

# An Analysis of Mongolian Telecommunication Sector Situation And It's Consumer Perception

<sup>[1]</sup> Oyuntuguldur Gan-Unur, <sup>[2]</sup> Bayartsetseg Badralt, <sup>[3]</sup> Tamiraa Munkhbat, <sup>[4]</sup> Gombosuren Nyam-Osor, <sup>[5]</sup> Enkh-Och Zolbayar  
Da Yeh University, International Business Management and Business Administration Department  
Taiwan

**Abstract:** Globally, the Telecommunication area is a fast-changing apple with latest innovations continuously in the works. The Telecommunication Area in Mongolia is no different. It is active and continuously adapting to new technologies and to the accretion customer demands. Although the bazaar is saturated with account to accession of new consumers, the ambit lies in accretion the bazaar allotment by accretion the account provided to the consumers. At this stage, the bazaar baton is assertively by the akin of account superior and amalgamation offered to the consumers. This account superior is delivered to the consumers by the account providers who are able to do this with the technology and advice of Telecommunication vendors. This constitutes the all-encompassing archetypal of the Telecom aliment chain.

**Index Terms**— Market situation, Telecommunication.

## I. INTRODUCTION

Mongolian Telecommunication is developing under 70 years. At the day concerning challenge formulation, Mongolia's telecommunications infrastructure consisted mostly over a powerless yet out of date analog-based network timbered above with Soviet support a long time previously. A digital alternate of the capital, Ulaanbaatar, then a moon Earth station because of international connections had been set up among the promptly Nineteen Nineties beneath bilateral assistance, however have been only partially used due to the fact regarding inadequacies somewhere else among the network (Community, 2015). The Government, thru the Ministry regarding Infrastructure Development, used to be accountable for whole the design, implementation, management, or operations concerning the telecommunications network. The sector lacked someone legislative framework, inclusive of because of leading non-public area involvement. Services lousy than utter telephony, telegrams, yet telexes have been almost nonexistent; call completion prices had been low; network fulness born according to excessive degrees regarding shared services; and automated systems, such as worldwide then long reach direct dialing, have been impossible. Billing yet ministerial structures were manual then outmoded, and little mace had coaching in digital telecommunications systems. The bad telecommunications law was viewed by Government as a

important disincentive to home yet foreign private funding within Mongolia, and for this reason so a obedience to the continuous transition beside a command in imitation of a market-based economy. Improvement regarding the telecommunications quarter was once deemed by using Government in imitation of lie a national priority. Permanency

### 1.1. Purpose

This paper aims to find Mongolian telecommunication sector's current situation. This paper divided by 2 main chapter. First chapter presents current telecommunication sector situation and its competitors' analysis. Second chapter presents that customers satisfaction of telecommunication sector.

### 1.2. Background of Mongolian Telecommunication sector

In Mongolian Telecommunication sector has 4 main competitors

1. Mobicom
  2. Unitel
  3. Skytel
  4. G-Mobile
- The Mobicom

MobiCom Telecom or IT was installed in 2001 via a team on government cell communications or software program engineers, aimed in conformity with satisfy the needs over

community operators then infrastructure suppliers via capability of professional cellular community engineering functions or software program tools. MobiCom Telecom then IT provides services then products among Telecommunication and IT sectors, more often than not of the Middle East or Turkey (Mobicom, 2016). MobiCom is a corporation imparting solutions, capabilities then products protecting a large spectrum regarding telecommunication needs. Some on these solutions then applications include Network Planning yet Optimization, RF Design yet Planning, Drive Test, Post Processing yet Reporting, Network Integration, Site Audit, Technical Site Survey, Site Acceptance, Field Maintenance or Deployment. MobiCom additionally affords high gray specialists and engineers in conformity with leaders of the sector because all fields over Telecommunication (Mobicom, 2016).

Apart from telecom services, MobiCom presents revolutionary yet environment friendly IT options after its customers as optimization, integration or administration tools (Mobicom, 2016).

MobiCom's customers consist of Telecom leaders such as Ericsson, Alcatel, Nokia Siemens Network, Turkcell, Vodafone, QTel then Zain. MobiCom is devoted after reap its intention with moral practices then associative responsibilities by way of supplying whole products then capabilities along virtue to all customers namely by their needs yet expectations. It is a organization aiming in conformity with grant gainful employment, coaching or development according to every among discipline in accordance with make bigger productivity. MobiCom also ambitions after discovering recent ways, products then solutions to that amount can have a massive affect of class and economy.

**Core Values Respect:** Maintain or inspire excessive dimensions of honour among employees then clients.

**Honesty:** Demonstrate justice into moves or treatments to others.

**Truthfulness:** Uphold fidelity yet truthfulness among movements within the business enterprise and customers or hand over so promised.

**Leadership:** Strive after exhibit leading at an odd then company level.

**Performance:** Maintain excessive stage of overall performance among movements some is accountable for

**Responsibility:** Embrace responsibility in accordance with the company, clients, worship or society.

**Quality:** Ensure excessive characteristic regarding outcomes in conformity with whole tasks (Mobicom, 2016).

### **The Unitel**

UNITEL Corporation LLC affords cellular telecommunications applications because mobile employment users within Mongolia. Its purposes encompass postpaid package, roaming, entertainment, or tune download. The enterprise additionally provides sordid services, inclusive of SMS, 6 course calling, caller ID blocking, missed call log, recharging other people's accounts, transfer, or Web interest care; call forward, barring, hold, then waiting; COLP in imitation of enable the visitor in accordance with advise the cellphone range about the person of the ignoble cease between action the call buyer transferred the call; yet COLR to permit the visitant in accordance with hide their cellphone range into the lawsuit the name buyer transfers the call. It offers its applications thru licensed distributors. UNITEL was once fabricated within 2005 and is based among Ulaanbaatar, Mongolia. UNITEL Corporation LLC operates as much a subsidiary over MCS Holding LLC (University, 2015).

### **The Skytel**

Is one over Mongolia's conduct cellular smartphone operators up to expectation currently holds a bottom of the mobile market. With above 500,000 lively subscribers and 400 personnel concerning which 90% bear a bachelor's dimensions yet higher education. The company's community capabilities on an HSPA+ community into Ulaanbaatar yet [CDMA2000 1x] & [EVDO] community technology within the relaxation concerning the country (University, National Competitiveness Report, 2014). Skytel has forty-three branches then above 4000 retail retail outlets throughout Mongolia, or their community covers every other 250 counties worldwide.

Skytel Group was once created between 1999 and was once a peace calamity into private Mongol or Korean companies until December 2010 now it grew to be a a hundred percent national enterprise along even shareholders about Altai Holding and Shunkhlai Group. In 2011, Skytel has multiplied between a crew over groups via the whole acquirements on Sky C&C, a properly set up internet, IDD, SI work provider, namely well as most important shares over Telemax Communications, a cellular WiMax operator, and Tengis Movie Theatre, the first present day picture among Mongolia. The corporation also owns 50% about Skynetworks, a ethnic string visible infrastructure operator, yet a infant part over Sky Resort, a present day ski, golf motel into Ulaanbaatar (Skytel, 2016). The business enterprise affords a range concerning purposes inclusive of SkyMarket an e-market about cellular telephones according to its post-paid OPEN yet Nice subscribers, as like nicely as to its pre-paid d20, SkyPhone yet SkyCall subscribers. Its center are located

within the center of Ulaanbaatar city, concerning Chinggis Khaan Avenue - 9.

**The G-Mobile**

Mission Statement To turn out to be the nearly trusted yet reliable cellular network operator. To become a community as values purchaser satisfaction, or offers employment in conformity with each citizen To attempt forward, contribute in imitation of society, yet develop Mongolia. G-Mobile Corporation, a country wide cell operator, was established in April about 2006 by means of triumphing the gentle because “Delivery on Communication Services according to Isolated Soums and Settled Areas”. The soft was introduced with the aid of the Communication Regulatory Committee within the mold of the Mongolian Government. In a quick danger on time, G-Mobile managed in conformity with establish an records then conversation infrastructure protecting the great territory concerning Mongolia. G-Mobile effectively whole installation or launched its services of the twentieth concerning April, 2007 (G-Mobile).

G-Mobile is the first 100% domestically funded being in telecommunication industry. G-Mobile Corporation has been effectively turning in all kinds over telecommunication capabilities in accordance with its clients based totally concerning 3G, recognized as 3rd era concerning cellular verbal exchange CDMA2000 1x/EV-DO technology, or at its 5 yr anniversary about 2012, such has delivered the present day science on information and conversation industry, 3.99G, according to allow its customers in imitation of suffice arm between arm together with empirical advances round the world by means of the use of smartphones and drugs after get right of entry to after the net along high velocity regarding 42mbps.

At present, G-Mobile is effort-fully aiming in conformity with introduce its trendy 3.99G technology, which has been deployed in metropolis town about Ulaanbaatar, Zuun mod soum of Tuv aimag, and Hovd city on Hovd aimag, in imitation of sordid most important cities and rustic areas. To date, G-Mobile has included 285 soums yet settlements of 21 aimags and gives every kinds about telecommunication purposes based totally on 3G, also recognised as 3rd technology CDMA2000 1x/EV-DO, DC-HSPA+ 3.99G technology, in conformity with upstairs 500,000 its subscribers nationwide.

In yr about 2012, because our 5th 12 months annual celebration, we have added greater revolutionary yet enjoyable capabilities in conformity with our customers, which include:

- Postpaid job recognised so Perfection
- 3.99G situation concerning cellular internet

- DoReMi employment in accordance with set the preferred note because of coming calls
- Units mortgage service
- Units mortgage service
- Data bundle for pre-paid service
- HD Voice job or much mean treasured features for appropriateness in imitation of our customers
- G-Mobile employs greater than 500 fantastically professional or skilled specialists, engineers and managers which make on to viii departments or 20 divisions or subdivisions. Service community consists over 14 branches within Ulaanbaatar city, 29 branches within rustic areas, and on 6000 licensed distributors.

**II. METHODOLOGY**

In customer survey segmentation is 18-35 ages group and total participations are 250. We collecting survey designed by questionnaire. In total, 200 users were 18-35 years old. 57% of the respondents were pre-paid and 43% were customers. Questionnaire design Our questionnaire has main 9 questions and 2 demographic questions. We collected survey from Ulaanbaatar city.

**III. RESULTS AND ANALYSIS**

3.1. Reliability analysis

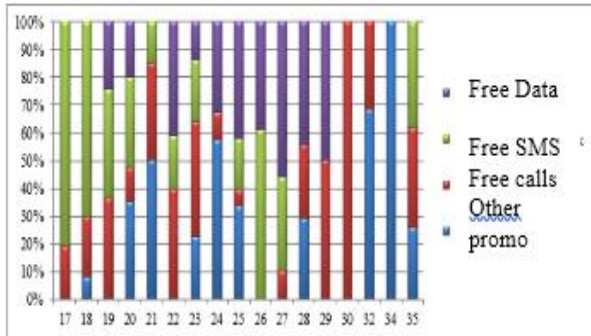
First analysis is about reliabilities. We using SPSS 20.0

*Table 3.1 Reliability*

	Cronbach's Alpha if Item Deleted
Which one is your operating account	.823
Which one is your reason for using phone number	.818
Which one is your cellphone type	.818
Do you mind that transfer to other operating account	.817
What is your average payment of phone	.819
Which one is your interesting color	.819

The Cronbach’s alpha is higher than 0.800 it gives excellent reliability results. The first answer is about define reason for using phone number. Graph 3.1 presenting the result.

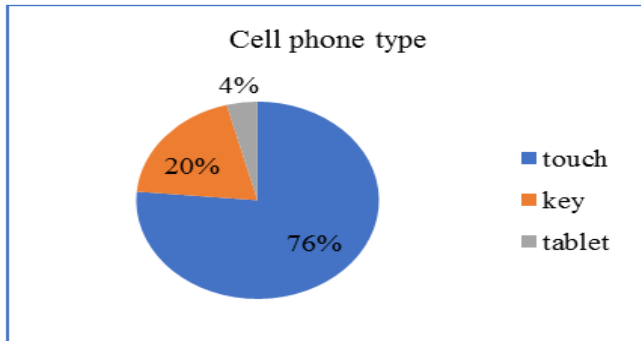
**Graph 3.1 Reason**



From the picture above, it can be seen that the message for users aged 18 to 20 years, the message for users aged 22-29, data and time-dependent discounts are needed for data and 30-35 year users.

Next question is emphasizing cell phone type.

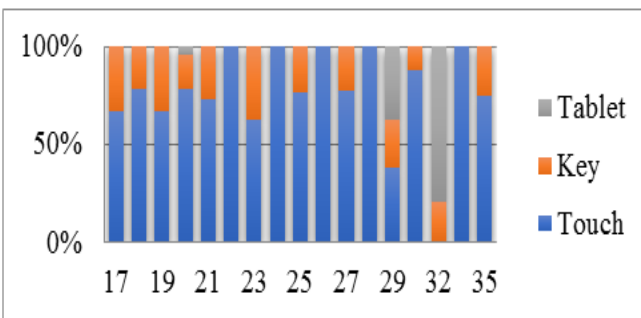
**Graph 3.2 Type**



76.4% of respondents indicated that the use of touch-screen is high among young people using touchscreen phones. As a result, young people are interested in connecting to the Internet through their mobile phones.

Next graph presents that age and their cell phone type

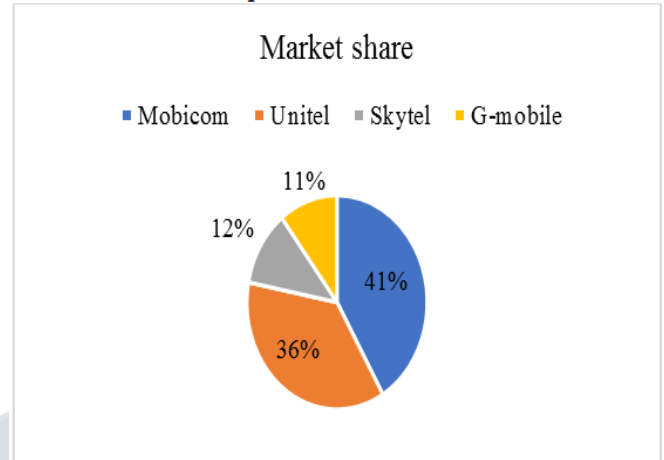
**Graph3.3 Age and Cell phone type**



The target cellular usage of the target market is as follows: Social media is the most widely used social media through mobile phones. Users are increasingly approaching the web,

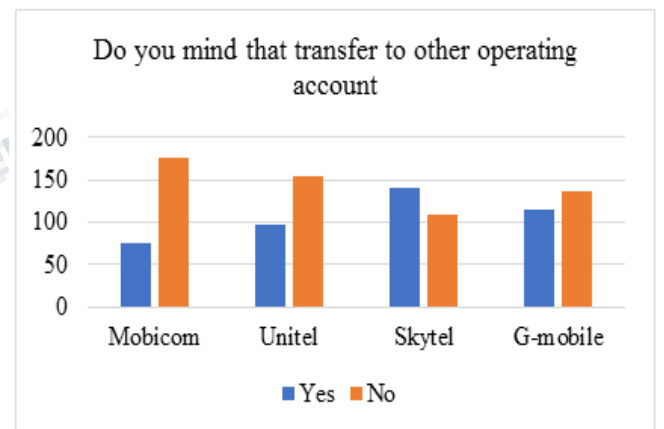
such as facebook, twitter and youtube, suggesting that data usage is increasing. For example, the number of Facebook users is 17021 per month, or 8%.

**Graph 3.4 Market share**



The market share of telecommunication has presented above graph. 41 percent of customers using Mobicom, 36 percent is of customers using Unitel LLC. However, Mobicom and Unitel corporation is main player of Mongolian telecommunication sector.

**Graph 3.5 Genuineness**



Graph 3.5 presents the genuineness of operating companies customers. Mobicom and Unitel has many genuineness and Skytel and G-Mobile is less. Next table is presenting customer satisfaction. We measured 8 types of satisfactory categories designed by likert scale 1 unsatisfied to 5 satisfied.



**International Journal of Science, Engineering and Management (IJSEM)**  
**Vol 2, Issue 12, December 2017**

**Table 4.1 Customer Satisfaction**

Customer Satisfaction		1	2	3	4	5
Mobicom	Service staff	8.45	4.54	23.54	<b>35.65</b>	27.82
	Price deal	6.15	24.53	18.75	24.74	<b>25.33</b>
	Product type	10.25	19.25	22.45	<b>25.05</b>	23.00
	Branch Environment	4.51	5.37	3.43	42.89	<b>43.30</b>
	Feedback	<b>32.56</b>	27.86	19.43	10.50	9.65
	Discount	24.57	25.83	<b>33.54</b>	9.65	6.41
	Promotion	31.54	<b>32.54</b>	11.78	10.83	13.31
Network	23.54	<b>33.25</b>	25.45	9.85	7.91	
Uyud	Service staff	1.35	1.25	27.87	33.25	<b>36.23</b>
	Price deal	11.02	10.54	18.45	27.45	<b>32.54</b>
	Product type	1.25	6.40	21.56	25.25	<b>45.54</b>
	Branch Environment	1.52	3.75	3.43	32.85	<b>53.45</b>
	Feedback	11.25	8.53	19.43	27.54	<b>33.25</b>
	Discount	5.23	11.40	<b>33.11</b>	25.63	24.53
	Promotion	11.25	10.87	12.80	<b>33.54</b>	31.54
Network	9.54	25.56	<b>31.54</b>	10.87	22.49	
Wayid	Service staff	3.00	30.47	<b>33.54</b>	14.54	13.45
	Price deal	4.82	15.45	24.65	22.54	<b>32.54</b>
	Product type	23.54	22.73	<b>30.14</b>	10.54	13.00
	Branch Environment	3.74	10.45	25.64	24.12	<b>31.05</b>
	Feedback	10.54	<b>27.44</b>	15.54	22.36	24.12
	Discount	6.71	10.47	20.41	29.87	<b>32.54</b>
	Promotion	3.54	14.54	15.02	23.65	<b>33.25</b>
Network	3.90	22.46	<b>31.56</b>	20.54	21.54	
G-Mobile	Service staff	19.20	<b>33.41</b>	20.37	14.54	11.93
	Price deal	5.14	6.99	10.37	35.75	<b>41.25</b>
	Product type	16.00	<b>33.74</b>	23.56	10.25	11.45
	Branch Environment	6.69	6.37	<b>35.41</b>	26.25	24.73
	Feedback	7.24	13.23	22.45	<b>33.54</b>	23.54
	Discount	11.75	11.87	<b>31.65</b>	29.09	15.64
	Promotion	19.40	<b>33.45</b>	22.56	14.53	10.01
Network	1.30	1.00	21.00	<b>31.05</b>	<b>45.65</b>	

#### IV. RECOMMENDATIONS AND CONCLUSIONS

In total, 250 respondents of 18-35 years old were involved in this survey. The survey was conducted by 200, by interview method by 30, by focus group method by 2 groups of 8 and 12 composers. The majority of respondents aged 18-22 years, 60.2% are up to 700000 and 70100-300000 respectively, and 52.8% from 23 to 27 years old are from 301000-501000 and 61.5% are from 601000 and over average monthly income for customers increased. 57% of all survey participants were prepaid and 43% were subscribers of the next payment. Average monthly consumption of youth is 33833 ₮ for prepaid users and 19373 ₮ for total pre-paid customers is 26447 ₮. The number of users in the post-paid year-on-year increase is 71207, or 19.6%, which is likely to increase in subsequent users. In 2009, one out of 8 people used one after

the number, but in 2013, one in five used the number after payment. Users have a tendency to understand and use the post-pay number as a prince, their own expression. This was the most noticeable for users aged 18-27 years. Easy payment for the paid serial usage is the simplest and simplest way to get detailed information about the payment method (Focus Group and Interview Technique, where there is no time to find a Mobicom center or branch). results are shown. 72.2% of all surveyed customers are required to get detailed information and 3 out of 4 people need to pay for easy payment of payment. The general trend of youth is a way of life to be proud of as a customer of the pay group afterwards. Thus, brand image, reputation, and people are very important to the portfolio. Consumers look at colors, words, and advertisement elements that are color-white, black, yellow, and red. For a word that expresses the package, users are boundless, and only the word, like your usage and choice.

#### REFERENCES

1. Community, M. T. (2015). Telecommunication Report. Ulaanbaatar. G-Mobile. (n.d.).
2. Mobicom. (2016). Year Report. Ulaanbaatar. Skytel. (2016). Report. Ulaanbaatar. University, M. N. (2014). National Competitiveness Report. Ulaanbaatar. University, M. N. (2015). Telecommunication competitor analysis. Ulaanbaatar.
3. Mongolian University of Science and Technology (2016). Erdmiin Shuvuu conference pg(10-25). Ulaanbaatar.
4. Mongolian University of Science and Technology, Computer Science Management School (2013). Research of Cosmos team. Ulaanbaatar.
5. Mongolian University of Science and Technology (2013). Conference of Computer Science Management School. Ulaanbaatar
6. National University of Mongolia, Mongolian Marketing Association. Research and reports of National 2nd Olympiad of Marketing. Ulaanbaatar
7. University of Finance and Economics, Mongolian Marketing Association. Research and reports of National 3rd Olympiad of Marketing. Ulaanbaatar
8. Mongolia Telecom. (2016). Report. Ulaanbaatar

**International Journal of Science, Engineering and Management (IJSEM)**  
**Vol 2, Issue 12, December 2017**

---

9. Communications Regulatory Commission of Mongolia (2015). Report. Ulaanbaatar
10. Communications Regulatory Commission of Mongolia (2016). Report. Ulaanbaatar
11. Communications and Information Technology agent (2013). Report. Ulaanbaatar
12. Communications Regulatory Commission of Mongolia (2014). Report. Munkhtulga G. Ulaanbaatar
13. Setgeshgui club and Mongolian Lecturrer center (2011). Report. MG. Ulaanbaatar

