4	5	6	<b>916</b>
	International SMS Rates	أجر الرسائل القصيرة الدولية	1	2	3	4	5	6	<b>917</b>
	Rate for Abwab services	أجر خدمات أبواب	1	2	3	4	5	6	<b>918</b>
	Rates for JAWALNet	أجر جوال نت	1	2	3	4	5	6	<b>919</b>
	MMS rates	أجر الرسائل متعددة الوسائط	1	2	3	4	5	6	<b>920</b>
	* Rate for Live TV	* أجر تلفزيون الجوال	1	2	3	4	5	6	<b>921</b>
	International Roaming Rates	أجر التحويل الدولي	1	2	3	4	5	6	<b>922</b>
	* Rate for Video Calls	*أجر المكالمات المرئية	1	2	3	4	5	6	<b>1825</b>
	Rate for Location Based Services (LBS)	أجر خدمات تحديد الموقع	1	2	3	4	5	6	<b>1826</b>

#### SECTION H: ALJAWAL SALES OFFICE

القسم ك : مكتب مبيعات الجوال

H1. Have you ever visited an ALJAWAL Sales Offices?

ك 1 - هل سبق أن زرت مكتب مبيعات الجوال؟

		<b>ALJAWAL</b> الجوال <b>1107</b>		
Yes	نعم	1	<b>CONTINUE</b>	استمر
No	لا	2	<b>GO TO NEXT SECTION</b>	انقل إلى القسم التالي

**H2.** What was the purpose of your visit to the sales office? **DO NOT PROMPT**

كـ2- ما هو غرض الزيارة التي قمت بها إلى مكتب المبيعات؟ لا تلقن المجيب الإجابة

	AL JAWAL الجوال
Issuance of Jawal line / SIM card	استصدار خط / شريحة الجوال
To get mobile bill	الحصول على فاتورة الجوال
To inquire about some services	للاستفسار عن خدمات
To change the Jawwal chip	لتغيير شريحة الجوال
To get replacement SIM Card	الحصول على شريحة بديلة
To ask for distinctive number	طلب رقم مميز
Reviewing an error in the bill / reviewing the bill	مراجعة خطأ في الفاتورة /مراجعة الفاتورة
To obtain a replacement bill for a lost one	الحصول على فاتورة بدل فاقد
To get Multi SIM card	الحصول على الشريحة المتعددة
Other(specify)	غيره (حدد)

**H3.** Overall, how would you rate **ALJAWAL Sales Offices**? In giving your answer please think of your experience at the **ALJAWAL Sales Offices** and any other interaction you've had with **AIJAWAL Sales Offices**. Would you say that the Sales Offices are .....? **SHOW CARD AND READ OUT EXCEPT FOR DK**

ك-3- بشكل عام، كيف تقيم مكاتب مبيعات الجوال؟ للإجابة، رجاء فكر في مكاتب مبيعات الجوال وتجربتك مع مكاتب مبيعات الجوال وأي تعامل آخر جرى بينك وبينمكاتب مبيعات الجوال؟ هل تقول إن مكاتب مبيعات الجوال ..... ؟ ابرز البطافة واقرأ القائمة على، المحب.

		ALJAWAL الجوال
		1140
Excellent	ممتازة	1
Very Good	جيدة جداً	2
Good	جيدة	3
Fair	مقبولة	4
Poor	ردية	5

**H4.** Now I'd like you to rate some specific attributes related to the ALJAWAL Sales Offices. For these questions we will be using a rating scale of "Excellent," "Very Good," "Good," "Fair," or "Poor." How would you rate the ALJAWAL Sales Offices in terms of...? **SHOW CARD AND READ OUT EXCEPT FOR DK; ROTATE STARTING POINT ACROSS RESPONDENTS**

ك 4- الآن أريد منك أن تقيم **أوصافاً محددة** متعلقة **بمكاتب مبيعات الجوال**. لهذه الأسئلة، سوف نستعمل مقاييس مكوناً من "متنازة" أو "جيدة جداً" أو "جيدة" أو "مقبولة" أو "ردية". كيف تقيم **مكاتب مبيعات الجوال** من ناحية.....؟ ابرز البطاقة واقرأ الفانمية على المحب ما عدا لا اعرف. ناوب نقطة البداية بين المحبين.

Excelle nt متنازة	Very Goo d جيدة جداً	Good جيدة	Fair مقبولة	Poo r رديئة	DK لا أعر ف
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Overall layout of the <b>ALJAWAL</b> Sales Offices i.e. being able to easily find the section you require	تصميم مكتب مبيعات الجوال، أي سهولة معرفة القسم الذي تحتاج إليه	1	2	3	4	5	6 <b>1145</b>
Convenient, accessible location of offices	موقع المكتب وسهولة الوصول إليه	1	2	3	4	5	6 <b>1146</b>
Reception welcoming and directing clients to the correct divisions	ترحيب الاستقبال بالمرأجعين وتوجيههم إلى الأقسام الصحيحة	1	2	3	4	5	6 <b>1147</b>
Waiting times – length of queues	وقت الانتظار - طول الطوابير	1	2	3	4	5	6 <b>1148</b>
Staff knowledge of the products and services	معرفة الموظفين بالمنتجات والخدمات	1	2	3	4	5	6 <b>1149</b>
Staff helpfulness	تعاون الموظفين	1	2	3	4	5	6 <b>1150</b>
Staff being presentable in appearance	مظهر الموظفين	1	2	3	4	5	6 <b>1151</b>
Staff being courteous and polite	لباقة وأدب الموظفين	1	2	3	4	5	6 <b>1152</b>
Staff offering their full attention without allowing interruptions	التفرغ لك تماماً بدون أن يسمحوا لأي مقاطعات	1	2	3	4	5	6 <b>1153</b>
Convenient working hours	ملاءمة ساعات الدوام	1	2	3	4	5	6 <b>1154</b>
Cleanliness of the offices	نظافة المكاتب	1	2	3	4	5	6 <b>1155</b>
Availability of informative materials / brochures at visible locations in the <b>ALJAWAL</b> Sales Office	توفر المواد الإعلانية / البروشورات في موقع بارزة في مكتب مبيعات الجوال	1	2	3	4	5	6 <b>1156</b>
Adequate parking facilities	توفر مواقف كافية للسيارات أمام المكاتب	1	2	3	4	5	6 <b>1157</b>

<b>SECTION I: ALJAWAL CUSTOMER CARE CENTRE (902)</b>	القسم م: مركز العناية بعملاء الجوال (902)
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I1a. Have you ever used the services of the **ALJAWAL** Customer Care Centre (902)?

م1أ - هل سبق أن استخدمت خدمات مركز العناية بعملاء الجوال (902)؟

			<b>ALJAWAL الجوال 1940</b>	
Yes	نعم	1	<b>CONTINUE</b>	استمر
No	لا	2	<b>GO TO NEXT SECTION</b>	انتقل إلى القسم التالي

- I2. Overall, how would you rate **ALJAWAL Customer Care Centre (902)**? In giving your answer please think of your experience with **ALJAWAL Customer Care Centre** and any other interaction you've had with **AIJAWAL Customer Care Centre**. Would you say that the **ALJAWAL Customer Care Centre** is .....? **SHOW CARD AND READ OUT EXCEPT FOR DK**

م2 - بشكل عام، كيف تقيم مركز العناية بعملاء الجوال (902)؟ للإجابة، رجاء فكر في مركز العناية بعملاء الجوال وتجربتك مع مركز العناية بعملاء الجوال وأي تعامل آخر جرى بينك وبين مركز العناية بعملاء الجوال؟ هل تقول إن مركز العناية بعملاء الجوال .....؟ ابرز البطاقة واقرأ القائمة على المجيب.

		<b>ALJAWAL الجوال 1307</b>	
Excellent	ممتاز	1	
Very Good	جيد جداً	2	
Good	جيد	3	
Fair	مقبول	4	
Poor	رديء	5	

13. Now I'd like you to rate some specific attributes related to the **ALJAWAL Customer Care Centre (902)**. For these questions we will be using a rating scale of "Excellent," "Very Good," "Good," "Fair," or "Poor." How would you rate the **ALJAWAL Customer Care Centre** in terms of...? **SHOW CARD AND READ OUT EXCEPT FOR DK; ROTATE STARTING POINT ACROSS RESPONDENTS**

"3- الآن أريد منك أن تقيم أوصافاً محددة متعلقة بـ **مركز العناية بعملاء الجوال (902)** لهذه الأسئلة، سوف نستعمل مقياساً مكوناً من ممتازة "أو" جيدة جداً "أو" جيدة "أو" مقبولة "أو" ردئه. كيف تقيم **مركز العناية بعملاء الجوال** من ناحية.....؟ ابرز البطاقة واقرأها **القائمة على المجيب ما عدا لا أعرف.** ناوب نقطة البداية بين المجيبين."

		Excellent ممتازة	Very Good جيدة جداً	Good جيدة	Fair مقبولة	Poor ردئه	DK لا أعرف	
	Speed and ease of contacting the 902 Centre سرعة وسهولة الاتصال بالمركز 902	1	2	3	4	5	6	1311
	The IVR being able to meet the purpose of the call مقدرة الرد الآلي على تلبية غرض المكالمة	1	2	3	4	5	6	1312
	The IVR's options being clear and easily understood خيارات الرد الآلي واضحة وسهلة الفهم	1	2	3	4	5	6	1313
	The 902 agent's knowledge of Aljawal's activities and services معرفة موظفي 902 بنشاط وخدمة الجوال	1	2	3	4	5	6	1314
	The 902 Centre meeting all your needs for ALJAWAL services تلبية مركز 902 جميع احتياجاتك من خدمات الجوال	1	2	3	4	5	6	1315
	The clarity of the agent's voice كلامات مقدم الخدمة واضحة وتوضيح الخدمة بدقة	1	2	3	4	5	6	1316
	The accuracy of the agent in explaining the services دقة الموظف في شرح الخدمات	1	2	3	4	5	6	1317
	Speed of resolving your financial disputes on your bill سرعة حل الخلافات حول الفاتورة	1	2	3	4	5	6	1318
	Method of resolving your financial disputes on your bill طريقة حل الخلافات حول الفاتورة	1	2	3	4	5	6	1319
	Speed of delivering the service through calling 902 سرعة تقديم الخدمة من خلال الاتصال بـ 902	1	2	3	4	5	6	1320
	Speed of delivering the service through 902 in comparison to visiting the Aljawal Sales Office سرعة تقديم الخدمة من خلال 902 مقارنة بزيارة مكتب مبيعات الجوال	1	2	3	4	5	6	1321
	The responsiveness of the agent who delivered the service تجاوب الموظف الذي قدم الخدمة	1	2	3	4	5	6	1322
	The agent's understanding of your problem فهم الموظف لمشكلتك	1	2	3	4	5	6	1323
	Ability of 902 agent to promote the different services offered by Al الترويج لخدمات الجوال المختلفة	1	2	3	4	5	6	1324

	Jawal								
	The ease of the procedures of applying for a Al Jawal line through 902	سهولة إجراءات تقديم الطلب لخط جوال جديد من خلال 902	1	2	3	4	5	6	1325
	Behaviour of the 902 agent who answered your call.	سلوك موظف 902 الذي رد على مكالمتك	1	2	3	4	5	6	1326
	Waiting/on-hold time on the phone	وقت الانتظار على الخط	1	2	3	4	5	6	1327

#### SECTION J: STC WEBSITE

القسم ن: موقع الاتصالات السعودية على الانترنت

J1. Have you ever visited the **SAUDI TELECOM** website?

ن1 - هل سبق أن زرت موقع الاتصالات السعودية على الانترنت؟

STC الاتصالات السعودية		1350	استمر	
Yes	نعم	1	CONTINUE	
No	لا	2	GO TO N5	انقل إلى ن5

J2. Overall, how would you rate the **SAUDI TELECOM** website? In giving your answer please think of all the features of **SAUDI TELECOM's** website. Would you say that **SAUDI TELECOM's** website is.....? **SHOW CARD AND READ OUT**

ن2 - بشكل عام، كيف تقيم موقع الاتصالات السعودية على الانترنت؟ للإجابة، الرجاء التفكير في كل خصائص موقع الاتصالات السعودية على الانترنت. هل تقول إن موقع الاتصالات السعودية على الانترنت .....؟ ابرز البطاقة واقرأ الفانمة على المجيب

STC الاتصالات السعودية		1354
Excellent	ممتاز	1
Very Good	جيد جداً	2
Good	جيد	3
Fair	مقبول	4
Poor	رديء	5

J3. Now I'd like you to rate some specific attributes related to the **SAUDI TELECOM** website. For these questions we will be using a rating scale of "Excellent," "Very Good," "Good," "Fair," or "Poor." How would you rate the **SAUDI TELECOM** website in terms of...? **SHOW CARD AND READ OUT EXCEPT FOR DK; ROTATE STARTING POINT ACROSS RESPONDENTS**

ن3 - الان أريد منك أن تقيم أوصافاً محددة بموقع الاتصالات السعودية على الانترنت. بهذه الأسئلة، سوف تستعمل مقياساً مكوناً من " ممتاز " أو " جيد جداً " أو " جيد " أو " مقبول " أو " رديء ". كيف تقيم موقع الاتصالات السعودية على الانترنت من ناحية .....؟ ابرز البطاقة واقرأ الفانمة على المجيب ما عدا لا أعرف. تابع نقطة البداية بين المجيبين.

			Excellent ممتازة	Very Good جيدة جداً	Good جيدة	Fair مقبولة	Poor ردية	DK لا أعرف	
	Design and layout	تصميم الموقع وسهولة معرفة القسم الذي تحتاج إليه	1	2	3	4	5	6	1358
	Ease of browsing	سهولة تصفح الموقع	1	2	3	4	5	6	1359
	Ease of navigation	سهولة الوصول إلى الموقع	1	2	3	4	5	6	1360
	Speed of surfing	سرعة التنقل داخل الموقع	1	2	3	4	5	6	1361
	Finding relevant information	الحصول على المعلومات ذات العلاقة	1	2	3	4	5	6	1362
	Speed of page Loading	سرعة تحميل الصفحات	1	2	3	4	5	6	1363

## SECTION K: BACKGROUND INFORMATION

القسم س: المعلومات الشخصية

Finally, can I just ask you some personal details? These are for statistical purposes only.

في النهاية، هل تسمح لي أن أطرح بعض الأسئلة الشخصية ستسنتمل للأغراض الإحصائية فقط..

K1. May I ask you how old you are? SHOW CARD

س1- كم عمرك؟ ابرز البطاقة

1407		
Under 18	تحت 18	1
18-24	24-18	2
25-34	34-25	3
35-44	44-35	4
45-54	54-45	5
55-64	64-55	6
65 or over	65 أو أكثر	7
Refused	رفض	8

K3. And what is your working status? SHOW CARD

س3- ما هو وضعك الوظيفي؟ ابرز البطاقة

1420-21		
Employed full time	موظف دوام كامل	01
Employed part time	موظف دوام جزئي	02
Self-employed, or running own business	أعمل لحسابي الخاص أو أدير أعمالني التجارية الخاصة	03
Not employed, not seeking work	عاطل عن العمل / لا أبحث عن عمل	04
Unemployed, seeking work	عاطل عن العمل / أبحث عن عمل	05
Retired from an occupation	متقاعد من مهنة	06
Student	طالب	07
Other (write in.....)	آخر (حدد) .....	08

**K6. RECORD RESPONDENTS' NATIONALITY**

س7 - سجل جنسية المجيب

		1432
Saudi	سعودي	1
Arab expat	عربي مقيد	2
Asian expats living with their families in own dwelling units	أسيوي مقيم يعيش مع أسرته في وحدة سكنية مستقلة	3
Asian expat sharing accommodation with other	أسيوي مقيم يعيش مع آخرين في وحدة سكنية مشتركة	4
European/North American expats	أوروبي /أمريكي شمالي مقيد	5

**K7. RECORD RESPONDENT'S TELEPHONE NUMBERS**

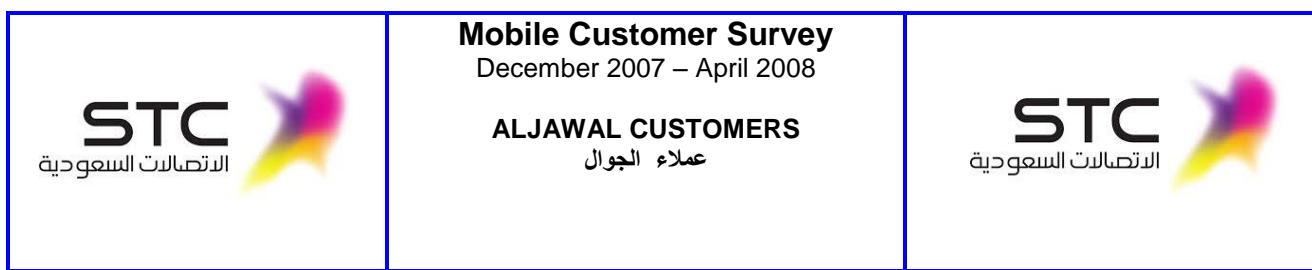
س8 - سجل أرقام هاتف المجيب

FIXED LINE 1	هاتف ثابت 1		1507-16
FIXED LINE 2	هاتف ثابت 2		1517-26
FIXED LINE 3	هاتف ثابت 3		1527-36
FIXED LINE 4	هاتف ثابت 4		1537-46
MOBILE LINE 1	هاتف جوال 1		1547-56
MOBILE LINE 2	هاتف جوال 2		1557-66

**THANK RESPONDENT FOR HIS COOPERATION AND CLOSE INTERVIEW**

أشكر المجيب على تعاونه وأنه المقابلة

## Appendix D – Refined Questionnaire



Good morning/afternoon. My name is Yahya Al Kahtani and I'm an employee of Saudi Telecom Company. I am currently conducting a survey on telecommunications amongst a group of defected customers to obtain their experiences, views and opinions on the services offered.

صباح/مساء الخير. أسمي ..... وأعمل ل..... وهي شركة تعمل في مجال أبحاث السوق في المملكة العربية السعودية. نجري دراسة مع الجمهور حاليا حول الاتصالات لمعرفة تجاربهم ووجهات نظرهم وأرائهم في الخدمات المقدمة بهدف تطويرها و الإرتقاء من مستوى تقديم خدماتها .

Respondent Name:  
\_\_\_\_\_ اسم المجيب:

House/Villa No \_\_\_\_\_ الفيلا / البيت رقم \_\_\_\_\_  
Building/Compound \_\_\_\_\_ العماره/المجمع:

Street Name:  
\_\_\_\_\_ اسم الشارع

Area: \_\_\_\_\_ المنطقة Zip \_\_\_\_\_ Code \_\_\_\_\_  
الرمز البريدي

P.O. Box No: \_\_\_\_\_ ص ب \_\_\_\_\_ E-mail address: \_\_\_\_\_ عنوان  
البريد الإلكتروني

Tele # (Home): \_\_\_\_\_ رقم الهاتف (المنزل) Mobile Number \_\_\_\_\_ رقم  
الجوال

Interviewer's code number:	<b>107-109</b>	رقم الباحث:
----------------------------	----------------	-------------

Date of interview: \_\_\_\_\_ تاريخ المقابلة  
Time of interview: \_\_\_\_\_ وقت المقابلة :  
Length of Interview \_\_\_\_\_ مدة المقابلة  
Checked by: \_\_\_\_\_ تمت المراجعة من قبل

**First of all I'd like to ask you some few basic questions in order to verify whether or not you can participate in this study.**

أولاً، أود أن أطرح عليك أسئلة بسيطة لكي أتحقق ما إذا كنت مناسباً للمشاركة في هذه الدراسة أم لا.

### SCREENING QUESTIONNAIRE

#### الاستماره الانتقائيه

**S1. Do you or any of your close relatives work in any of the following professions? READ OUT**

11 - هل تعمل أو يعمل أي من أقربائك المقربين في أي من المهن التالية؟ اقرأ على المجيب.

		110		
Terminate Interview  أنه مقابلة	1	Marketing Research	أبحاث التسويق	
	2	Advertising	الإعلان	
	3	Telecommunication	الاتصالات	
Continue  استمر	4	Others	غيرها	

**S2. Have you participated in a research survey regarding telecommunication over the past 6 months?**

21- هل شاركت في دراسة تسويقية حول الاتصالات خلال الستة أشهر الماضية؟

		111		
Yes	نعم	1	Terminate Interview	أنه مقابلة
No	لا	2	Continue	استمر

**S3. Have you ever been a postpaid customer of the other operator?**

61- هل كنت عميلاً على الإطلاق للجوال مؤجلة الدفع من المشغل الآخر؟

		128		
Yes	نعم	1		
No	لا	2		

**S4. Are you the prime user of this ALJAWAL line? (MENTION ALJAWAL NUMBER RECORDED ON THE FIRST PAGE)**

84- هل أنت المستخدم الرئيسي لخط الجوال هذا؟ (اذكر رقم الجوال المسجل على الصفحة الأولى)

		ALJAWAL الجوال		
		121		
Yes	نعم	1	<b>CONTINUE</b>	استمر
No	لا	2	<b>ASK TO TALK TO PRIME USER AND START INTERVIEW AGAIN</b>	اطلب التحدث إلى المستخدم الرئيس وابدأ مقابلة مجدداً

القسم ج [الصور الذهنية]

SECTION A: IMAGE

- A1. I am going to read a list of statements that might be used to describe **ALJAWAL**. As I read each statement, please indicate whether you "strongly agree", "agree", "neither agree nor disagree", "disagree", or "strongly disagree".

How much do you agree or disagree that **ALJAWAL** ....?

ج1أ - سوف أقرأ عليك قائمة عبارات يمكن استعمالها لوصف الجوال. فحينما أقرأ عليك كل عبارة، رجاء قل لي ما إذا كنت "موافق بشدة، " أو "موافقاً" أو "لا أنت موافق ولا أنت غير موافق" أو غير موافق أو "غير موافق إطلاقاً".  
فإلى أي مدى أنت موافق أو غير موافق أن الجوال ...؟ ابرز

		Strongly Agree موافق بشدة	Agree موافق	Neither agree nor disagree لا أنا موافق ولا أنا غير موافق	Disagree غير موافق	Strongly disagree غير موافق إطلاقاً	Don't Know لا أعرف	
Has a superior/strong customer care image	تلبى احتياجات العملاء متى	1	2	3	4	5	6	<b>501</b>
Has a superior brand quality image	ملتزمة بالجودة	1	2	3	4	5	6	<b>502</b>
Continually improves through innovation	لديها موظفون يعروفون عملهم	1	2	3	4	5	6	<b>503</b>
Provides excellent services to its customers	تقدم الخدمات بكفاءة	1	2	3	4	5	6	<b>504</b>
Has a good reputation/name	ذات سمعة جيدة	1	2	3	4	5	6	<b>505</b>

MAJOR SERVICE AREAS

مجالات الخدمة الرئيسية

Next, I'd like you to rate **ALJAWAL** services performance in some service areas. In answering these questions please use your experiences as well as what have you heard about these service areas.

الآن، أريد منك أن تقيم أداء الجوال في بعض مجالات الخدمة . للإجابة على هذه الأسئلة، رجاء استعمل تجاربك وما سمعت عن مجالات الخدمة هذه .

SECTION B: QUALITY OF CALL & NETWORK COVERAGE

القسم هـ: جودة مكالمات الجوال

- B1. Overall, how would you rate the call quality of **ALJAWAL's** mobile lines? In giving your answer please think of the overall quality of call, your experience of subscribing to **ALJAWAL** lines, as well as any interaction that you've had with **ALJAWAL** service. Would you say that the call quality of **ALJAWAL's** lines is .....?

هـ1- بشكل عام، كيف تقيم جودة مكالمات الجوال ؟ للإجابة، رجاء فكر في جودة المكالمات بشكل عام وتجربتك مع الاشتراك للجوال وأي تعامل آخر جرى بينك وبين خدمة الجوال؟ هل تقول إن جودة مكالمات الجوال

- |                                    |           |
|------------------------------------|-----------|
| <input type="checkbox"/> Excellent | ممتازة    |
| <input type="checkbox"/> Very Good | جداً جيدة |

- |                               |        |
|-------------------------------|--------|
| <input type="checkbox"/> Good | جيدة   |
| <input type="checkbox"/> Fair | مقبولة |
| <input type="checkbox"/> Poor | ردئية  |

### SECTION C: SERVICE AWARENESS

القسم و: خدمات الجوال الإضافية

- C1. Overall, how would you rate **ALJAWAL's** value added services? In giving your answer please think of the value added services and your experience of subscribing to **ALJAWAL** lines, as well as any interaction that you've had with **ALJAWAL** with regards to value added services. Would you say that **ALJAWAL's** value added services are .....?

و1 - بشكل عام، كيف تقيم خدمات الجوال الإضافية؟ للإجابة، رجاء فكر في الخدمات الإضافية وتجربتك مع الاشتراك للجوال وأي تعامل آخر جرى بينك وبين الجوال فيما يخص الخدمات الإضافية؟ هل تقول إن خدمات الجوال الإضافية

- |                                    |           |
|------------------------------------|-----------|
| <input type="checkbox"/> Excellent | ممتازة    |
| <input type="checkbox"/> Very Good | جداً جيدة |
| <input type="checkbox"/> Good      | جيدة      |
| <input type="checkbox"/> Fair      | مقبولة    |
| <input type="checkbox"/> Poor      | ردئية     |

### SECTION D: HANDLING OF COMPLAINTS

القسم ح : التعامل مع الشكاوى

- D1. Overall, how would you rate **ALJAWAL's** handling of complaints? In giving your answer please think of the handling of complaints and your experience of subscribing to **ALJAWAL** lines, as well as any other interaction you've had with **ALJAWAL** with regard to handling complaints. Would you say that **ALJAWAL's** handling of complaints is .....? **SHOW CARD AND READ OUT**

ح3 - بشكل عام، كيف تقيم تعامل الجوال مع الشكاوى؟ للإجابة، رجاء فكر في تعامل الجوال مع الشكاوى وتجربتك مع الاشتراك لخدمة الجوال وأي تعامل آخر جرى بينك وبين الجوال فيما يخص التعامل مع الشكاوى؟ هل تقول إن تعامل الجوال مع الشكاوى .....؟ ابرز البطاقة واقرأ القائمة على المجيب

- |                                    |           |
|------------------------------------|-----------|
| <input type="checkbox"/> Excellent | ممتازة    |
| <input type="checkbox"/> Very Good | جداً جيدة |
| <input type="checkbox"/> Good      | جيدة      |
| <input type="checkbox"/> Fair      | مقبولة    |
| <input type="checkbox"/> Poor      | ردئية     |

- I have never made a complaint about my **ALJAWAL** line/s or service in the past 12 months  
خط/خطوط أو خدمة الجوال خلال الـ 12 شهراً الماضية؟ عن شکوى قدمت هل

### SECTION E: ALJAWAL SALES OFFICE

القسم ك : مكتب مبيعات الجوال

- E2. Overall, how would you rate **ALJAWAL** Sales Offices? In giving your answer please think of your experience at the **ALJAWAL** Sales Offices and any other interaction you've had with **ALJAWAL** Sales Offices. Would you say that the Sales Offices are .....?

ك3- بشكل عام، كيف تقيم مكاتب مبيعات الجوال؟ للإجابة، رجاء فكر في مكاتب مبيعات الجوال وتجربتك مع مكاتب مبيعات الجوال وأي تعامل آخر جرى بينك وبين مكاتب مبيعات الجوال؟ هل تقول إن مكاتب مبيعات الجوال

- |                                    |        |
|------------------------------------|--------|
| <input type="checkbox"/> Excellent | ممتازة |
|------------------------------------|--------|

- |  |           |
|--|-----------|
| <input type="checkbox"/> Very Good                                       | جداً جيدة |
| <input type="checkbox"/> Good  | جيدة      |
| <input type="checkbox"/> Fair  | مقبولة    |
| <input type="checkbox"/> Poor  | ردية      |
| <input type="checkbox"/> I have no experience with ALJAWAL Sales Offices |           |

#### SECTION F: COMMITMENT QUESTIONS

القسم د - استئناف عن الولاء

##### F1a. Overall Impression (Affective Commitment)

What is your overall opinion of ALJAWAL post paid services? Please use this 10-point scale, where "1" means your overall impression of ALJAWAL post paid services is **VERY NEGATIVE** and "10" means your overall impression of ALJAWAL post-paid services is **VERY POSITIVE**.

You may use any number from 1 to 10 to express your opinion.

الكتل الانطباع - ١أ د

ما هو رأيك الإجمالي عن خدمات الجوال مؤجلة الدفع؟ فضلاً استعمل هذا المقياس المكون من 10 نقاط حيث يعني "1" "أن انطباعك الإجمالي عن خدمات الجوال سلبي جداً ويعني" 10 "أن انطباعك الإجمالي عن خدمات الجوال مؤجلة الدفع إيجابي جداً علماً بأنه يمكنك استعمال أي رقم من 1 إلى 10 لتعبير عن رأيك . ابرز

	• Ver y negative سلبي جداً								• V ery positive إيجابي جداً	•
	1								10	
ALJAWAL SERVICES ... خدمات الجوال	1	2	3	4	5	6	7	8	9	0 543

##### F1b. Needs (Calculative/Continuance Commitment)

How well do ALJAWAL post-paid services meet your specific needs? Please use this 10-point scale where "1" means ALJAWAL post-paid services **DO NOT MEET YOUR NEEDS AT ALL** and "10" means ALJAWAL post-paid services **MEET YOUR NEEDS PERFECTLY**. You may use any number from 1 to 10 to express your opinion.

د ب - الاحتياجات

إلى أي مدى تتفى خدمات الجوال مؤجلة الدفع باحتياجاتك المحددة؟ الرجاء استعمال هذا المقياس المكون من 10 نقاط حيث يعني "1" "خدمات الجوال لا تتفى باحتياجاتك على الإطلاق ويعني" 10 "أن خدمات الجوال مؤجلة الدفع تتفى باحتياجاتك تماماً، علماً بأنه يمكنك استعمال أي رقم من 1 إلى 10 لتعبير عن رأيك . ابرز

	• Do not meet my needs at all لا تفي باحتياجاتي على الإطلاق		•		•					• eet my need s perfe ctly تفي باحتياجاته ي تماماً	•
	1									10	
ALJAWAL SERVICES خدمات الجوال	1	2	3	4	5	6	7	8	9	0	548

#### F1c. Motivation to switch (Normative Commitment)

How likely you are to switch from or stop using Saudi Telecom's **ALJAWAL** post-paid services? Please use this 10-point scale where "1" means you **DEFINITELY WOULD SWITCH FROM OR STOP USING ALJAWAL** post-paid services and "10" means you **DEFINITELY WOULD NOT SWITCH FROM OR STOP USING ALJAWAL** post-paid services. You may use any number from 1 to 10 to express your opinion.

التغيير إلى الدافع - 1d-ج

ما مدى احتمال أن تغير أو تتوقف عن استعمال خدمات الجوال أو أن تتحول إلى شركة أخرى؟ الرجاء استعمال هذا المقياس المكون من 10 نقاط حيث يعني "1" "مؤكد أنك ستحول أو ستتوقف عن استعمال خدمات الجوال ويعني" 10 "مؤكد أنك لن تتحول أو تتوقف عن استعمال خدمات الجوال، علما بأنه يمكنك استعمال أي رقم من 1 إلى 10 لتعبير عن رأيك. أبرز

	• Definitely would switch from or stop USING مؤكد أنني ستحول أو سأتوقف عن الاستعمال		•		•					• Definitely would not switch from or stop USING مؤكد أنني لن أتحول أو أتوقف عن الاستعمال	•
	1									10	
ALJAWAL SERVICES خدمات الجوال	1	2	3	4	5	6	7	8	9	0	553

#### SECTION G: BACKGROUND INFORMATION

القسم س: المعلومات الشخصية

Finally, can I just ask you some personal details? These are for statistical purposes only.

في النهاية، هل تسمح لي أن أطرح بعض الأسئلة الشخصية ستساعد للأغراض الإحصائية فقط..

#### G1. Please indicate your age group

- Under 18      تحت 18  
 18-24

- 25-34  
 35-44  
 45-54  
 55-64  
 65 or over      أو أكثر 65

س1- كم عمرك؟ ابرز البطاقة

**G2.** Please indicate the Saudi region you come from:

- Western  
 Southern  
 Central  
 Eastern

**G3.** Kindly indicate your working status

س3- ما هو وضعك الوظيفي؟ ابرز البطاقة

- Employed full time  
Employed part time  
Self-employed, or running own business  
Not employed, not seeking work  
Unemployed, seeking work  
Retired from an occupation  
Student  
Other (write in.....)  
.....

- موظف دوام كامل  
موظف دوام جزئي  
أعمل لحسابي الخاص أو أدير أعمالى التجارية الخاصة  
لا أبحث عن عمل /عاطل عن العمل  
ابحث عن عمل /عاطل عن العمل  
متقاعد من مهنة  
طالب  
(حدد) آخر

**G4.** What is your nationality?

س7- سجل جنسية المجيب

	1432
Saudi	1 سعودي
Arab expat	2 عربي مقيم
Asian expats living with their families in own dwelling units	3 آسيوي مقيم يعيش مع أسرته في وحدة سكنية مستقلة
Asian expat sharing accommodation with other	4 آسيوي مقيم يعيش مع آخرين في وحدة سكنية مشتركة
European/North American expats	5 أوروبي /أمريكي شمالي مقيم

**H.** RESPONDENT'S TELEPHONE NUMBERS

س8 - سجل أرقام هاتف المجيب

FIXED LINE 1	هاتف ثابت 1	1507-16
FIXED LINE 2	هاتف ثابت 2	1517-26
FIXED LINE 3	هاتف ثابت 3	1527-36
FIXED LINE 4	هاتف ثابت 4	1537-46
MOBILE LINE 1	هاتف جوال 1	1547-56
MOBILE LINE 2	هاتف جوال 2	1557-66

**THANK RESPONDENT FOR HIS COOPERATION AND CLOSE INTERVIEW**

اشكر المجيب على تعاونه وأنه المقابلة