Customer Perceptions on Internet Services in Kurdistan Region of Iraq

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Abstract: The purpose of this research is to investigate internet service quality in the KRI and to explore its effect on customer approval. The idea of this research came into existence from the fact that internet is quite new to the KRI customers, but it is also a sector which shows great development in the region and tends to get more common as time passes. The research at hand evaluates the relationship of Internet service provider's (ISP) quality aspects with the Trust, perception of value, and commitment. The collected data was obtained through an online survey aimed at academic scholars in the KRI mostly. The sample consisted of 444 individuals. The study focuses on the customer's usage of different ISPs and their overall perceived value, trust, and commitment to the ISP. An ISP's service quality is affected by these four factors: (1) network quality, (2) customer service, (3) information quality and (4) security and privacy. It can be noticed from the results that most factors affect the perceived Value, Trust, and Commitment. However, only security and privacy have a considerable positive impact on Trust. When it comes to Customer Value, only Network Quality has a significant positive impact, and Information Quality is the only factor which is directly correlated to Customer Commitment.

Keywords: Customer Commitment, Perceived Value, Trust, Customer Service Quality, Internet Service Provider (ISP), Network Quality

1. Introduction

It's estimated that roughly 3.2 billion internet users exist worldwide. The internet has become an essential part of our daily routine, ranging anywhere from being used by a student for research, all the way to becoming a vital tool for the success of businesses. The internet is a relatively a recent invention following its predecessors in the telecommunication industry. The internet has novel features as well which include anonymization to an extent and the availability of online focus groups for people with similar interests. Nowadays, internet is part of every company's communication and operations due to its fast transfer of data. This capability of internet changed how companies communicate with the outsiders. Another benefit would be the application of online advertisement and marketing. Companies can target their customers for advertisement based on age group, location, and interest. Without the aid of internet

most companies will struggle to perceive the right image of their company to the mass consumers who are online.

On one hand, the internet has made it a lot easier for companies to directly contact and receive feedback from customers through their online customer service platforms. On the other hand, Internet has enhanced communication speed like never before. What took days before, now takes fraction of a second to reach the other side of the planet. Companies benefited from this innovation, starting from exchange of emails, all the way to web-conferences. It's not only the companies which took advantage of this technology, but people on personal level started to rely on internet more especially after the development of social media platforms.

Internet revolutionized the world of banking and purchasing goods. The availability of online transactions and banking has also made payment processes in between business entities and people. What seemed impossible before now happens on daily basis. Thousands of online transactions occur every second around the world. If we compare the world before the invention of the internet with the world subsequent to it by the psychological, social, maintaining information, professional and community involvement aspects, the results show that they are linked to the objectives that users convey such as self-expression, affiliation, or competition, they also interrelate in essential traditions with the distinctive traits of the Internet communication circumstances. Commitment is also as an indispensable component for flourishing long-term interaction; the relationships built by the service providers with their customers can help maintain long-term profits and has a direct impact on attracting new customers through recommendations of previous and continuing customers.

ISP (Internet service provider) is a company that provides individuals and other companies' access to the Internet and other related services such as Web site building and virtual hosting. Regarding the importance of ISP attributes to customer retention and loyalty, Customers may not always be certain in deciding on an ISP. In this case it's best to seek out desired aspects in order to find the right service and utility. Not all ISP in KRI (Kurdistan Region of Iraq) offer service in all areas, it is important to evaluate which providers operate in each location before purchasing them. In addition to that, not all ISP perform in the same way in all locations. This is an essential aspect of the product being purchased as it can make downloads of heavy/high quality files time consuming based on the quality or speed the ISP at use provides, this is why choosing an ISP with good specifications is important.

Internet speed which is defined by the amount of data transferred to the computer in one second (Kbps, Mbps… etc). Different ISP provides different internet speed based on commercial packages and locations. It is also worth mentioning that some ISPs in KRI provide no limit bandwidth services with a fixed monthly/annual cost depending on use. When it comes to business owners, regular bandwidth packages aren't sufficient; they need special packages designed specifically for business owners to carry through their video conferences without any noticeable interruptions from their ISP connection. All this of course comes at a price so business owners need to talk with different providers in order to determine all their needs and how much it will cost based on their budget. At the same time most businesses require a password protected network this in turn will help in further protecting the use of the network and limit it to use by those who have a hold of the password. Occasionally, it might be best for businesses to

reflect on a fiber internet connection if their business depends greatly on internet/speed efficiency. Another aspect for choosing an ISP is the uptime of that ISP since any disruption in service can be a great nuisance for the consumer regardless of whether they use it for personal or professional business use.

It's well known that no ISP is one hundred percent perfect and perfection is hard to acquire. However, ISPs that provide a sturdy customer service come pretty close to perfection, so even the best Internet providers can't promise perfection, It's best to decide on a provider that has 24/7 customer service which is reachable online or by phone. Consumers can get a pretty good idea of a company's customer service through the customer reviews that are posted on their website. For businesses, excellent customer service holds an even higher regard given that technical problems of any sort can cause operations to come to a halt.

In order to attract new customers and add value for the existing customers most ISP providers come out with new package deals constantly, this can include cable TV and telephone bill packages which can save a great amount of money if they are already used separately. It's of great importance that the customer asks about the special/introductory prices and how much it will change after the introductory period is over, on the other hand customers need to be careful not to purchase a package just because it sounds good, they need to decide based on their need as sometimes it would be best to go with the normal broadband plan. When deciding on an ultimate choice, it's best to keep in mind the ISPs that can offer the best and the most convenient price for the specifications needed, sometimes customers don't take the setup and equipment fees into account when deciding on a company this however can affect the pricing greatly. Search for an ISP that can provide a verity of specifications and features at the best cost to end up with the support of a long term service provider. Look for a reliable company that offers the best range of features at the most affordable price to wind up with a provider that will support needs in the long term.

To further investigate the importance of everything discussed in this paper, an online survey questionnaire was conducted in order to collect data on the consumer's perception and expectations regarding their internet service providers in the KRI.

2. Literature Review

2.1 Network Quality

Network quality includes the number of errors, downloading and uploading speed and system response time (Vlachos & Vrechopoulos, 2008). Network quality and call quality are key drivers of customer satisfaction. Network quality's importance has been discussed by Bouch, Kuchinsky and Bhatti (2000) who mentioned that several factors intervene in user's judgments of network quality and it plays a large part in informing their expectations of future. They state that, "…. network quality attributes were also used to enhance the understanding of consumer attitude understanding ….".

2.2 Customer Satisfaction

Saha and Zoha (2005) describe customer satisfaction as 'a collective outcome of perception, evaluation and psychological reactions to the consumption experience with a product or a service'. Without a doubt customer satisfaction and service quality are very much inter connected as they are the roots of market theory and repetition. Expectations of performance play an important role in the dependability for customer satisfaction. Meaning, if there is surpass in the performance expected of the service then the satisfaction will be increased. The same concept applies vice versa. In conclusion, it can be said that customer satisfaction is affected by service quality as perceived by customers (Jun et al., 2004; Lee & Lin, 2005; Zhu et al., 2002; Aydinli & Demir, 2015; Demir & Eray, 2015; Demir, Eray & Erguvan, 2015; Demir & Mukhlis, 2017). Unavoidably for customers to understand or determine whether they are satisfied or not with a service, they will need to experience it first (Li et al., 2002; Demir & Aydinli, 2016; Demir, 2017).

2.3 Information Quality

How an individual uses a service and perceives information is subjective and depends on the use of service by that individual. Strong et al. (1997) stated that the information quality assessment cannot be made independently based on the customers using that information. Which means the information and empirical evaluation of the information quality becomes a more challenging task. The reason for usage can also have an effect on how service quality is perceived. Hirschman and Holbrook (1982) divide consumers into two main branches, either 'problem solvers' or those seeking 'fun, fantasy, arousal, sensory stimulation, and enjoyment'.

2.4 Security and Privacy

Previous research reveals that overall service quality is associated with customers' perceptions of a high level of security and privacy that is trusted by customers (Roca et al., 2009). Customer's frame of mind for safety and protection are what relates to Security and Privacy during use (Vlachos & Vrechopoulos, 2008). The determinants for e-commerce quality of service are certainly related to privacy in personal information provided and security related to payments (Ha & Stoel, 2012). A trustworthy e-commerce service provider is often associated with fewer privacy concerns (Cases et al., 2010). Wu et al. (2010) demonstrate that privacy policies provided and set up by websites can create trust and an enhanced sense of privacy among members of the virtual society. Furthermore, customers feel it is best and more secure to buy and invest in services from providers having respectable reputations when it comes to the practices related to security aspects (Roca et al., 2009). In other words, transparency and reliability of the security and privacy policies can create a quality perception of an ISP that is more favorable. Henceforth the dimensions for service quality are determined as security and privacy (Ladhari, 2010; White & Nteli, 2004). Security and privacy fully manifested their effects on commitment through trust and value. Although all the service quality dimensions influence customers' trust towards the service provider, security and privacy had the greatest influence Taichon (2014).

2.5 Customer Trust

Customer trust refers to the customers' perceptions of attributes of service providers, including the ability, integrity, and benevolence of the providers (Deng et al., 2010). Customer trust additionally recounts to the customers insight relating to the capability of carrying out a promise by a brand, while expertise states the capabilities of a brand in grasping its promises (Ou et al., 2011). Additionally, a service provider would be more likely to form relationships that are trustworthy with the customers in the case of their main routines exceeding or at least meeting the expectations of those customers (Eisingerich & Bell, 2008). It can be additionally suggested that customer trust has network quality can be positively related to it. Research conducted earlier claims that there is a constructive relationship between perceived value and customer trust, as it can boost customers' observations of the ability, reliability and benevolence by the service providers, in that way growing their confidence in procuring the service that is provided (Chen & Chang, 2012).

Customer trust is crucial for long-term relationship marketing and a vital precursor of purchase conduct (Benedicktus, 2011) and gaining customer trust is essential in the Internet market. Customer trust appraisal can be made by exploring customers feelings about the company's trustworthiness, accountability and proficient conducts, towards them (Chiou, 2004). Trust accompanied by commitment is key in creating a long-term professional relationship (Morgan & Hunt, 1994). Current studies establish that the more trust is given by a customer to the service provider, the added commitment he or she will have for them (Perry et al., 2004). As a matter of fact, customers' commitment is positively affected by trust in virtual public services (Wu et al., 2010). Rutherford (2012) has explained that by increasing trust in the salesperson, customer commitment increases.

2.6 Customer Value

In this regard customer value is considered a super ordinate goal and customer loyalty is a subordinate goal, as it is a behavioral intention. Thus, customer value regulates "behavioral intentions of loyalty toward the service provider as long as such relational exchanges provide superior value" (Sir Deshmukh et al., 2002, p.21). An exchange between what a customer gives up in order to purchase a service and what they receive in return has been often described as customer value (Shirin & Puth, 2011; Tam, 2012). Disconnection in the connectivity can result in a bad customer perception on the network quality. In this regard, appropriate and swift return of a connection is essential. Factors leading to benefit or sacrifice between customers and Internet service provider's relationship cause a difference in perceptions of customer value (Wang & Lo, 2002). Furthermore, customer value involves perceived trade-off between benefit and sacrifice in relationships (Blocker, 2011).

2.7 Costumer Commitment

Previous research done in UK retail banks reveal that customer commitment is influenced by customer service (Malhotra et al., 2013). Customer commitment can be described as a customer's faith to continue a productive relationship in regards to functional and emotional benefits (Tuškej et al., 2013). Customer commitment is affected by customers' value (Tai, 2011). Fullerton (2005) concludes that customer

commitment is a direct subsequent of service quality and it is positively correlated to repeat buying, and tendency to continue in the relationship. Therefore, the value gained by sticking with a company could in fact improve customer commitment motivations, (Lacey, 2007). Musa et al. (2005) back this view by stating that value perception is resultant from straight sales consumption involvement and positively effects interactive commitment. Another significant and optimistic outcome for the customers' commitment in virtual communal services is trust (Wu et al., 2010). Rutherford (2012) points out that as the salesperson's trustworthiness increases, customer commitment also rises.

3. Methodology

To further investigate the importance of everything discussed in this paper, an online survey questionnaire was conducted in order to collect data on the consumer's perception and expectations regarding the internet service providers in the KRI. The survey questionnaire consisted of thirty questions and was conducted online by focusing on the English-speaking majority, thus most of our target consisted of academic students and teachers of all age groups in all cities of the KRI. Our sample consists of 444 people with the majority of them being from Erbil, followed by Sulaymaniyah, Duhok and Karkuk consecutively. The sample consists of both genders along with a detailed list of the majority of the ISPs available in the KRI. The investigation performed was based on an online survey site (freeonlinesurveys.com), participants needed to fill out a thirty question survey in order to determine customer commitment and the basis on which it might depend, such as: (Network Quality, Customer Satisfaction, Information Quality, Security and Privacy, Customer Trust, and Customer Value). The survey platform was accessible for 79 hours starting from December 5th at 11:51 and closed on December 7th, 2017 at 18:51.

3.1 Demography

This comprehensive study encompasses 444 individuals, which covers gender, major cities, variety of age groups, and different nationalities.
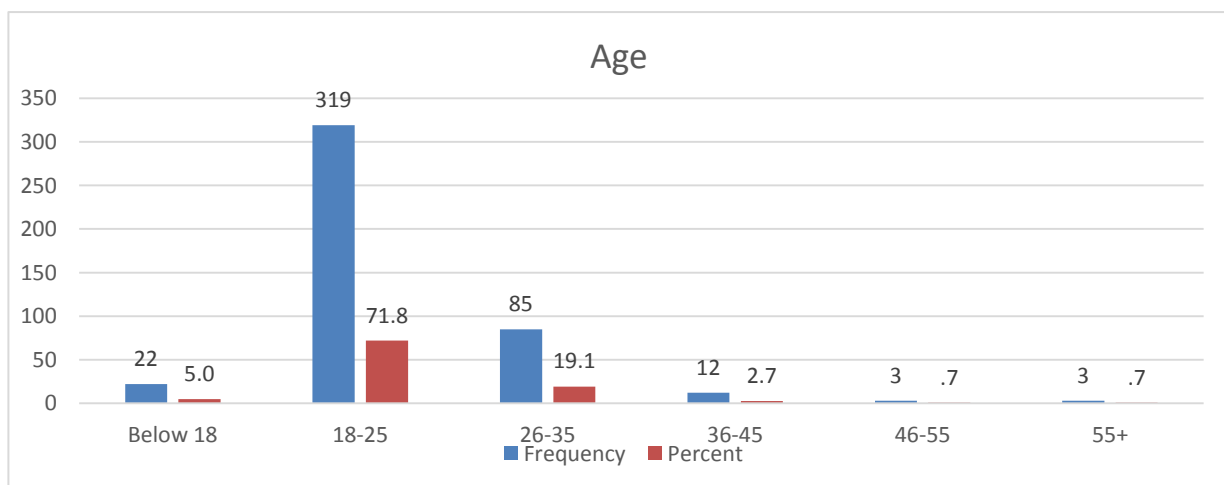

Figure 1: Results of Age Testing

Figure 1 illustrates that from the total of four hundred and forty four samples obtained, the ages ranged from below 18 to above 55. The majority is from the age group of 18 to 25 years (71.8%), followed by the age groups 26 to 35 (19.1%), below 18 (5%), 36 to 45 (2.7%), and equal samples of 46 to 55 and above 55 (0.7%) consecutively. Due to the fact that younger people rely more on internet on a daily basis when compare to the other age groups, hence a significant variance were concluded from the survey results.
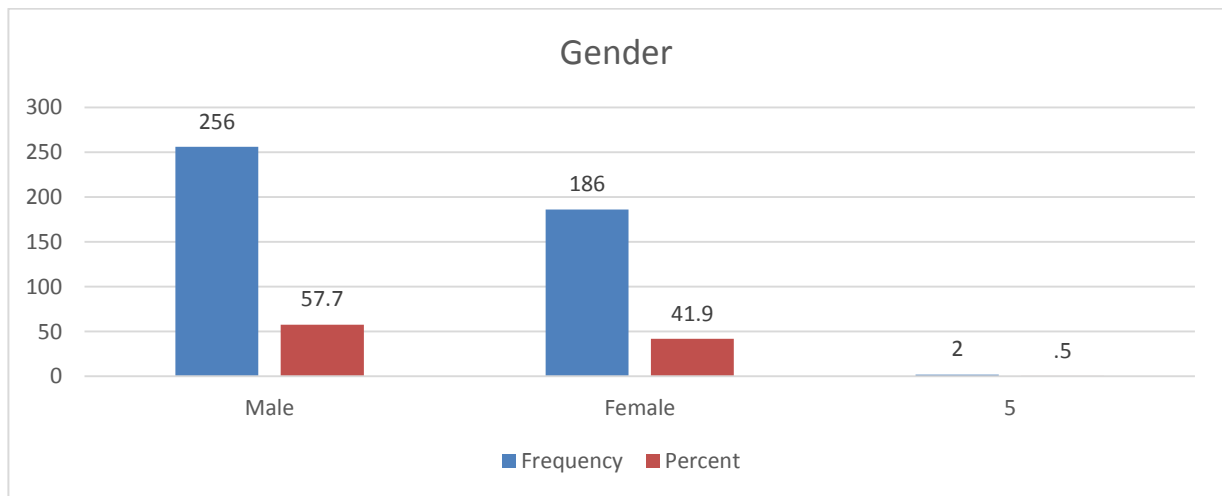
Figure 2: Results from Gender testing

Figure 2 illustrates that from the population obtained the larger sample consisted of males by (57.7%) with females (42.3%).
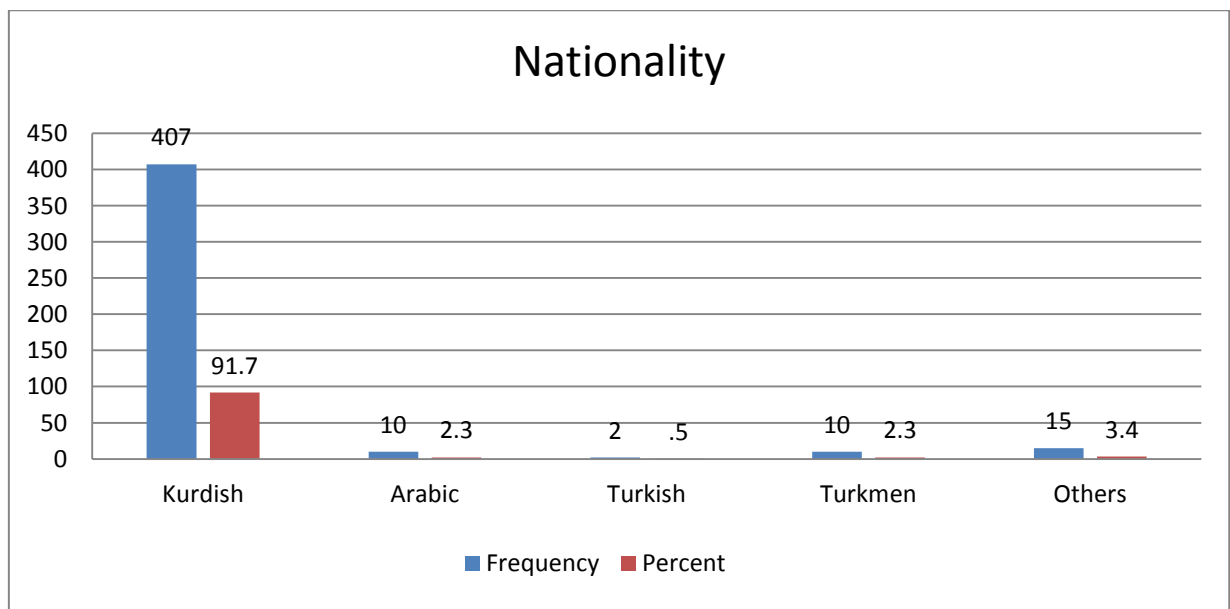

Figure 3: Results of Nationality testing

Since the survey was targeted at the Kurdish dominated cities consequently, Figure 3 shows that based on the nationalities of the population, the larger portion consisted of Kurdish nationality by (91.7%), followed by the other nationalities.
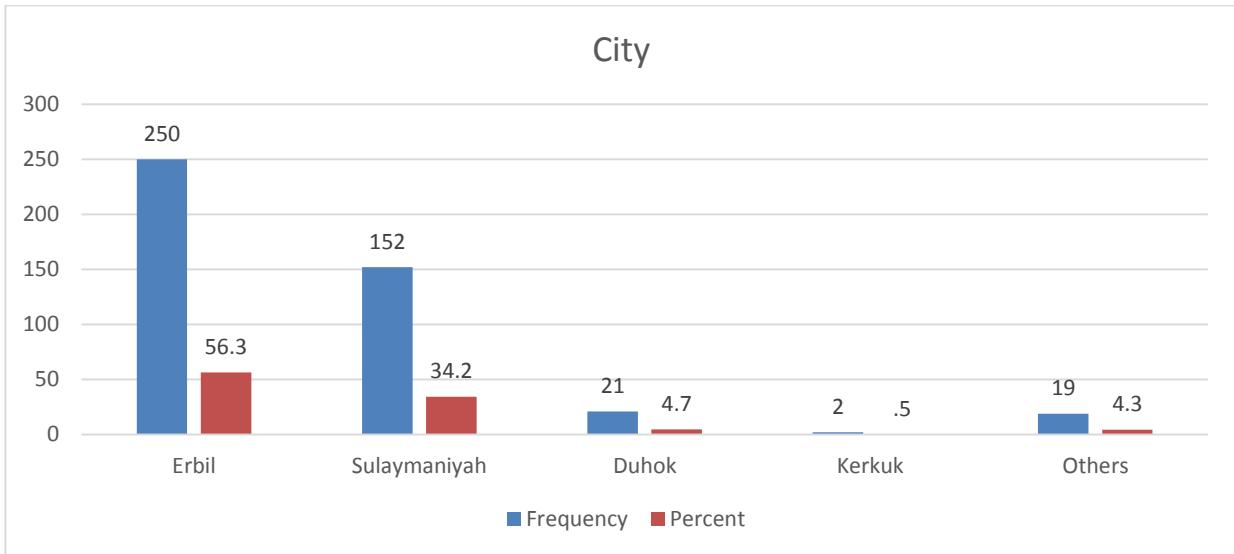

Figure 4: Results of City testing

It can be noticed in Figure 4, from all the Kurdish governorates, Erbil has the greatest outcome of users. Since the focus was on academic scholars and a greater deal of advertisement went into the survey posted for Erbil, followed by Sulaymaniyah, Duhok, Karkuk, and the others consecutively.
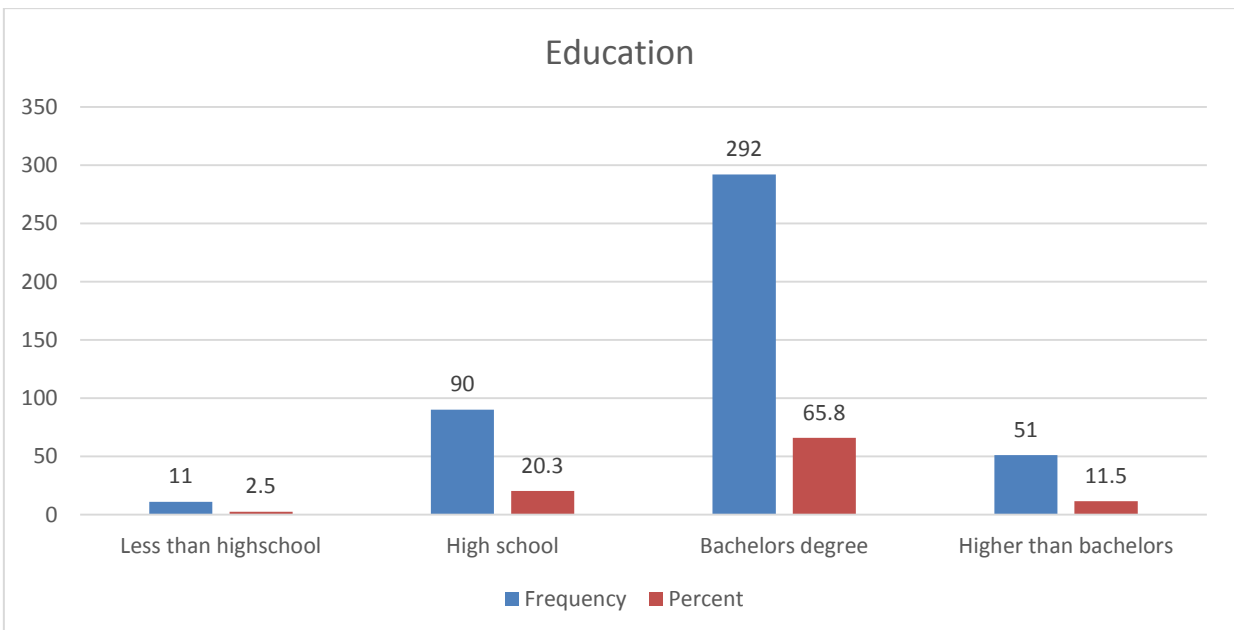

Figure 5: Results of Education testing

It can be noticed from Figure 5 that based on educational level, the bachelor degree holders were a majority by (65.8%), and again this is due to the fact that the focus of this survey was on the academic scholars.
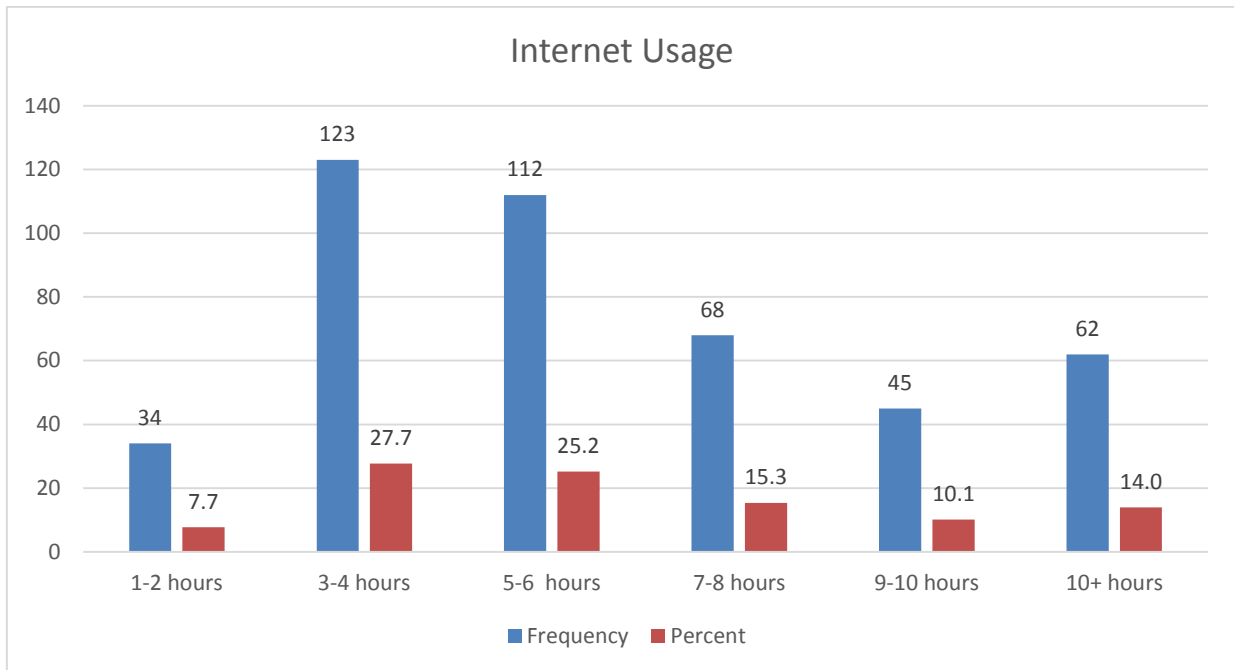

Figure 6: Results of Internet Usage testing

Figure 6 demonstrates that there is minor difference between the usage hours of 3-4 hours and 6-5 hours. The majority of users allocate between 3-4 hours (27.7%) for internet use followed by 5-6 hours (25.2%), this could be as a result of people wanting to be efficient with their time.
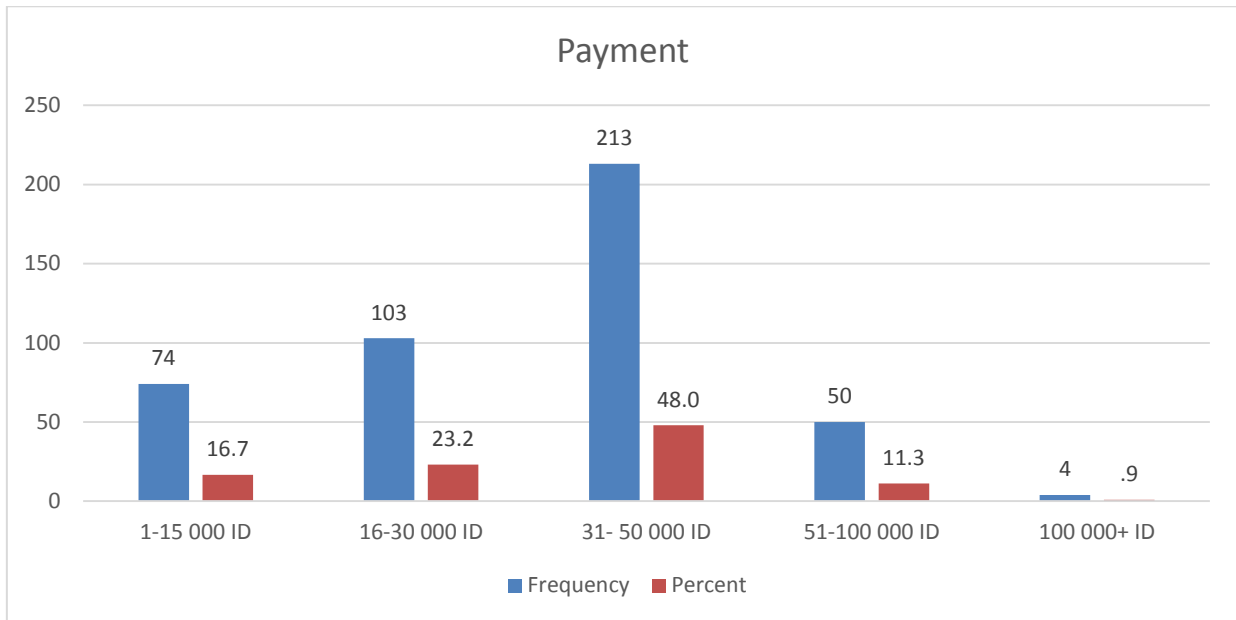
Figure 7: Results of Payment testing

The greater part of ISP providers in KRI have set the acceptable quality of internet services in the price range of 31-50000 IQD (48.0%), Figure 7 indicates that most of the people who answered the survey spend between the same range on internet services. This in turn advocates that the customers in the KRI are willing to spend an extra amount of cash for a desired service quality.
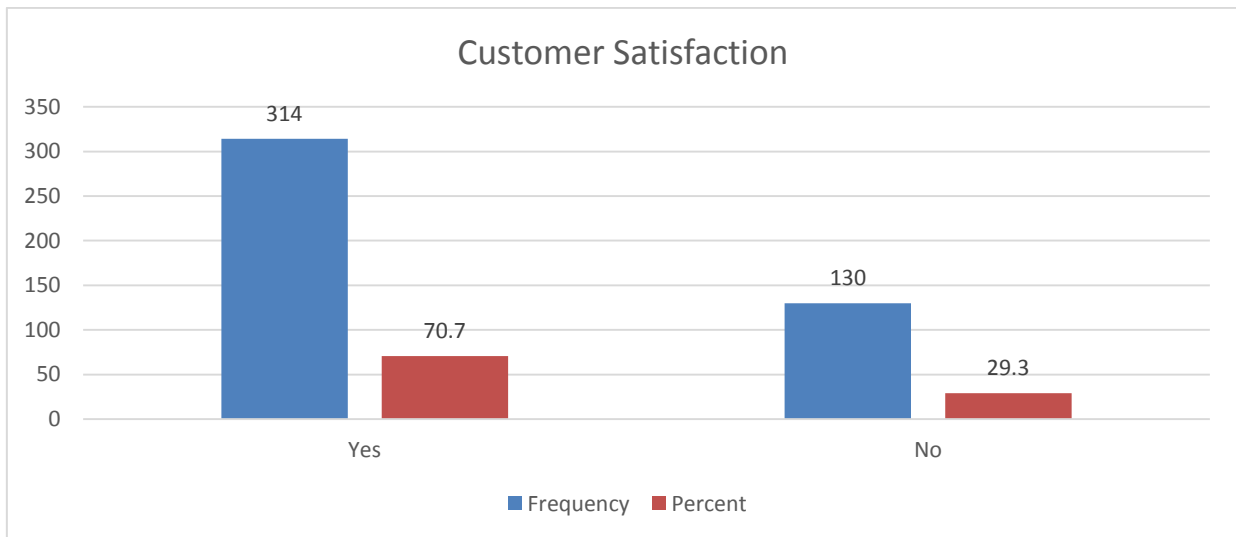

Figure 8: Results of Customer satisfaction testing

When asked whether customers were satisfied with their ISP based on the results shown in Figure 8, majority of the individuals answered yes (70.7%), we can directly relate such a result to the previous

tested price factor in which the majority spend an average amount to obtain high-quality service, so in turn this has lead to their satisfaction regarding their ISP.

Figure 9: Results of ISP testing

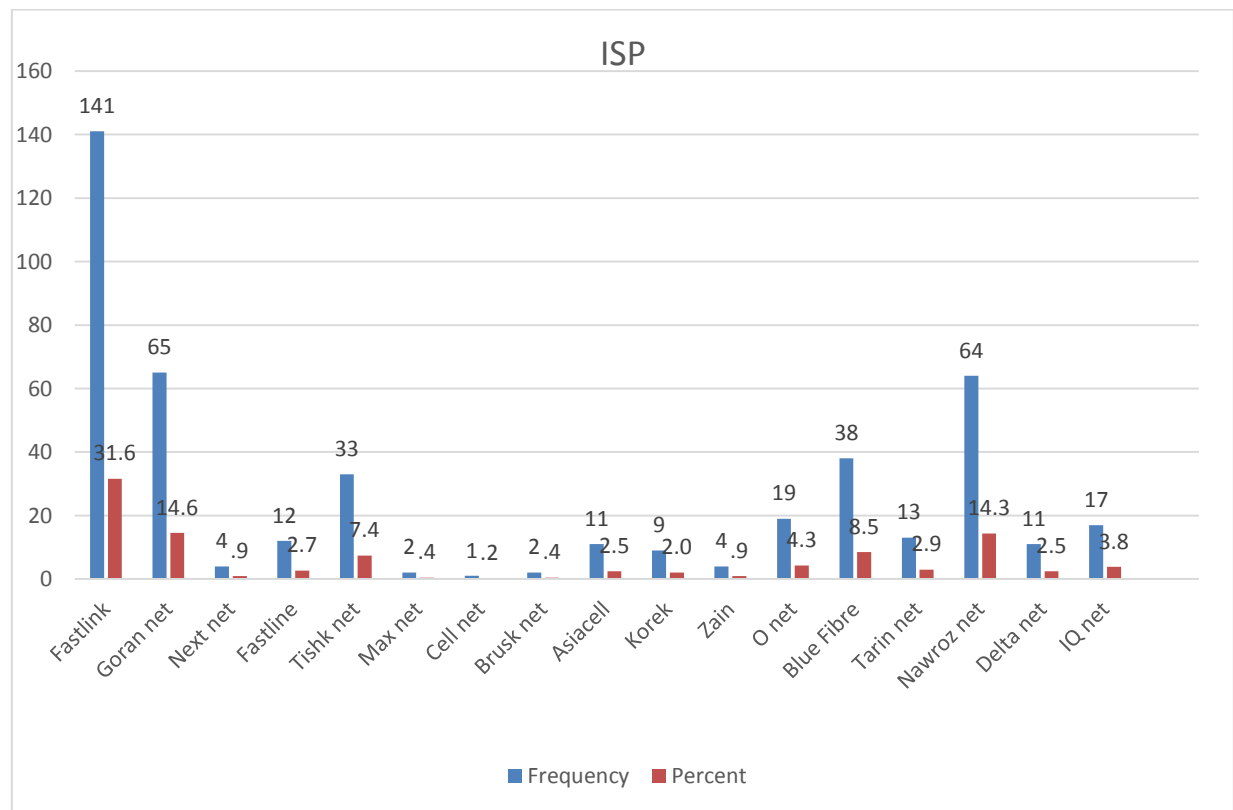Results from Figure 9 show that the ISP, Fastlink has the greatest number of users by (31.6%) followed closely by Goran net (14.6%) and Nawroz net (14.3%). Fastlink is very commonly used due to its services ranging between all governorates of the KRI and their high quality of internet service at the same time Goran net is used by most households in the city or Sulaymaniyah and Nawroz net in Erbil.
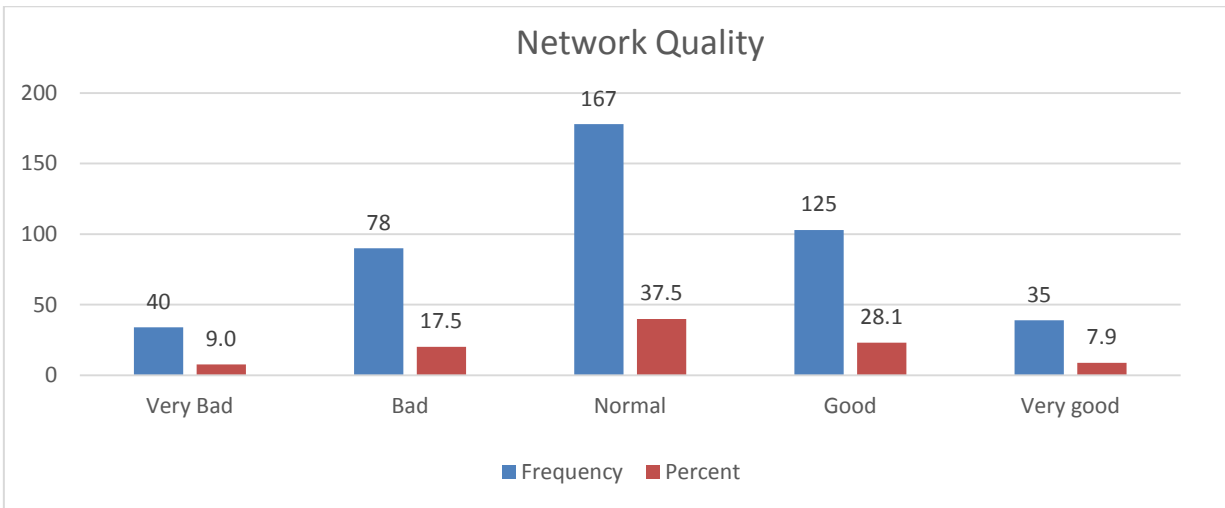
Figure 10: Customer Perception on Network Quality Results

Consumers were asked a series of questions corresponding to Network Quality (NQ), Customer service (CS), Information Quality (IW), Security and Privacy (SP), Customer Trust (TRU), Customer Commitment (COM), and Customer Value (VAL). Figure 10 illustrates the results of customer perception on NQ, which were obtained through three questions: the download/upload speed, the connection's ability to remain unchanged regardless of peak or peak-off hours and whether they ever experience any disconnect from the service. The result shows (37.5%) of costumers believe their Network to be of average quality.
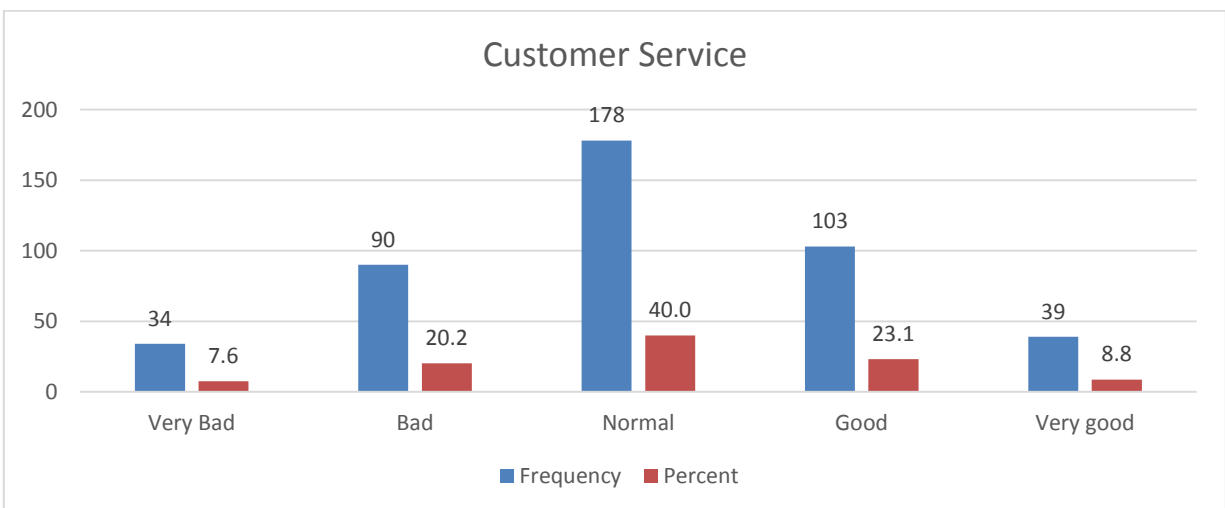

Figure 11: Customer Perception on service Results

The survey questionnaire had three questions related to customer service (CS). Consumers were asked

about overall customer service personnel's knowledge, willingness to respond to inquiries, and solving technical issues quickly. Figure 11 illustrates that when it comes to perception on CS, the majority of customers felt that it is at normal standards by (40.0%).
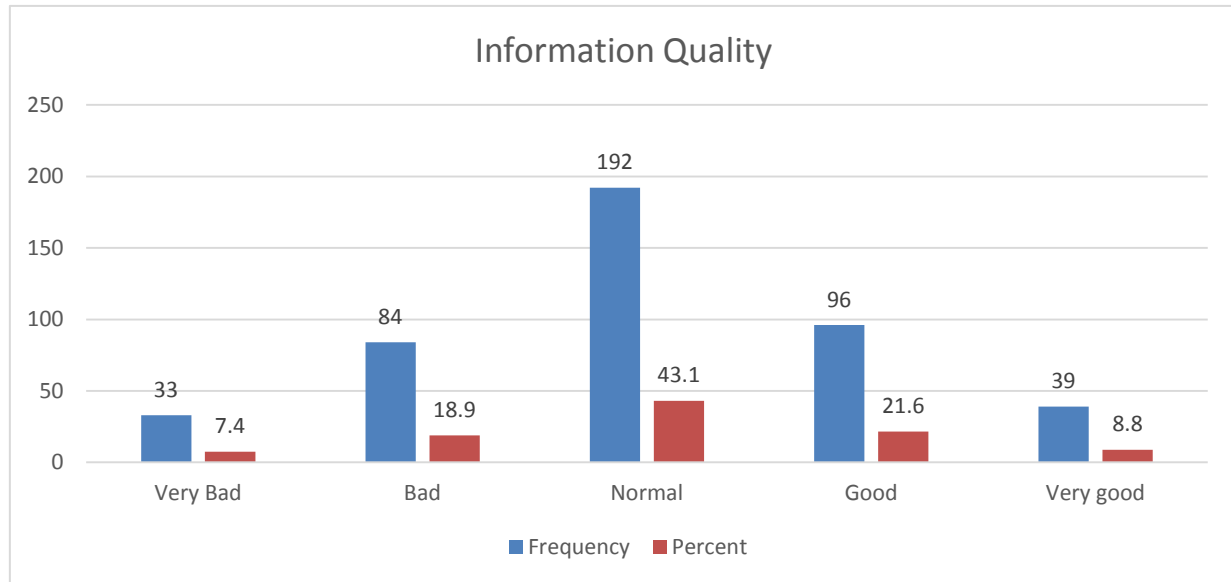
Figure 12: Customer Perception on Information Quality results

When customers were asked about the information quality of the ISP in regard to whether they provide sufficient, relevant, and up to date information to their users, similar results emerge against prior results. Figure 12 demonstrates that most customers feel the quality of information obtained through their ISPs is at a common standard by (43.1%).
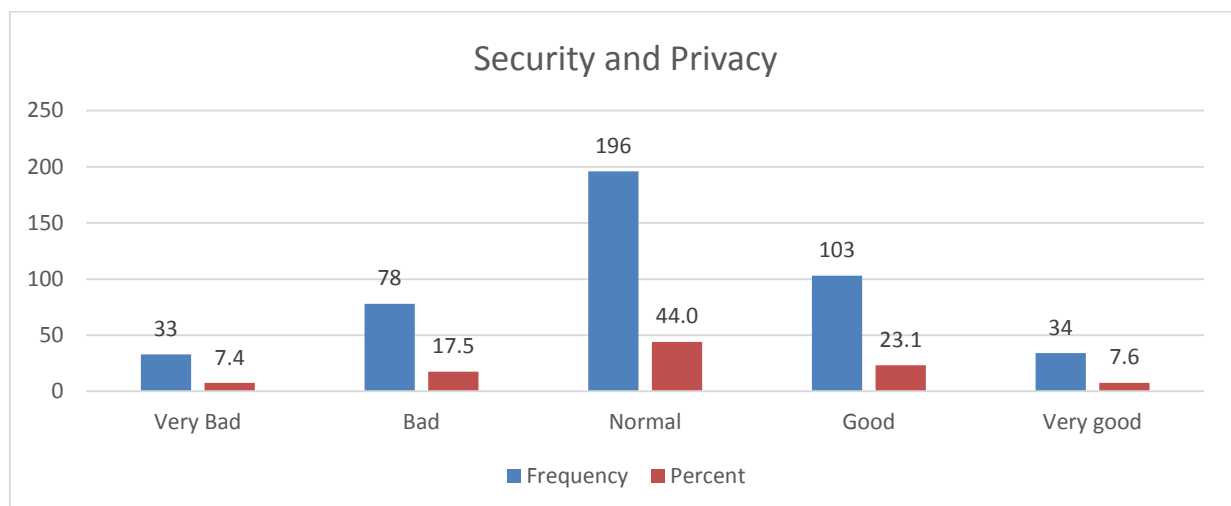
Figure 13: Customer Perception on Security and Privacy Results

In addition customers were also inquired about Security/Privacy features of the ISP, customers were asked whether they felt personal and financial information is protected with the ISP and if they feel secure in regards of transactions carried out. The greater part of customers (44.0%) felt that the security and privacy characteristics are of average value as shown in Figure 13.
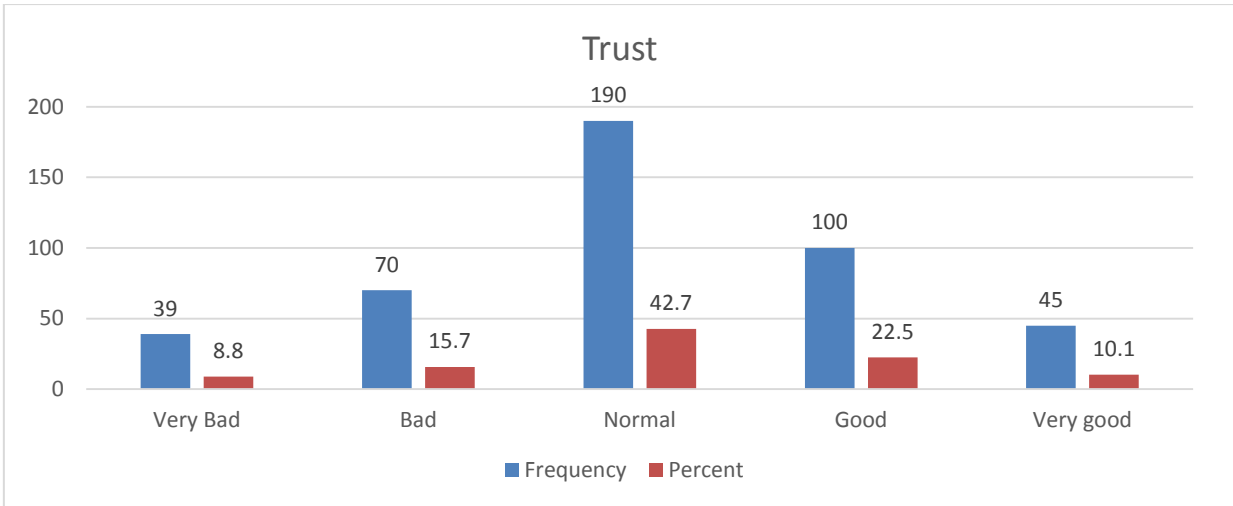
Figure 14: Customer Perception on Trust Results

In regards to customer trust, customers were asked whether they can rely on the ISP, and believe that the ISP will not deceive them in anyway. Figure 14 depicts the results were close to previous outcomes and the bulk ranged in the normal area.
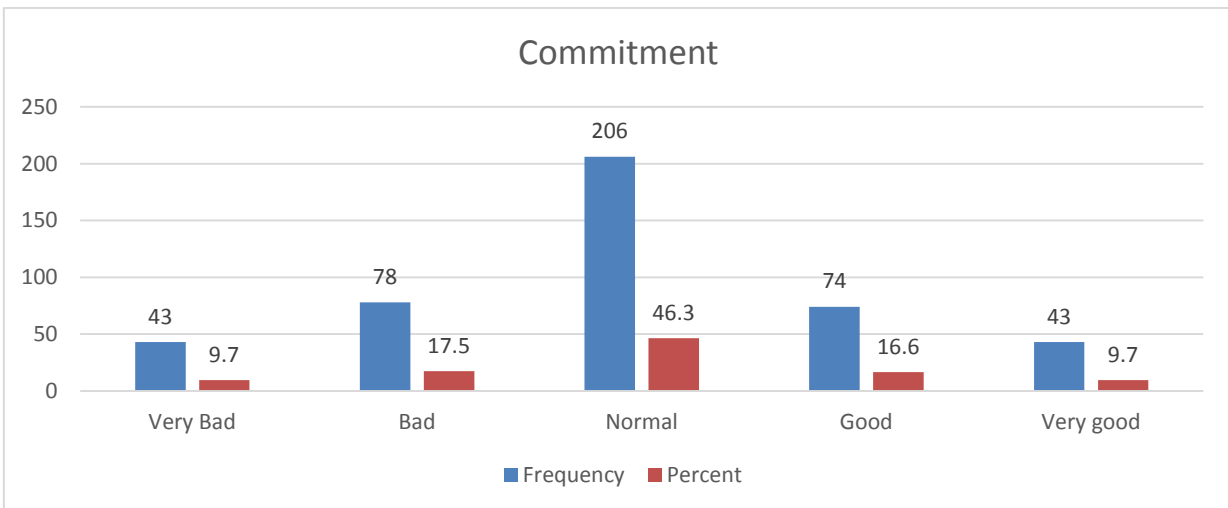
Figure 15: Customer Perception on Commitment Results

Customers when asked about their Involvement/Attachment to the ISP and their sense of pride toward having this company as a service provider, in response the outcome for customer commitment towards

an ISP was of normal standards by (46.3%) as shown in Figure 15.
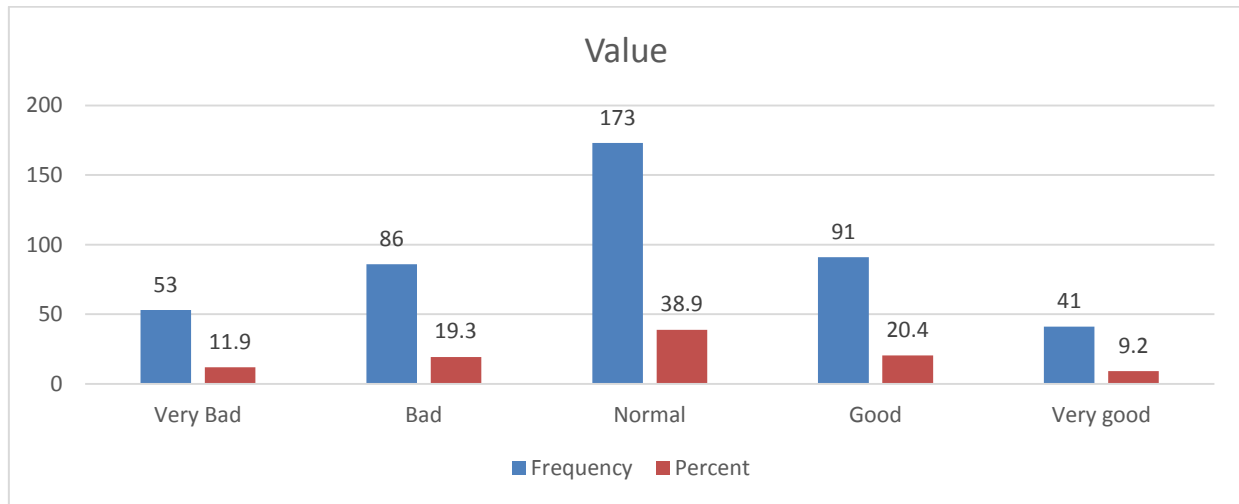
Figure 16: Customer Perception on Value Results

In the last set of questions customer opinion was taken on the internet package worth, considering the price, whether it was a good buy and a good internet package with the a reasonable price. Figure 16 shows the results of customer opinion on value with a preponderance quantity leaning towards normal value.

3.2 Correlations

Table 1: Correlation of ISP aspects with Customer Trust

Correl/NQ,CT	Correl/CS,CT	Correl/IW,CT	Correl/SP,CT
0.65	0.69	0.71	0.79

Correlation predicts statistically the scale of change in one value caused by the change of another value. When one variable's variation dependably foresees a variation alike in a different variable, a tendency to assume the change in one cause the change in the other might be formed. Yet, correlation is not always causation. **Table 1** shows the correlation of Customer Trust (CT) with Network Quality (NQ), Customer Service (CS), Information Quality (IW), and Security and Privacy (SP) consecutively.

When observing the correlation of NQ and CT, a moderate value of 0.65 can be seen, which means there is a positive relationship between the two factors. The correlation of CS and CT illustrates a moderate uphill of 0.69 which shows positive relation between the factors. As for IW and its correlation with CT, 0.71 is demonstrated which means between the two factor there is a strong relationship. In other words information quality strongly impacts the customer trust. Finally the correlation between SP and CT shows a strong, positive relation of 0.79 values between the two factors.

Table 2: Correlation of ISP aspects with Customer Value

Correl/NQ,CV	Correl/CS,CV	Correl/IW,CV	Correl/Sp,CV
0.64	0.63	0.64	0.57

Table 2 illustrates the correlation between the Customer Value (CV) with NQ, CS, IW, and SP. It can be observed that there is a moderate, positive relation between the NQ and CV by 0.64. In addition CS can also impact the CV because there is a positive, moderate relation of 0.63. At the same time, a positive moderate relation between IW and CV can be shown through the result of 0.64. Lastly the relation between SP and CV can be noticed, which is a positive moderate relation by 0.57.

Table 3: Correlation of ISP aspects with Customer Commitment

Correl/NQ,CC	Correl/CS,CC	Correl/IW,CC	Correl/SP,CC
0.69	0.71	0.72	0.69

By observing Table 3, it can be seen that this table represents the correlation of NQ, CS, IW, and SP with Customer Commitment (CC). In the first part a positive moderate relation by 0.69 it's shown between NQ and CC, at the same time both CS and IW have a strong positive correlation of 0.71 and 0.72 consecutively with CC. last of all a moderate positive correlation between SP and CC can be observed which is of similar value to the first correlation in Table 3.

Table 4: Correlation between Customer Value and Customer Trust

Correl/CV,CT
0.69

Table 4 depicts a correlation value of 0.69 between Customer Value and Customer Trust, which represents a moderate positive relation between the two factors.

Table 5: Correlation between Customer Trust and Value with Customer Commitment

Correl/CT,CC	Correl/CV,CC
0.83	0.76

By testing the correlation between Customer Value and Trust with Customer Commitment, the results obtained were positive strong relationships for both of the factors by 0.83 and 0.76 successively.

3.3. Regression

Regression analysis can be used to settle on the real connection amid variables. The regression outcomes illustrate whether this relationship is valid or not based on being below or above -1.96 and 1.96.

Table 6: Regression Analysis

Customer Trust	Model	T.Stat	Adjusted R Square
NQ	Y=0.63x+1.16	17.91	0.42
CS	Y=0.67x+1.05	20.01	0.47
IW	Y=0.67x+1.02	21.44	0.51
SP	Y=0.77x+0.74	27.45	0.63
CV	Y=0.76x+0.61	20.33	0.41
CC	Y=0.82x+0.58	31.61	0.47
Customer Value	Model	T.Stat	Adjusted R Square
NQ	Y=0.56x+1.41	17.73	0.41
CS	Y=0.56x+1.46	17.01	0.39
IW	Y=0.55x+1.45	17.65	0.41
SP	Y=0.51x+1.61	14.67	0.33
CT	Y=0.76x+0.61	20.33	0.48
CC	Y=0.83x+0.46	24.57	0.58
Customer Commitment	Model	T.Stat	Adjusted R Square
NQ	Y=0.65x+1.10	19.41	0.47
CS	Y=0.68x+1.05	21.29	0.50
IW	Y=0.67x+1.05	22.01	0.52
SP	Y=0.67x+1.10	20.15	0.48
CV	Y=0.83x+0.46	24.57	0.69
CT	Y=0.82x+0.58	31.61	0.58

As shown in Table 6, based on the results of the Network Quality and Customer Trust, there is a focus on T Stat and the Adjusted R Square to determine whether there is a significant impact or lack thereof. It can be seen that the results of the T Stat for the Customer Trust is 17.9, meaning it has a significant impact for being above 1.9. As for the Adjusted R Square, it has an impact of 0.42, which means that the Customer Trust depends on the Network Quality by 42%.

Regression Analysis between Customer Service and Customer Trust

It can be seen that the results of the T Stat for the Customer Trust is 20.01, meaning it has a significant impact for being above 1.9. As for the Adjusted R Square, it has an impact of 0.47, which means that the Customer Trust depends on the Customer Service by 47%.

Regression Analysis between Information Quality and Customer Trust

It can be seen that the results of the T Stat for the Customer Trust is 21.4, meaning it has a significant impact for being above 1.9. As for the Adjusted R Square, it has an impact of 0.51, which means that the Customer Trust depends on the Information Quality by 51%.

Regression Analysis between Security and Privacy with Customer Trust

Additionally from Table 6 the results of Security and Privacy with Customer Trust can be seen, a focus on T Stat and the Adjusted R Square can determine whether there is a significant impact or lack thereof. The results of the T Stat for the Customer Trust is 27.4, meaning it has a significant impact for being above 1.9. As for the Adjusted R Square, it has an impact of 0.63, which means that the Customer Trust depends on the Security and Privacy by 63%.

Regression Analysis between Network Quality and Customer Value

Table 6 demonstrates that , based on the results of the Network Quality and Customer Value, there is a focus on T Stat and the Adjusted R Square to determine whether there is a significant impact or lack thereof. It can be seen that the results of the T Stat for the Customer Value is 17.7, meaning it has a significant impact for being above 1.9. As for the Adjusted R Square, it has an impact of 0.41, which means that the Customer Value depends on the Network Quality by 41%.

Regression Analysis between Customer Service and Customer Value

The results of the T Stat for the Customer Value is 17.01, meaning it has a significant impact for being above 1.9. As for the Adjusted R Square, it has an impact of 039, which means that the Customer Value depends on the Customer Service by 39%.

Regression Analysis between Information Quality and Customer Value

Results of the T Stat for the Customer Value is 17.65, meaning it has a significant impact for being above 1.9. As for the Adjusted R Square, it has an impact of 0.41, which means that the Customer Value depends on the Information Quality by 41%.

Regression Analysis between Security and Privacy with Customer Value

Table 6 illustrates, based on the results of the Security and privacy with Customer Value, there is a focus on T Stat and the Adjusted R Square to determine whether there is a significant impact or lack thereof. It can be seen that the results of the T Stat for the Customer Value is 14.67, meaning it has a significant impact for being above 1.9. As for the Adjusted R Square, it has an impact of 0.33, which means that the Customer Value depends on the Security and privacy by 33%.

Regression Analysis between Network Quality and Customer Commitment

Based on the results of the Network Quality and Customer Commitment, there is a focus on T Stat and the Adjusted R Square to determine whether there is a significant impact or lack thereof. It can be seen that the results of the T Stat for the Customer Value is 19.9, meaning it has a significant impact for being above 1.9. As for the Adjusted R Square, it has an impact of 0.47, which means that the Customer Commitment depends on the Network Quality by 47%.

Regression Analysis between Customer Service and Customer Commitment

It can be seen that the results of the T Stat for the Customer Value is 21.2, meaning it has a significant impact for being above 1.9. As for the Adjusted R Square, it has an impact of 0.50, which means that the Customer Commitment depends on the Customer Service by 50%.

Regression Analysis between Information Quality and Customer Commitment

It can be seen that the results of the T Stat for the Customer Value is 22.0, meaning it has a significant impact for being above 1.9. As for the Adjusted R Square, it has an impact of 0.52, which means that the Customer Commitment depends on the Information Quality by 52%.

Regression Analysis between Security and privacy with Customer Commitment

Table 6 expresses that based on the results of the Security and privacy with Customer Commitment, there is a focus on T Stat and the Adjusted R Square to determine whether there is a significant impact or lack thereof. It can be seen that the results of the T Stat for the Customer Value is 20.1, meaning it has a significant impact for being above 1.9. As for the Adjusted R Square, it has an impact of 0.48, which means that the Customer Commitment depends on the Security and privacy by 48%.

Regression Analysis between Customer Value and Customer Trust

The results of the T Stat for the Customer Value is 20.33, meaning it has a significant impact for being above 1.9. As for the Adjusted R Square, it has an impact of 0.48, which means that the Customer Trust depends on the Customer Value by 48%. In other words, by increasing the value of the provided services the ISPs can greatly impact a Customer's Trust.

Regression Analysis between Customer Trust and Customer Commitment

Results of the T Stat for the Customer Value is 31.6, meaning it has a significant impact for being above 1.9. As for the Adjusted R Square, it has an impact of 0.69, which means that the Customer

Commitment depends on the Customer Trust by 69%. Furthermore, in order to gain customer commitment its imperative for ISPs to gain Customer Trust to begin with.

Regression Analysis between Customer Value and Customer Commitment

As a final point Table 6 expresses that based on the results of the Customer value with Customer Commitment, there is a focus on T Stat and the Adjusted R Square to determine whether there is a significant impact or lack thereof. It can be seen that the results of the T Stat for the Customer Value is 24.5, meaning it has a significant impact for being above 1.9. As for the Adjusted R Square, it has an impact of 0.58, which means that the Customer Commitment depends on the Customer value by 58%. If a comparison between the results of customer trust and Customer Value was made, to determine their effects on Customer Commitment. The later shows a smaller impact compared to Customer Trust, both have significant importance in determining commitment none the less.

4. Conclusion & Discussion

Table 7: Results of hypothesis testing

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	Correlation			**Adjusted R square**			**Coefficient Value (T>1.96)**		
	CT	CV	CC	CT	CV	CC	CT	CV	CC
NQ	0.65	0.64	0.69	0.42	0.41	0.47	17.91	17.7	19.9
CS	0.69	0.63	0.71	0.47	0.39	0.5	20.01	17.01	21.29
IW	71	0.64	0.72	0.51	0.41	0.52	21.44	17.6	22.01
SP	0.79	0.57	0.69	0.63	0.33	0.48	27.4	14.6	20.15
CT	/	0.69	0.83	/	0.48	0.69	/	20.33	31.6
CV	0.69	/	0.76	0.41	/	0.58	20.33	/	24.5
CC	0.83	0.76	/	0.47	0.58	/	31.6	24.5	/

The aim of this study is to determine the factors affecting customer perception on commitment to an ISP on the bases of quality. The end outcome validates that network quality, customer service, information quality, and privacy/security can influence value, trust and commitment on different levels. It was also revealed that only information quality most directly influences customer commitment. This is relatively different to the outcome of Thaichon's research, which this study was based on. In Thaichon's paper it shows that customer service is the only factor that significantly impacts the Customer Commitment. This difference might be due to the fact that internet service is relatively new in the KRI and customers are not fully aware or they aren't properly educated on post-purchase services that are available. However, the effect of security and privacy was found considerable on Customer trust. A reason for this could lie in the reality of the costumers being very discreet and reserved from a cultural aspect, this may transfer subconsciously to internet use as well. In addition, when it came to Customer Value, Network Quality was found to be the highest determinant factor for customers. This could imply that the quality of the service provided is superior when it comes to value for costumers in the KRI, as a result customers may be willing to spend more if it means more quality and thus better value. The conclusions are reasonably

strong, as the model explained a substantial amount of variation in customer perception of value, trust and as a final point commitment can be observed.

According to our research, another finding was that the majority utilize (Fastlink) ISP. Based on the results obtained, customers may feel this company is one of the best when it comes to security and privacy. At the same time customers could consider Fastlink's Network Quality of greatest value among the other ISPs. Finally, majority of these customers may be committed to Fastlink due to the extensive information the company provides. The information quality in their product promotion advertisement is superior and information on how their products and services can be used is very easily obtained.

5. Implications

There are no known researches on the ISPs in Kurdistan concerning Quality, even though service quality can be considered relevant and important when it comes to most businesses in the KRI. The study at hand tried to identify the factors affecting customer's perception of value, specifically network quality, customer service, information quality, and privacy and security, and their affect on value, customer trust and commitment. The Network Quality aspect affects customer perception on value differently amongst different groups.

A different perception on customer behavior regarding internet service was found through this research. Results indicate the importance of Security and Privacy along with Network Quality and how their impact would vary significantly if ISPs could dedicate resources in order to improve Customer Trust and Customer perception of Value. The customers in KRI are not properly equipped with enough information and tools on internet and post-purchase services to make proper comparisons between internet providers. Hence it is vital that the government tries to create fair competition, and properly educates consumers on customer service importance and its determinant role in quality comparisons when it comes to ISPs. When customers are aware of all aspects of a product or service that is provided, the more accurate, conscious, and value based the buying motives will become. At the same time and ISP can become more reliable compared to other service providers by increasing their Network Quality and having more transparent policies and privacy protections. This study proposes that ISPs work hand in hand with the government to further develop customers understanding of customer service and its importance in determining quality. ISPs should also determine the type of users they have for customers in order to understand the market and expand marketing strategies for the different user groups. The majority of customers seemed to be light users that focus on Network Quality when it comes to Value. A meticulous explanation of the services and network quality by the ISPs to these customers is highly recommended. However this information should be made into packages designed especially for light use customers as they are usually beginners and probably understand simplified instructions better. ISPs should attempt to ensure delivering optimal services to this segment and steer clear of supposed judgment through customers which could alter the customer's perception of quality and eventually their commitment to the service providers.

6. Limitations

The limitations of this research were restricted to the method and language used to obtain data. First, the choice of using an online survey for this study (i.e. onlinesurvey.com). This might have limited the acquiring of more diverse results. A reform of this study could be done to analyze the diversification of this form in another light, such as including equal samples questioned on the survey in all major cities mentioned.

Second, the language used in the survey questionnaire was limited to English language solely. This may have impacted the participation of a limited number of people, since not everyone can speak or understand the language fluently.

Third, this study could have included the question of which device customers use to access the internet. The data obtained through this question might have aided in explaining whether fastlink is preferred among customers due to it being a portable/wireless device that can be used in most cities and more efficiently with mobile phones on the go. Finally, in future studies, the survey mechanism should focus on including more diverse groups. Rather than just focusing on an academic population which was done mainly due to language restrictions.

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