# **Czech University of Life Science Prague**

# **Faculty of Economics and Management**



# Diploma thesis

# The Concept of Marketing its Role and Influence in Mobile Operators of Azerbaijan

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# **Declaration**

I hereby declare that I wrote my diploma thesis "The concept of Marketing its role and influence in mobile operators of Azerbaijan" independently under the leadership of my supervisor and on my own without the use of any other than expert literature and other information sources which are cited in this thesis and listed in the bibliography at the end of the thesis.

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# The Concept of Marketing its Role and Influence in Mobile Operators of Azerbaijan

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# Koncepce Marketingu a jeho role v činnosti mobilních operátorů v Ázerbájdžánu

## **Abstract**

The process of marketing management consists of analysis of market opportunities, target market selection, implementation of marketing activities. The management of marketing in the field of marketing research and supervision of the implementation of plans are drawn up. This includes planning, production and sales, price formation, advertisement, sale, implementation, and so on.

Marketing is the management function of supply and demand, investigating the relations of production is necessary to clarify the relationship arising from production, in order to ensure sales of the finished product.

The level of demand for the marketing department's responsibility, it should influence the timing and nature of the problems facing the organization in helping achieve the goals. Simply defined, marketing management is demand management.

The need for marketing is a necessity only on a certain stage of development, production and marketing. Depending on the characteristics of each country, an effective approach to marketing activities is required. In this regard, mobile operators in Azerbaijan should be able to identify market opportunities. None of the operators should be permanently confident in its product and market. It has to look for new markets, customers should be provided with new offers. Only in this case, we can talk about the prospects of the future of mobile operators.

The concept of marketing in the mobile operator's view of the organization reflects sales activity. The most advanced is the concept of production and marketing of high-quality products.

# **Key words**

Azerbaijan, marketing, mobile operator, mobile, roaming, economics, finance, satellite, information and communication technologies, telecommunications, gross domestic product, innovation.

#### Abstrakt

Proces marketing managementu se skládá z analýzy tržních příležitostí, výběru klíčového trhu a využití marketingových aktivit. Především je prováděn management marketingových aktivit v oblasti marketingové analýzy a implementace marketingových plánů. To zahrnuje plánování, výrobu a prodej, stanovení cenové politiky, reklamu, odbyt, implementaci apod.

Marketing je řízení poptávky a nabídky, zjištění stavu výroby pro ujasnění vztahů výroby a odbytu hotové produkce. Stanovení poptávky je významným faktorem pro rozhodování v čase o podstatě problémů, kterým organizace čelí, aby dosáhla stanovených cílů. Jednoduše řečeno, marketing management je řízením poptávky.

Marketing je nutný na jednotlivých úrovních vývoje společnosti, výroby a odbytu. V závislosti na charakteristice každého státu, efektivní přístup k marketingovým aktivitám je nezbytný. V tomto ohledu mobilní operátoři v Ázerbájdžánu musí rozpoznat tržní příležitosti. Žádný z operátorů nemůže být jednoznačně jistý svou nabídkou a vývojem trhu. Je nutno se podívat i na ostatní trhy a zajistit zákazníky novými nabídkami. Pouze v tomto případě je možné hovořit o budoucích perspektivách vývoje mobilních operátorů.

Koncepce marketingu z pohledu mobilních operátorů odráží intenzitu odbytu. Nejvíc efektivní je koncepce výroby a marketingu vysoce kvalitních produktů.

### Klíčová slova

Ázerbájdžán, marketing, mobilní operátor, mobilní roaming, ekonomie, finance, satelit, informační a komunikační technologie, telekomunikace, hrubý domácí produkt, inovace.

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### 1 Introduction

### 1.1 Topicality of the problem

After the proclamation of independence of the Republic of Azerbaijan, progress has been reached in the communications sector, as well as in all areas. At present, the development of information and communication technologies, the launch of the first satellite of the country and other issues prove the development of this area.

Mobile communication is a new area, and the first operators have been functioning in Baku since 1994. Mobile communication which is a new and prospective field establishing links with foreign countries in the international arena takes an active part in improving the gross domestic product of the country's economy. Therefore, the concept of marketing and its role in the exploration of the mobile operators of Azerbaijan are extremely relevant.

Scientific research in this field has not been carried out in Azerbaijan. Only mobile operators, particularly in the field of information and communication technologies, have been investigated, and scientific articles have been published in various directions. In the course ofour research of the Azerbaijani mobile operators and other operators (mobile operators in Azerbaijan and Turkey), we carried out a comparative analysis, and marketing of mobile communication networks has been studied extensively.

The network marketing of the 3 mobile operators in Azerbaijan,the country's position in the region, international recognition, trade relations with foreign countries, the role of mobile communications in the country's economy, population and employment levels have been analyzed extensively in other areas. 3 mobile operators in Azerbaijan reduce prices of certain companies, offers new services to the population. However, despite the work done in our republic, the price of the mobile communication is more expensive in comparison to other post-Soviet states.

### 1.2 The bases of research knowledge

Ministry of Communications and Information Technologies of the Republic of Azerbaijan, State Statistical Committee of the Republic of Azerbaijan and the annual reports of the Ministry of Economic Development of Azerbaijan Republic, Azerbaijan National Academy of Sciences and the scientific research of Baku State University, statistical indicators of Azercell, Bakcell, Nar and Turkcell mobile operators, as well as my academic analysis of the collected material.

## 1.3 The object of the study

The object of study is the mobile operators of The Republic of Azerbaijan, their place and role in the international arena and functional tasks.

### 1.4 The level of study of the problem

The mobile network operators of Azerbaijan and their marketing is a new field of research. The annual reports of the Ministry of Communications and Information Technologies of the Republic of Azerbaijan highlight this field at least in part, the State some data of the Statistical Committee of the Republic of Azerbaijan have only been published only in papers. However, some research work in this field has been doneby scholars and has been published in scientific articles. Especially, it can be seen in the article "Tax "Problems and assumptions". To achieve the goal, we have set our research work based on the publication by Alisenskaya, Deynika, Proklin, Fomenko, Blank, Seremet and other scientists. Taking advantage of the nature of the theoretical basis of the concept of scientific works of scholars, we conducted a comprehensive inspection.

#### 1.5 The scientific innovation of the research

The scientific novelty of the research is as follows:

- The mobile operators of Azerbaijan and their marketing network analysis has been carried out for the first time;
- The mobile operators in modern conditions, and the theoretical and methodological basis of their marketing network;
- Comparative evaluation of mobile operators is given;

• The analysis of network marketing through mobile operators and their future development.

# 1.6 Practical significance of the research work

Practical significance of the study is that proposals put forward in the mobile communication operators may further improve the results, effectively lead to the solution of problems in the future.

# 2 Goals, objectives and Methodology of the study

The main objective of our research is to examine the place and role of this sector of the national economy, investigate its development in the future. The extent to which the activity of the positive or negative impact on people's lives will be taken into account with the assumption that the innovations in this field complete solution of the problems identified to date.

To achieve this goal, the following tasks need to be solved:

- The place and role of Azerbaijan in the international arena;
- New and better ways to use mobile communications, which is considered a promising field of information and communications technologies;
- To analyze the potential each of the 3 mobile operator in the country;
- To consider the future of mobile operators;
- To enhance the access of the population to increase interest in actually existing mobile operator networks.

# 2.1 The main methods used in marketing

In order to write this thesis, I will use different information sources and different methods for analyzing the information obtained from them.

The methods used for analyzing the information on the given topic will include retrospective analysis, synthesis, comparison of data, statistical analysis, deductive thinking, and so on. All the abovementioned methods will be used in their complexity in order to make comprehensive conclusions with the highest added value possible.

The data necessary for writing this thesis will be taken from publicly available sources, namely bibliographic sources and online resources. Bibliographic sources will be needed for my theoretical investigation, in order to form a deep understanding of the topic and its different aspects. Online sources will be used for gathering the most up-to-date statistical and other data related to mobile operators in Azerbaijan and their involvement in marketing activities.

For convenience, my thesis will be divided into several sections. The first chapter provides an introduction to the thesis. The second chapter describes the goals, objectives and methods of the thesis. The third section is literature review. The fourth section is dedicated to theoretical analysis of information and communication technologies in Azerbaijan. The fifth section deals with Azerbaijan's first telecommunications satellite. The sixth chapter compares Azerbaijani mobile operators, while the seventh one provides a comparative analysis of mobile operators in Azerbaijan and Turkey. The eighth chapter is dedicated to marketing in mobile communications. The ninth chapter contains the author's conclusions, and the tenth chapter provides the list of bibliographic sources used.

# 3 Concept of marketing

# 3.1 The modern explanation of marketing

Marketing is destined to create favorable conditions for the sale of a product, its quality, range and volume of production, in order to adapt to consumer demand analysis and forecast market conditions.<sup>1</sup>

The term "marketing" appeared for the first time in the beginning of the 20th century (in 1901) in the United States. It expresses that market economy is a category of the concept of management. However, there are certain differences in its classical and modern meanings. The modern meaning was formed gradually. First of all, it appeared for the first time in the U.S. under the title "product marketing". For the second time in the first period, it was overcome by the use of goods and services.

The concept of market management, sales and trading activities of the organization and management of production systems are given. Development of product, production and sale are the main objectives of the system - the market and the real needs and requirements of customers and increased revenue as a result of accurate and comprehensive study should be directed. Marketing forms such type of products, production and sale that show great interest in these products by customers, and for which there is a real demand. Only at a certain stage of development and production, the importance of marketing was understood. Depending on each country's own development, marketing activities are required for an effective approach. If only those economic activities of the country's institutions to implement marketing activities to increase the efficiency of their production, sales and trading activities can be achieved. The main tasks of marketing include the following: study of market, the structure and dynamics of demand, consumer taste and wishes to collect information about the sound, the current and future needs of the production of goods that are relevant to various fairs, exhibitions, advertising, discounts and price policy and service provision, guarantees, the creation of favorable conditions for the product, etc.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup>ASHOK, J. Principles of Marketing, p. 3

<sup>&</sup>lt;sup>2</sup>AKHUNDOV, S. The concept of marketing, p. 27

## 3.2 Principles of marketing

The basic purpose of a business is to produce or deliver something which the customers want or need, whilst making a profit. There are various definitions of marketing, such as that from the Chartered Institute of Marketing, namely "The management process for identifying, anticipating, and satisfying customer demands profitably". They go on to identify three key elements, which are:

- Understandingcustomerneeds
- Matching your company's strengths to market opportunities
- Segmenting your market to direct your efforts<sup>2</sup>

#### 3.3 Market segmentation and targeting

Speaking about management of marketing, to achieve the goal in establishment of exchange profitable for customers, strengthening and analysis of maintenance measures, planning, implementation and control is understood.<sup>4</sup>

Literally just half a century ago, the creation of something new brought to a revolution, and gave super-profits to inventors. Now, the main thing is not the creation, but rather skilful and effective promotion of a new product. There have been cases in history when products which in fact were not unique or supernova became bestsellers for many years thanks to a competent marketing strategy. When developing a new product, it is necessary to know precisely for what consumer audience it was designed. It is necessary to know almost everything about your average statistical potential customer: from age and sex, to personal hobbies. It is these facts that make it possible to develop the product down to the smallest detail, and to make an effective advertising campaign. For this purpose, there is such a concept as market segmentation, which is a division of consumers into groups.

Targetmarketingrequiresrunningthreemainevents:<sup>5</sup>

<sup>&</sup>lt;sup>3</sup>http://www.cim.co.uk/marketingplanningtool/intro.asp [ [accessed September 2014]

<sup>&</sup>lt;sup>4</sup>ASHOK, J. Principles of Marketing, pp. 3-4

<sup>&</sup>lt;sup>5</sup>KOTLER, P., KELLER, K.L. Marketing Management, pp. 42-47

- market segmentation: market division into distinct groups of buyers, each of which
  may require particular products or marketing complexes. Different market
  segmentation methods are used;
- selection of target market segments: evaluation and selection of one or several market segments for accessing them with own products;
- product positioning on the market provision of the product's competitive position
  on the market, and market complex development.

In order to carry out a successful market segmentation, it is reasonable to apply five principles: differences between segments, similarities between consumers, large segment volume, consumer parameters measurability, consumer accessibility.

- 1. The principle of difference between segments means that segmentation should lead to different consumer groups. Otherwise, segmentation will implicitly be substituted by marketing.
- 2. The principle of similarity between consumers in a segment assumes homogeneity of potential consumers in terms of buyer attitude toward a particular product. Similarity between consumers is needed in order to develop an appropriate marketing plan for the entire target segment.
- 3. The requirement of a large segment volume means that target segments should be large enough to ensure the company's sales, and cover its expenses. When evaluating segment volume, the nature of the product sold and the capacity of the potential market should be taken into account. Thus, thenumberofbuyersinasinglesegmentontheconsumermarketmaybedozensthousands, while a large segment on the industrial market may count less than a hundred potential customers (for instance, for cell or satellite communication systems, for consumers of power plant products, etc.)
- 4. Measurability of consumer parameters is necessary for aimed field marketing studies, thanks to which needs of potential buyers may be identified, as well as for studying the target market's response to the company's marketing activities. This principle

is extremely important, as "blind" product distribution, with no feedback from the customers, leads to diffusion of the seller's funds, human and intellectual resources.

5. The principle of consumer accessibility stands for the need in communication channels between the seller and potential customers. Suchcommunicationchannels may be new spapers, magazines, radio. television. exterioradvertisingmeans, etc. Consumeraccessibility is needed for arranging promotional events, orforinformingpotentialcustomersofaparticularproduct: its features. value, main advantages, possible sale-offs, etc.

Market segmentation requires detailed knowledge regarding the customers' requirements to the product, and buyer motivation parameters of the consumers themselves. Segmentation may be of several types<sup>6</sup>:

- macrosegmentation, which classifies markets by regions, countries, their industrialization level, etc.;
- microsegmentation, which identifies customer groups within a single country or region based on more detailed criteria;
- inward segmentation, when the marketing specialist proceeds to segmentation from a broad group of customers, and then deepens, narrows it (for instance, watches → watches for men → watches for businessmen with a high level of income);
- broadwise segmentation, when the marketing specialist proceeds to segmentation from a narrow group of consumers, and then broadens it (for instance, balls for professional athletes → balls for professional athletes and amateurs → balls for young people);
- preliminary segmentation, which defines the start of marketing research and covers a large number of possible market segments aimed for research;
- final segmentation, which defines the final stage of market research, and is formed based on market conditions and capacities of the company itself. It is connected with the identification of the most favorable market segments, for which the company will in the future develop its market strategy and program, and it generally comprises a

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<sup>&</sup>lt;sup>6</sup>KOTLER, P., KELLER, K.L. Marketing Management, pp. 42-47

limited number of market segments. Market segmentation and analysis of separate market segments are carried out for the purpose of subsequent identification of target markets which would suit most the customers' requests and the company's capacities, as well as those most favorable for its activities.

# 3.3 Target market segment selection

Market segmentation opens up capacities of different market segments where the seller is going to act. Then, the company has to decide:

- how many segments should be covered;
- how to identify the most profitable segments.

There are three market coverage options:

- 1) undifferentiated marketing;
- 2) differentiated marketing;
- 3) concentrated marketing.

Undifferentiated marketing is a situation when the company opts to neglect differences in segments, and contacts the entire market at once with the same offer. In this case, it concentrates efforts not on differences between the customers' needs, but rather on common things in such needs. The company develops a product and marketing program which would seem attractive to the largest possible audience. The company relies upon methods of mass distribution and mass advertising. It strives to address an image of excellence in the minds of people. In addition, undifferentiated marketing is cost-efficient. Costs for product manufacturing, maintenance of its reserves, and transportation are not high. Costs for advertising are also maintained at a low level at undifferentiated marketing. Lack of market segments and planning in division into such segments in marketing research favours decreased costs for marketing research and product manufacturing management.

Differentiated marketing. In this case, the company opts to act on several market segments, and provides a separate offer for each of them. The company expects that, thanks to strengthening its positions in several market segments, it will be able to identify the company with this product category in the customer's mind. In addition, it expects growth

in repeated purchases, as it is the company's product to correspond to the customers' desire, and not vice versa.

Concentrated marketing. Many companies see for themselves a third marketing opportunity, which is especially attractive for organizations with limited resources. Instead of focusing efforts on a small share of a large market, the company focuses them on a large share of one or several submarkets. Thanks to concentrated marketing, the company ensures for itself a stable market position in segment servicing, as it knows better than the others such segments' needs, and has certain reputation. Moreover, thanks to production specialization, distribution and stimulation measures, the company gets economy in many fields of its activities.<sup>7</sup>

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<sup>&</sup>lt;sup>7</sup> KURTZ, David L. BOONE, L., 2012, p. 299-304

# 4 The current state of information and communication technologies in the republic of Azerbaijan

Up-to-date information and communication technologies create new opportunities in the development of the country, in raising the intelligence of the population, and engage more actively in the process of integration in the world.

Efficient use of the existing potential in the development of information and communication technologies, organizational, legal, technical and human resources for the improvement of information and communication technologies (ICT) industry in the form of business expansion and attraction of new investment in this sector, the free market and healthy observance of the principles of competition, and other social projects are important conditions.

The regulation "For the Development of the National Strategy for Information and Communication Technologies (2003-2012-years) in the Azerbaijan Republic" adopted in 2003 was an important step in the development of information and communication technologies. In this regard, Geneva, 10-12 December 2003, the United Nations and the World Summit on the Information Society by the International Telecommunication unions the basic principles of the state policy in the field of ICT and the development of the National Action Program has been noted as one of the main directions.<sup>8</sup>

During recent years, in the areas of information and communication technologies to accelerate the development, regulatory and legal framework in this area to improve the coordination of international treaties to which the Republic of Azerbaijan, the liberalization of the telecommunications services market and the private sector in order to develop a more substantial work has been done. In 2004, the laws "On Mail Service", "On Electronic Signature and Electronic Documents", in 2005, "On Telecommunications", "On Ecommerce" were adopted in the Republic of Azerbaijan. On October 21, 2005, the Law "On the Development of Communication and Information Technologies for the Years 2005 and 2008, the State Program "Electronic Azerbaijan" was approved. In 2013, the Republic of Azerbaijanlaunched the first telecommunications satellite to the orbit.

<sup>&</sup>lt;sup>8</sup> Azerbaijan National Academy of Science, Institute of Information Technology. *News*. [online]. [cit. 2014-05-20]. Available

 $from: < http://www.ict.az/az/index.php?option=com\_content\&task=view\&id=2947\&Itemid=122>.$ 

ICT, which is the catalyst of industrialization and scientific social-economic growth of the global economy, is the sector with the strongest and most dynamic growth and development potential following the hydrocarbon industry. Establishment of the Regional Innovation Zone for information and communication technologies and electronic production will provide the basis for sustainable development of the ICT sector in Azerbaijan, create alternative sources of income, increase attractiveness of the local markets for foreign investors, and willensure sustainable development of the non-oil sector.

According to the instructions of the President of the Republic of Azerbaijan, the "Regional Innovation Zone" project developed by the Ministry of Communications and Information Technologies in cooperation with Booz Allen Hamilton (a major US consulting company), will support the establishment of techno-parks for the support of innovative entrepreneurship, a regional market for the production and export of electronic equipment and software, a transitional information dimension between the East and the West to provide wide-ranging electronic services to all countries in the region, and a university for the development of human resources.<sup>9</sup>

# 4.1 Regional Innovation Zones

The main five purposes of the activity of a Regional Innovation Zone can be summarized as follows:

1. To foster SME / technology innovation: Stimulate development of small and middle businesses, providing an innovative environment for designing and implementing information and other technologies for application and use in various sectors of the Azerbaijani economy, and potentially for the region;

2. To enable HR development and look at the establishment of an IT university: Provide the site, resources, and expertise to support the development of human resource capabilities, and related training and development activities that make part of the broader national initiative to develop a Regional Information Technology University;

 $from: < http://www.ict.az/az/index.php?option=com\_content\&task=view\&id=2947\&Itemid=122>.$ 

<sup>&</sup>lt;sup>9</sup>Azerbaijan National Academy of Science, Institute of Information Technology. *News*. [online]. [cit. 2014-05-20]. Available

- 3. To assess perspectives of an International data center: Assess the feasibility of a profitable business that involves receipt, value added and return or redistribution (e.g., "transit") of various forms of information, data and content services from around the world to the domestic and regional market;
- 4.To define measures that help untap New investments, esp. foreign direct investment: Provide a hospitable, low-risk, innovative and collaborative environment for ICT and other domestic, regional and global technology organizations to invest and develop operations to share ideas, information, research and development, work processes and other knowledge-based activities to support the commercial needs and sustained economic, social and technological development of Azerbaijan and regional markets;
- 5. To help Azerbaijan spur Exports activities: Provide an environment that supports and enhances production and export of electronic equipment and software products and services that are produced in Azerbaijan and distributed to regional markets.

# **4.2** The location of the non-oil sector of Information and Communication Technologies

The main strategic lines of the economic policy pursued by the Government of Azerbaijan's non-oil sector to achieve development, economic diversification and create new opportunities for the development of new industrial areas. At present, the country's socio-economic development of the telecommunications and ICT sector is rapidly growing.

In 2012, the sector's share in GDP was 1.74%, while the non-oil GDP was 3.7%. <sup>10</sup> It is worth noting that 65% of the sector's income accounted for mobile operators.

The system of registration of IMEI-codes of mobile phones or mobile devices (SRMU) was established at the Information Centre of the Ministry of Communications and Information Technologies of Azerbaijan in accordance with the "Rules of registration of mobile devices" approved by Decree No. 212 of the Cabinet of Ministers of Azerbaijan Republic on December 28, 2011, and was held within the framework of the year of information and communication technologies.

<sup>&</sup>lt;sup>10</sup>The Journal for Business. *Information and Communication Technologies in Azerbaijan and Importance of Their Use.* p. 122. [online]. [cit. 2014-05-20]. Available from:

<sup>&</sup>lt;a href="http://thejournalofbusiness.org/index.php/site/article/viewFile/373/325">http://thejournalofbusiness.org/index.php/site/article/viewFile/373/325</a>.

After the functioning of the registration systems, an IMEI-code for each mobile device, was imported to the territory of the republic for private use (via SIM-cards of mobile operators in Azerbaijan), must be registered within 30 days of its connection to the network.

The system of registration of IMEI-codes does not apply to foreign citizens and tourists in Azerbaijan using foreign SIM-cards and roaming connection. In other words, they will work with foreign devices SIM operators without interference.<sup>11</sup>

The purpose of registration of mobile devices is to create conditions in which users can easily use mobile devices, and will be protected from devices of unknown origin, which do not meet the specifications (commonly referred to as "pirate"), prevent the imports of mobile devices, as well as the level of recognition of manufacturing companies.

At the same time, the use of mobile devices in the network that have lost the registration system will be impossible.

Now, this system is used in Turkey, the U.S. and India. In Ukraine, attempts have been made as well to introduce a similar system, but they were not successfully completed. In European countries, a EU blacklistis held to exchange information about the theft of mobile devices.

#### 4.3 Information Society

One of the key features of the information society can be attributed to the following 12:

- Creation of the global information environment;
- Use of ICT, creation of new forms of social and economic activities;
- Improvement of the educational system on the international, national and regional levels, expansion of information exchange systems to increase the level of professional and general culture;
- Democratic development, which is important to get information from citizens and social institutions, as well as to disseminate and use it to create an environment that promotes freedoms.

<sup>&</sup>lt;sup>11</sup> HUBER, A. HUBER, J. F. 2008, p. 260-262

<sup>&</sup>lt;sup>12</sup>REYNOLDS, H., MAPLES W, 2001, p. 10-11

Creation and distribution of the global information environment is carried out by mobile operators.

Global experience shows that the use of ICT in the development of a wide range of services and technologies that address the socio-economic situation and the existing problems is a consistent means for poverty reduction.

The country's overall e-readiness, as well as the existing telecommunications infrastructure, hardware and software, information resources and services, the legal and normative framework shows that the formation of an information society in the country to speed up the process is as follows<sup>13</sup>:

- High level of literacy and education of the population;
- National private telecommunications operators and their development;
- National projects in the field of information and communication technologies have a wide range of experience;
- Existence of favorable conditions for the country's economic activities and investment;
- Mobile phone network covering the entirerepublic and the formation of permanent development;
- The wired phone network modernization and expansion, as well as digital communication channels, and so on.

The political, economic and technological developments in the world show that the future prospects of countries are characterized by the level of their ICT development. In this development, a special place has to be given to mobile network operators.<sup>14</sup>

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<sup>&</sup>lt;sup>13</sup>REYNOLDS, H., MAPLES W, 2001, p. 10-11

<sup>&</sup>lt;sup>14</sup>The open knowledge society: a computer science and information systems manifesto: First World Summit, WSKS 2008, Athens, Greece, September 24-26, 2008. proceedings. 1st ed. New York, NY: Springer-Verlag Berlin Heidelberg, 2008, p. cm. ISBN 35-408-7782-7.

# 5 Azerbaijan's first telecommunications satellite

In modern conditions, the social, economic, scientific and technical development of a country are the main issues and solution of complex problems in order to increase the defense power of the media, in the fields of informatization and information protection are changes in the legislation.<sup>15</sup>



Figure 1: Azerbaijan's satellite in space

Source: Azeriobserver. *Azeris Contribute to the Conquest of Space*. [online]. [cit. 2014-05-20]. Available from: <a href="http://azeriobserver.az/2014/01/25/azeris-contribute-to-the-conquest-of-space/">http://azeriobserver.az/2014/01/25/azeris-contribute-to-the-conquest-of-space/</a>>.

The level of application of ICT for socio-economic development of each country, as well as its intellectual and scientific potential, transparency and efficiency in public administration, as well as the development of society are one of the main indicators. The

<sup>&</sup>lt;sup>15</sup>Azeriobserver. *Azeris Contribute to the Conquest of Space*. [online]. [cit. 2014-05-20]. Available from: <a href="http://azeriobserver.az/2014/01/25/azeris-contribute-to-the-conquest-of-space/">http://azeriobserver.az/2014/01/25/azeris-contribute-to-the-conquest-of-space/</a>>.

wide application of ICT in the overall development of the country, as well as the field of information is of particular importance in terms of national security.

The location of the Republic of Azerbaijan between the European and Asian continents of the favorable geo-economic, geographical, as well as information on the intersection of highways to eliminate dependence on foreign countries to exchange information on space allocation, which is an essential component of economic and information security, and launch of telecommunications satellites to the orbit is of a great importance.

On May 3, 2010, "Azerspace" Open Joint-Stock Company was established. On February 8, 2013, the first satellite of the Republic of Azerbaijan "Azerspace-1" was launched to the orbit, which cost U.S. \$ 230 million. 16

More than 50% of the world market for satellite launch and the beginning of its operations in 1980 with a variety of carrier rockets carried out of the 242 satellite, "Arianespace" Company "Azerspace-1" satellite launch starting with 2002"Ariane-5" carrier rocket in the 54th edition of the series was successful.

Azerspace-1 "Satellite" Orbital Sciences' Corporation and is currently 22 active satellites developed by STAR-2 satellite platform, operating on the basis of successfully assembled.

Useful for trucks equipped with 36 active transponders and weighing approximately 3.2 tons of "Azerspace-1" satellite into geostationary orbit located at 46 degrees east longitude and within Europe, Africa, Central Asia, the Caucasus and the Middle East region will cover. Life will be at least 15 years in orbit, "Azerspace-1" satellite TV broadcasting and telecommunications services, as well as corporate and government clients requirements are designed to ensure high quality and stable communication platforms.

Satellite resources will be used to meet the needs of 20%, and the remaining 80% will be exported to the world markets. Satellite resources will be provided for the sale of more than 40% of signed contracts. "Azerspace-1" satellite technology will connect to a wide range of design possibilities, and will cover a third of the world, it will help millions of people easily use modern information and communication services. The first satellite connecting more than 50 countries will play an important economic role. Azerbaijan's first satellite launch diversify the economy, media independence and ensuring the security of

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<sup>&</sup>lt;sup>16</sup>Azeriobserver. *Azeris Contribute to the Conquest of Space*. [online]. [cit. 2014-05-20]. Available from: <a href="http://azeriobserver.az/2014/01/25/azeris-contribute-to-the-conquest-of-space/">http://azeriobserver.az/2014/01/25/azeris-contribute-to-the-conquest-of-space/</a>

our space industry an important step towards the development and integration into the international space, as well as commercial and profitable project. Thus, the "Azerspace-1" will provide satellite, high-quality television and radio broadcasting on the territory of Azerbaijan in the near future.

Launching into orbit the First Azerbaijani satellite will allow the introduction of digital broadcasting organization in the country, the creation of a centralized automated radio monitoring network, e-government, improve the integration of public institutions, the increased use of electronic services, scientific research and practical application of nanotechnologies, telecommunications and postal modernization of infrastructure, broadband services to all regions of the country and to take other appropriate measures.<sup>17</sup>

In order to expand satellite services and come out with a better organization of the Azerbaijani satellite into geostationary orbit is of particular importance. To this end, coming out with telecommunications satellite in orbit, of C-and Ku-band frequency range covers most of Asia and all Europe.

I would like to mention the services offered by the telecommunications satellite "Azerspace-1" can have a positive effect on the tariff policy. Mobile operators use the satellite to link up their antennas where is impossible to transmit cable. At the present time, this practice is spread as well in Central Asia and in Africa and the Middle East. <sup>18</sup>

With the help of the network VISAT, government agencies, business organizations that support telephone contact with each other through the appropriate mobile devices keep it via satellite. Today, thanks to the satellite, mobile, interactive and other services can be organized, and it does not cost much. Simply, customershave to prepare a scheme for the Internet, after compiling it very easy to put together, a lot of manufacturers, technology and price, but also from the point of view that it is effective. The global experience shows that large organizations and companies use satellite connection in their offices to build a continuous data connection. These offices can be transferred from one country to another country and from one city to another city at any time. If the connection set through the cable limits the ability to connect to a new office, the connection set over a satellite is allows you connecting more quickly.

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<sup>&</sup>lt;sup>17</sup>Azeriobserver. *Azeris Contribute to the Conquest of Space*. [online]. [cit. 2014-05-20]. Available from: <a href="http://azeriobserver.az/2014/01/25/azeris-contribute-to-the-conquest-of-space/">http://azeriobserver.az/2014/01/25/azeris-contribute-to-the-conquest-of-space/</a>

<sup>&</sup>lt;sup>18</sup> PARKS, L. and SCHWOCH, J. 2012,p. 129-134.

# 5.1 The main advantages of satellite "Azerspace-1"

- Diversification of the economy and development of new industrial areas;
- Elimination of dependence of data exchange on foreign countries and provision of information security;
- Development of human resources and intellectual potential in new economic sectors, implementation of latest knowledge-intensive projects;
- Formation of an innovation-driven economy;
- Enhancement of Azerbaijan's regional and international prestige;
- Turning Azerbaijan into a regional center for ICT. Providing telecommunication needs
  of the economy and development of telecommunications infrastructure;
- Provision of broadcasting and communications services, availability of reliable communication platforms meeting the requirements of public and corporate clients;
- Provision of the country's hard-to-reach areas with Internet connection, e-services, education, health and other services;
- Protection of the country from possible information blockade and strengthening Azerbaijan's position in the information war;
- Direction of financial flows for satellite communications services to the economy of Azerbaijan, and sale of satellite capacity abroad.<sup>19</sup>

Based on the experience, sometimes satellite is set on the first place, cable is as a backup resource, sometimes, on the contrary, the cable is set on the first place but satellite is kept as a spare. In any case, the satellite has major advantages and satellite services are safe and permanent.

Amplification efforts to develop the export potential of ICT in Azerbaijan are one of the major parts of the plan for the future. The aim in this direction is to become a major exporter of information services in the region. Until 2020, the government plans to spend about \$ 3.6 billion on the implementation of ICT projects in Azerbaijan, and is expected to increase income to 9.3 billion in this area.<sup>20</sup>

<sup>&</sup>lt;sup>19</sup>Ministry of Communications and High Technologies of Azerbaijan. *First national telecommunications satellite*. [online]. [cit. 2014-05-22]. Available from:<a href="http://www.mincom.gov.az/projects/first-national-telecommunications-satellite/">http://www.mincom.gov.az/projects/first-national-telecommunications-satellite/</a>.

<sup>&</sup>lt;sup>20</sup>PARKS, L., SCHWOCH, J. 2012,p. 129-134.

# 6 Operators of mobile network in Azerbaijan and its comparative analysis

### 6.1 The established history of the mobile phone

In 1946, the idea of creating a mobile phone was put forward by the company AT & T Bell Laboratories. At that time, the company created the world's first radio telephone service. Installed in a vehicle to send the signal to the radio station and the ATS, it had the ability to make a call. However, this was done way too complicated. It also hampered negotiations with other sound waves. At the beginning of the 1960's, many companies thought it to be impossible to establish a brief telephone in air communication, that's why they refused to conduct research. However, AT & T Labes and Motorola reached success. The first call to the mobile phone was the beginning of a new era in the field of telecommunications. The height of this phone was 25 cm, width was 12 cm, thickness was 5 cm, and weight was 1 kg.

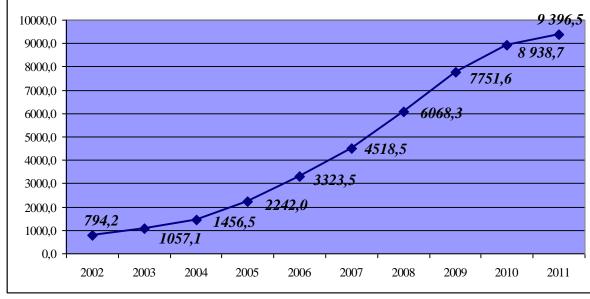
# **6.2** The role of mobile communications in the socio-economic life of Azerbaijan

Playing an important role in the socio-economic life of the Republic of Azerbaijan, the level of development in the field of information and communication is more clearly visible as compared with other sectors of the economy. After the oil sector in the country, which is considered a priority area of information and communication technologies, the country's socio-economic life has been rapidly developing in recent years.

In Azerbaijan, mobile communications is the fastest developing sector of the economy. According to the level of mobile penetration among the population, our country holds one of the leading positions among the states of the former USSR.

According to the UN International Telecommunication Union's information, the number of mobile subscribers in the world is 6 billion and 800 million. According to experts, in developed countries, subscribers of mobile operators among the population made up 93-95% in 2012. In Azerbaijan, this indicator is higher. Thus, according to

theinformation as of January 1, 2011, the number of subscribers of mobile operators in Azerbaijan made up 9 million 396 thousand and 500 hundred people.



Graph1: Number of mobile phone subscribers in Azerbaijan, 1,000 subscribers

Source: The State Statistical Committee of the Republic of Azerbaijan. *Telecommunication and post*. [online]. [cit. 2014-05-22]. Available from: <a href="http://www.stat.gov.az/source/communication/">http://www.stat.gov.az/source/communication/</a>>.

As it can be seen from the chart, the number of mobile phone subscribers in Azerbaijan in 2011 increased about 11-12 times as compared with 2002. The growth trend has lately continued to grow every year. This indicator is directly linked with the country's mobile phone operators' business activities.

When analyzing the activities of phone operators in the Republic of Azerbaijan, it is worth noting that mobile communication is very popular in the country, and the overall number of mobile phone subscribers significantly exceeds the number of fixed-line phone subscribers. This is mainly due to the wide coverage of the country's territory with mobile connection networks. At the same time, fixed-line communication in the country is relatively expensive, due to which the population of Azerbaijan prefers using mobile phones for both domestic and international calls.<sup>21</sup>

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<sup>&</sup>lt;sup>21</sup>The State Statistical Committee of the Republic of Azerbaijan. *Telecommunication and post*. [online]. [cit. 2014-05-22]. Available from: <a href="http://www.stat.gov.az/source/communication/">http://www.stat.gov.az/source/communication/</a>>.

Table 1: Number of mobile phone subscriptions in Azerbaijan in the period from 2004 to 2013

Mobile-cellular telephone subscriptions							
2000	2001	2002	2003	2004	2005	2006	
420 400	730 000	794 200	1 057 100	1 456 523	2 242 000	3 323 500	
2007	2008	2009	2010	2011	2012	2013	
4 519 000	6 548 000	7 757 120	9 100 113	10 120 105	10 125 200	10 130 102	

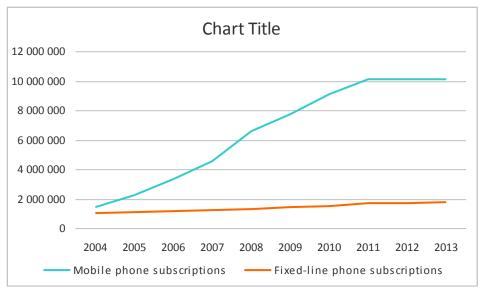
Source: ITU. *Statistics*. [online]. [cit. 2014-05-22]. Available from: <a href="http://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx">http://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx</a>.

Table 2: Number of fixed-line phone subscriptions in Azerbaijan in the period from 2004 to 2013

Fixed-telephone subscriptions							
2000	2001	2002	2003	2004	2005	2006	
801 200	864 800	926 000	941 366	1 013 400	1 094 200	1 176 976	
2007	2008	2009	2010	2011	2012	2013	
1 253 300	1 310 500	1 401 100	1 506 585	1 683 876	1 724 004	1 757 855	

Source: ITU. Statistics. [online]. [cit. 2014-05-22]. Available from: <a href="http://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx">http://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx</a>.

Graph2: Number of mobile and fixed-line phone subscriptions in Azerbaijan in the period from 2004 to 2013



Source: ITU. *Statistics*. [online]. [cit. 2014-05-22]. Available from: <a href="http://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx">http://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx</a>.

As we can see from the tables and chart above, both the number of mobile phone and fixed-line phone subscriptions has steadily been growing since 2004. However, the

greater growth than the number of fixed-line phone subscriptions. Thus, in 2004, the total number of mobile phone subscriptions in Azerbaijan made up almost 1.5 million, while the same figure for fixed-line phone connections slightly exceeded 1 million. At the same time, in 2013, the number of mobile phone subscriptions in Azerbaijan exceeded 10 million, while the same figure for fixed-line phone connections was slightly more than 1.75 million. The overall growth of mobile phone subscriptions in the period from 2004 to 2013 made up approximately 700%, while the overall growth of fixed-line phone subscriptions amounted to approximately 75%. Therefore, the pace of growth of mobile phone subscriptions exceeded the same pace rate for fixed-line phone subscriptions almost tenfold.

The difference in the growth pace of mobile phone subscriptions and fixed-line phone subscriptions testifies the great prospects of mobile phone operators on the territory of Azerbaijan. The far larger coverage of the Azerbaijani territory with mobile connectivity allows mobile operators offering a far wider range of mobile services to customers, thus only promoting further development of the mobile communication sector in the country. Also, expansion of the geographical coverage of Azerbaijani mobile operators brings significant yield to the state and the customers who seek better satisfication of services. However, despite the positive tendencies, it should also be mentioned that the growth rate of mobile phone subscriptions in the last two years significantly decreased. Thus, in 2012, mobile phone subscriptions overall grew by only 0.05% as compared with 2011, while in 2013, this figure grew by only 0.048% as compared with the previous year. The same figures for the same periods reached by fixed-line phone operators made up 2.38% and 1.96%, respectively. In my opinion, those trends testify that the market of mobile phone connection has already reached a high degree of saturation in the Republic of Azerbaijan, due to which its subsequent geographical and customer expansion is much complicated. At the same time, as fixed-line phone connectivity covers a far smaller range of customers, it has greater space for growth, especially taking into account the latest tendencies toward the reduction of operation and maintenance costs incurred by the Azerbaijani fixed-line phone operators.

Table 3: Number of mobile phone subscriptions per 100 inhabitants in Azerbaijan in the period from 2004 to 2013

Mobile-cellular telephone subscriptions per 100 inhabitants							
000	001	002	003	004	005	006	
,18	,91	,59	2,63	7,21	6,18	8,36	
007	008	009	010	011	012	013	
1,53	3,76	6,32	00,06	09,97	08,77	07,61	

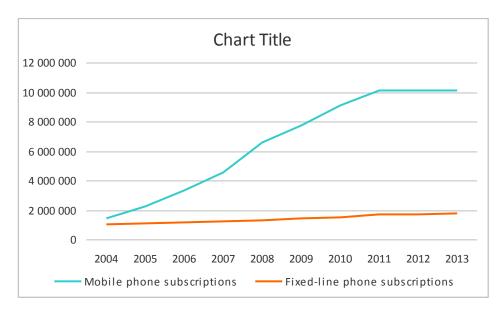
Source: ITU. Statistics. [online]. [cit. 2014-05-22]. Available from: <a href="http://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx">http://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx</a>.

Table 4: Number of fixed-line phone subscriptions per 100 inhabitants in Azerbaijan in the period from 2004 to 2013

Fixed-telephone subscriptions per 100 inhabitants							
000	001	002	003	004	005	006	
,87	0,55	1,18	1,25	1,97	2,78	3,58	
007	008	009	010	011	012	013	
4,29	4,76	5,59	6,57	8,30	8,52	8,67	

Source: ITU. *Statistics*. [online]. [cit. 2014-05-22]. Available from: <a href="http://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx">http://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx</a>.

Graph3: Number of mobile and fixed-line phone subscriptions per 100 inhabitants in Azerbaijan in the period from 2004 to 2013



Source: ITU. *Statistics*. [online]. [cit. 2014-05-22]. Available from: <a href="http://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx">http://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx</a>.

When the growth dynamics of mobile subscriptions in Azerbaijan per 100 inhabitants of the country, we can see nearly the same results as with the absolute growth dynamics. In the early 2000's, the number of mobile subscriptions per 100 inhabitants of Azerbaijan was considerably smaller than the number of fixed-line phone subscriptions per 100 inhabitants. This was mainly due to the narrow spreading of Internet connection in the country, and lack of quality mobile communication and telecommunications services provided by the local operators. Inhabitants of the country mostly preferred using fixedline telephones which were more cost-efficient, and allowed reaching a far wider target audience. However, the situation drastically changed in 2004, when the number of mobile subscriptions per 100 inhabitants exceeded the number of fixed-line phone subscriptions per 100 inhabitants by 44%, which can be seen from the tables and chart above. In the subsequent years, the difference in growth dynamics of mobile phone and fixed-line phone subscriptions per 100 inhabitants of Azerbaijan was only further growing, and mobile operators left their fixed-line phone competitors behind by rapidly increasing the territorial coverage of provision of mobile services, increased the offer of services, and ensured a higher quality of connection. As of 2013, the number of mobile phone subscriptions per 100 inhabitants in Azerbaijan made up 107.61, while the same figure for fixed-line phone subscriptions amounted to only 18.67, i.e. the number of mobile phone subscriptions per

100 inhabitants was 476% higher than the number of fixed-line phone subscriptions per 100 inhabitants.

The data given above testify that, as of today, the total number of Azerbaijan's citizens using the services of mobile phone operators considerably exceeds the number of people using fixed-line phones in their everyday life. This can be explained by several main reasons. First of all, the development of information and Internet technologies in recent years has significantly helped increase the coverage of the Azerbaijani territory with various up-to-date connectivity opportunities different from fixed-line phones. Thanks to this, the citizens of Azerbaijan have an opportunity to speak freely at considerable distances, without being attached to their fixed-line phones. Next, the quality and range of the services offered by the Azerbaijani mobile phone operators has lately been rapidly growing, thanks to which the local operators were able to considerably expand their customer base. It is worth noting that operators on the Azerbaijani market have lately been trying to always introduce technical and technological innovations introduced in the Western countries for the purpose of maximizing the quality of services they offer on the domestic market. Thus, Azerbaijani consumers are gradually increasing the rate of use of mobile phones thanks to the wide opportunities of communication and Internet connection offered by the Azerbaijani mobile phone operators. Finally, the prices for mobile phone operators' services have been significantly reduced in Azerbaijan in recent years thanks to the geographical expansion of the local operators' activities and the economies of scale reached by them. Thus, mobile talks are now much more accessible to the local population than before, and therefore people tend to use the services of local mobile phone operators for different purposes without spending any extraordinary amounts of funds.

Based on the latest trends in the Azerbaijani sector of telecommunications services, stable dynamics of mobile phone subscriptions should be expected, as the market is already significantly saturated as of today. Moreover, the growth rate of fixed-line phone subscriptions may even be higher than the one of mobile phone subscriptions due the former's low coverage of the Azerbaijani population. However, the expanded use of new technological achievements by the Azerbaijani mobile operators will allow maintaining their stable positions on the market, and will prevent people from opting toward fixed-line phones.

The mobile sector is rapidly developing new technologies, including the introduction of 3G and 4G services. There are 110 mobile phone users per 1,000 persons in Azerbaijan. The country's ICT sector and private sector development are closely supported.

Approximately 80-90% of the population uses mobile phones. The masses of mobile intensifying the competition between mobile operators, applies them to a more modern technology, as well as paving the way for the rise of mass mobile networks. There are 3 top mobile operators in the Republic of Azerbaijan: "Bakcell LTD", "Azercell" and "Azerfon MMC".

#### 6.2.1 BakcellLTD

**Bakcell LTD was** founded in 1994, and it is the first company to provide mobile services in the country. in 2012 In order to provide the most advanced communications services to subscribers to the development of their network investments through the Bakcell network is currently 95% of the population, the country covers 82% of the land area. To ensure high-speed Internet services, the entire network is based on EDGE technology. Actually, it has more than 2,000 base stations and provides high-quality communication in remote areas. At present, the number of active subscribers of Bakcell is 2.5 million people.<sup>22</sup>

In 2009, it was awarded "the Telecommunication Company of the Year" by the Caspian Integration Business Club. In March 2010, Bakcellwon "The fastest growing companies" National award. In 2010, the companywon the "TechnologicalLeader of the Year" and the "Corporate Social Responsibility Leader of the Year" Azeri Business Award nominations. Bakcellis one of the Azerbaijani companies that invest most in care and support for children.

At present the share of Bakcell is more than 35% on mobile market. Thus, the company has the largest network of base stations of up to 2,500 units on the market of Azerbaijan. These stations are able to serve both 2G and 3G standards.

The marketing strategy of Bakcell focuses on promotion of the mobile operator's services among corporate customers. Although Bakcell offers a wide range of services

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<sup>&</sup>lt;sup>22</sup>Backcell. *History*. [online]. [cit. 2014-05-28]. Available from:<a href="http://www.bakcell.com/en/company-history">http://www.bakcell.com/en/company-history</a>.

among all customer segments, its key priority has lately become the business-to-business segment. This is mostly due to the high competition from other major operators, and the company's lack of resources to overcome Azercell in the competition for market share expansion. Therefore, the new products developed and promoted by Bakcell on the market are mainly aimed for corporate customers, while the company continues maintaining its relations with individual customers, and offers standard services to them.

As of today, Bakcell's marketing strategy on the corporate segment includes several key directions followed by the company's management with an aim to become the largest mobile operator providing telecommunications and mobile communication services to Azerbaijani firms and corporations. These key directions are as follows:

- Development and implementation of products for reaching the goals of active base, income and benefits to the corporate market (under the subbrand Gold);
- Development of the management-to-management segment;
- Development and implementation of segmented offers for the corporate customer base of Gold;
- Development and implementation of specific advertising campaigns for the corporate market;
- Analysis of the competitors' activities and development of an active strategy against competition.

As we can see from the information above, Bakcell aims to use a profound segmentation of the corporate market of mobile services for the purpose of providing individually crafted services to different companies.

In order to fulfill the needs of corporate customer to the largest extent possible, Bakcell actively promotes provision of Internet and wi-fi connection services in complex packages together with the services of mobile phone communication. Such complex packages also include the possibility of sending corporate newsletters to other corporate and individual mobile phone users for the purpose of advertising a particular company's products or services or simply informing its customers of any new offers or developments on the market. This is an important marketing feature which allows Bakcell's corporate customers being more effective of the market of telecommunications and mobile communication.

Despite the fact that Bakcell largely focuses on the corporate segment of the telecommunications market, the mobile operator has lately been actively undertaking measures in order to expand its customer base on the segment of individual clients. The company's strategy on this segment assumes cooperation with other companies from different spheres of the national economy for the purpose of reaching a high synergic effect when selling mobile communication services. As it has already been stated earlier in this thesis, Bakcell doesn't provide well differentiated mobile communication services to individuals due to the company's major focus on the corporate segment. Thus, the company doesn't have many different packages for different groups of customers (for instance, businessmen, young people, retirees), and doesn't provide any comprehensive tariff segregation of its customer packages. However, Bakcell tries to compensate this by running campaigns for mutually beneficial promotion of products together with some Azerbaijani banks and companies running their activities in other sectors of the national economy.

Thus, as of today Bakcell has a joint promo action with the Azerbaijani bank Amrahbank, under which each of the bank's customers receiving a special debit card "Fankart" gets free minutes of communication for calls to all operators within Azerbaijan. This promo event is mainly aimed at employees and officers of the bank for the purpose of covering at once the corporate and the individual segments in the bank sector of mobile communication users.

Also, Bakcell currently runs a joint promo event with the Bank of Baku. Customers having contract communication within the network of Bakcell have an opportunity to receive loans from the Bank of Baku within short periods of times, without any delay in their provision, and with enhanced conditions of bank services provided for servicing such loans. Thanks to this, interest in Bakcell's services is raised among individual customers, as loans to individuals become far more popular among the Azerbaijani population.

Also, Bakcell organizes joint promo events with different establishments for the purpose of attracting young people to the company's products. Thus, as of today, Bakcell has mutual discount policies with several key Azerbaijani stores selling cell phones and smartphones, with a network of cinemas, and so on. Finally, Bakcell holds some quite interesting promotional events such as free minutes to the fans of Manchester United for each of the team's victories in the Premier League.

AsBakcell has agreements with 256 operators in 153 countries, Bakcell subscribers can use roaming services for voice and SMS roaming in Europe, Asia, North and South America, Australia and Africa.

#### **6.2.2** Azercell Telekom

**AzercellTelekom**was founded on January 19, 1996. The first founders of the company in Turkey are "Turkcell Communication Services, Inc» and the Ministry of Communications of the Republic of Azerbaijan. The company started its operations on December 15, 1996, postpaid system subscribers (subscription) based on the mobile services offered. In 1998, the pre-payment system was introduced.

The company established its quality management system in 2000, and on December 7, 2000, the system received the Certificate of Compliance with the International Standard ISO 9001. In 2003, the same standard on the company's quality system according to the updated version of the 2000, and on 15 January 2004, it obtained ISO 9001:2000 certificate of conformity.<sup>23</sup>

Standard CIP within the company meets all the 12 criteria and Standard CIP in the world, working with more than 36,000 companies included in the list. Within the company's scope of activity, 99.7% of the population, 80% of the republic's territory (except Nagorno-Karabakh occupied by the Armenian armed forces) was included. In Azerbaijan, Azercell has 16 mobile switching centers (MSC), 13 major stations, controller (BSC), 2 spare subscriber database (HLR) and a 1,700-capacity main receiving station (BTS).

In 2012, around 1,000 new radio base stations werebuilt, the number of customer service centers reached 54 (in 32 regions).

I want to note that Azercell is the second largest taxpayer after the oil sector in the country. Throughout the course of its activities, the company paid more than U.S. \$ 780 million of taxes to the state budget and off-budget funds.

Azercell is the largest mobile operator covering over 80% of the Azerbaijani market of telecommunications and mobile communication services. Thanks to the large

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<sup>&</sup>lt;sup>23</sup>Azercell Telekom. *About Company*. [online]. [cit. 2014-05-28]. Available from:<a href="http://www.azercell.com/ru/company/">http://www.azercell.com/ru/company/>.

geographical coverage of Azerbaijan's territory and the wide number of customers using the services of Azercell, the company provides services on all customer segments without focusing on any top-priority segments. The company targets at once corporate and individual customers, and provides a wide range of services to all of them. The company also has different tariff levels applied to calls, messages and Internet services both on the domestic market and for roaming. Thanks to the great economies of scale reached by Azercell, the company is able to allocate its resources to different marketing campaigns and promotional activities, thus reaching a high degree of differentiation of the corporation's offers on the telecommunications and mobile communication market.

On the individual customer segment, Azercell offers over ten different tariff packages, including with their segregation for businessmen, students, old people, people using mobile services mainly for Internet connection purposes, people mostly calling abroad, etc. Moreover, the company offers four different bonus programs for its customers based on the time they spend on calls within the Azercell network or the time for which they have used the services of Azercell. Such loyalty programs are especially popular on the middle class segment which represents the majority of Azerbaijan's population, and help maintain the corporation's leading positions on the Azerbaijani telecommunications and mobile communication market.

As for marketing campaigns aimed for individual customers, the company has contracts with producers of smartphones such as Samsung and Huawei under which customers awarded with specific bonuses within bonus programs have an opportunity to receive the newest models of the aforementioned manufacturers' phones for free as a gift.

The company's marketing differentiation on the corporate customer segment is considerably smaller than on the segment of individual customers. There is only one preferential corporate tariff provided to corporate customers – "Corporate Region". This program can be used by companies having their network of offices and branches within a single administrative region of Azerbaijan, in which case they get significant discounts on all calls both within the Azercell network and to other operators' subscribers. Also, the company provides its corporate customers with an opportunity to purchase cell phones directly from it at reduced prices, which allows significantly sparing the funds of those companies where there is a need to provide many employees with mobile phone communication connection.

Otherwise, the company's offers to the corporate sector are relatively restrained and generally assume the same conditions for all corporations seeking provision of mobile communication services. However, thanks to the beneficial conditions offered by Azercell, the company's wide geographical coverage of the Azerbaijani market, and the quality of services offered by the mobile operator, Azercell still remains a major player on the corporate segment.

Azercell's specific feature on the Azerbaijani market of telecommunications and mobile communication is the non-standard services the company offers. Thus, as of today, such services include fixed GSM, bulk SMS (which is especially beneficial to corporate clients), M2M service, enhanced online banking capacities, and car fleet management by using GPS systems.

Overall, we can see that Azercell is the major mobile operator on the Azerbaijani, and the company is able to maintain its leading positions both on the individual and corporate segments. However, the company's marketing strategy rather focuses on individual customers, while marketing efforts on the corporate segment remain considerably narrower.

#### 6.2.3 Azerfon MMC

On March 21, 2007, Azerfonstarted working with the brand "Nar Mobile", and within a short time, it was a leading company in the field of telecommunications and mobile communications.

It should be mentioned that the trademark Nar was created as a symbol of commitment to the rich cultural heritage and modern life.

The network covers 80% of Azerbaijan. At present, it has 2 million subscribers. In order to provide convenience for customers in Azerbaijan, Azercellhas begun to provide services based on 3G (third-generation) technology (video call, mobile TV, etc.).<sup>24</sup>

Noted, Bakcell LTD, Azercell Telekom and Azerfon MMC offer cell (mobile) phone numbers in order to provide transportation services to the joint work carried out by the mobile operators, the number of legal normative documents adopted in connection with

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<sup>&</sup>lt;sup>24</sup>Nar Mobile. *History*. [online]. [cit. 2014-05-28]. Available from:<a href="http://narmobile.az/aboutus/aboutcompany/history/">http://narmobile.az/aboutus/aboutcompany/history/>.

the introduction of the transport service, the equipment required for its activities, the center of the base system and equipment, as well as the networks of mobile operators.

Nar Mobile's marketing strategy focuses to the largest extent on the individual customer sector of the Azerbaijani telecommunications and mobile communication sector, while the corporate sector is not widely covered by the company, and it rather remains beyond the scope of the mobile operator's key strategic priorities.<sup>25</sup>

When speaking of the individual corporate sector and its coverage by the services provided by Nar Mobile, it should first of all be mentioned that the company has a wide number of tariff packages offered to its individual customers. The packages offered by Nar Mobile on the market are well differentiated in terms of the prices for calls within the country and abroad, and are also diversified for calls within the network and to other mobile operators.

A particularly important detail in the marketing strategy of Nar Mobile is that the corporation's key customers are young people, and the company's marketing efforts launched on the market are mainly aimed for students or other young people. This can be seen from the tariff packages and bonus programs offered by Nar Mobile on the market.

Nar Mobile offers different special programs for young people such as various combinations of unlimited calls and cheap SMS or Internet connection, free calls at night, free calls within Nar Mobile's network between subscribers joining a single group (for instance, for friends or families), tariffs where fees are charged for each second of talk, and not for entire minutes, etc.

Thanks to the wide differentiation of its products for young people, the company reaches a great marketing effect on the Azerbaijani telecommunications and mobile communication market. Young customers are mainly attracted by the fact that they get an opportunity to make cheap calls to their friends with a wide choice of the time or communication method most suitable for them.

Finally, the company provides special tariffs for users of smartphones interested not only in mobile communication, but also in the connection to the Internet, and the opportunities reached thanks to online connectivity. As such users of smartphones are mostly young people, such marketing orientation mostly focuses on them as target customers.

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<sup>&</sup>lt;sup>25</sup>Nar Mobile. *History*. [online]. [cit. 2014-05-28]. Available from:<a href="http://narmobile.az/aboutus/aboutcompany/history/">history/</a>.

However, despite the deep differentiation of services provided to individual customers, Nar Mobile's marketing campaigns launched in Azerbaijan aren't well differentiated, and in fact are much restrained by the company's resources available for allocation. For instance, as of today, Nar Mobile has one major marketing campaign aimed at attracting individual customers. The mobile operator offers an opportunity to get the second mobile phone number for free when purchasing a package, and talks between such two numbers can be done at very low prices.<sup>26</sup>

On the corporate customer segment, Nar Mobile's marketing activities are far less intensive. Thus, the company doesn't provide any tariff differentiation to its corporate customers, and its marketing campaigns and promo events are mainly limited to the possibility of sending newsletters, and reduced roaming prices for companies mainly focusing on foreign cooperation in their activities. Due to this, the company's position in the corporate segment of the Azerbaijani telecommunications and mobile communication market remains rather weak, and Nar Mobile's activities on this segment are not a priority for the corporation.

Thus, overall, it can obviously be stated that Nar Mobile's marketing activities are mainly aimed at individual customers, where the company indeed runs effective marketing campaigns, while the segment of corporate customers is only seen as an addition to the corporation's main activities by Nar Mobile's management.

# **6.3** Comparative analysis of mobile phone operators

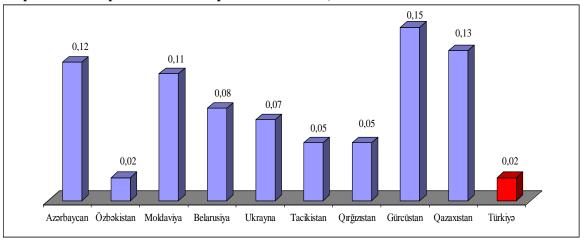
Mobile operators try to provide advanced services to subscribers. They always try to provide quality communication. Every operator of mobile social networks has aFacebook and Twitter account, and there are a lot of customers' questions answered here. However, there are very few who are interested in the services and prices of mobile operators, always new services of the campaign. However, it is proven that the mobile operator pages on social networks. Many people in connection with any order of service, shift from one tariff to another tariff, any specific service activation / deactivation, they try

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<sup>&</sup>lt;sup>26</sup>Nar Mobile. *History*. [online]. [cit. 2014-05-28]. Available from:<a href="http://narmobile.az/aboutus/aboutcompany/history/">history/>.

to learn the terms of a new campaign in social networks as well as customer services and telephone centers.<sup>27</sup>

In Azerbaijan in 2012, mobile phone operators carried out a comparative analysis with other countries, we call mobile phone, domestic prices calculated in U.S. dollars in the general survey carried out separately for each country.



Graph4: Domestic price of mobile telephone conversation, in U.S. dollars

Source: Azadliq. Fire in the price of mobile services. [online]. [cit. 2014-05-28]. Available from: <a href="http://www.azadliq.info/qtisadiyyat/299-qtsadyyat/27933-azerbaycanda-mobil-xidmet.html">http://www.azadliq.info/qtisadiyyat/299-qtsadyyat/27933-azerbaycanda-mobil-xidmet.html</a>.

**Note:** The study is carried out in the analysis of the mobile operator of Azerbaijan and Turkey to the above diagram, we have added to the conversation in the domestic mobile phone. Here, you can clearly see that the price of a minute of talk on the mobile phone in Turkey is cheaper than in Azerbaijan.

Thus, the price per minute of mobile phone talk for a minute about 0.12 in the case of U.S. dollars, we would be closer to the political and economic situation in the former Soviet states of Uzbekistan is \$ 0.02, in Moldova is \$ 0.11, in Belarus is \$ 0.08, in Ukraine is \$ 0.07, in Tajikistan and Kyrgyzstan is \$ 0.05, İn Georgia is \$ 0.15, in Kazakhstan is \$ 0.13. If we look at the diagram, we can see that the highest rates of mobile phone conversation is in Georgia, Azerbaijan, Kazakhstan, and Moldova but the cheapest is in the Central Asian states, Uzbekistan, Tajikistan and Kyrgyzstan.

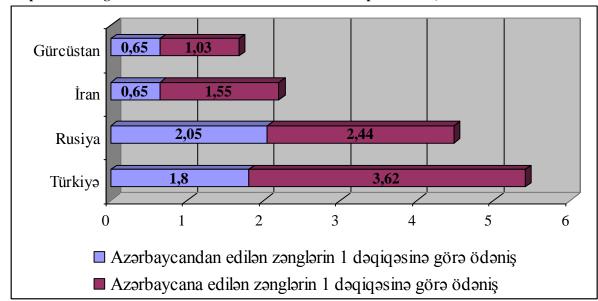
The results of research of mobile communications market show that, due to high rate of mobile phone in 2012, a one-minute call would cost about 12 cents. However, the

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<sup>&</sup>lt;sup>27</sup>Texnopress. *Home*. [online]. [cit. 2014-05-28]. Available from:<a href="http://www.texnopress.com/mobil-rabite-istifadecilerimizin-ve-mobil-operatorlar-haqqinda.html">http://www.texnopress.com/mobil-rabite-istifadecilerimizin-ve-mobil-operatorlar-haqqinda.html</a>.

prices of mobile operators differ significantly from each other. Thus, the mobile operators currently operating in the country prefer the company in the market if the share of the lowest tariffs for subscribers of Nar are applied. However, there are still some problems in services provided by the mobile operators to customers.

For example, each of the three mobile operators operating in Azerbaijan - Azercell, Bakcell and Azerfon only operator offers discounts for local calls. Calling to another operator is much more expensive for the customer. Due to this, most citizens are forced to use numbers in each of the three operators. This means additional costs for citizens.



Graph5: Roaming services and international calls in Azercell -specific rates, in U.S. dollars

Source: Azadliq. Countries and prices. [online]. [cit. 2014-05-28]. Available from: <http://www.azercell.com/en/personal/roaming/roaming\_prepaid/roaming\_countries\_prepaid/#.VCq1 m\_l\_v1g>.

Taking into account the roaming services and international calls glancing at the prices specified in the tariffs, we can see that it is more expensive. For example, Azercell uses the services of the operator's roaming customers for the calls at \$ 1.80, to \$ 2.05 in Russia, Georgia, Iran, and the fee was \$ 0.65.

The cost of calls from Turkey to Azerbaijan is \$ 3.62 per minute, from Russia is \$ 2.44, from İran is \$1.55 but from Georgiais \$ 1.03. Every minute of local calls to other

countries, according to the company's subscribers, costs \$ 2.05 to \$ 2.30, depending on the country's fee for the calls.<sup>28</sup>

Bakcell customers are required to pay U.S. \$ 0.47-0.64 per minute to call to international numbers. If you are a rich former Soviet Union and the Baltic countries amounted to \$ 0.47 per minute, to \$ 0.55 Turkey and Iran, Europe, America and other countries, to \$ 0.65. Bakcell subscriber roaming cost \$ 2.30 to \$ 6.55 per minute of talk depending on the country.

In Azerfon, international calls cost just as in Bakcell. According to the minutes of call, depending on the country, the subscriber is required to pay U.S. \$ 0.47-0.64. While roaming service connection for outgoing calls depending on the country is from \$ 1.60 to \$ 4.5, for incoming calls is from \$ 0.65 to \$ 2.80, but for SMS messages is from \$ 0.32 to \$ 1.28.

Despite the global financial and economic crisis, communication services for mobile operators around the world are increasing their income. According to the statistical report of the Organization for Economic Cooperation and Development, the greatest income from mobile communication in the world is reached by the U.S., Canada, and Spain. According to the report, although prices for mobile phones become cheaper, services are becoming increasingly popular.

However, there is a huge difference between the prices for mobile communication services in different countries. These services in Europe are considerably cheaper than in the U.S. and Canada. In particular, users in Denmark, Finland and Sweden make minimum payments for mobile communication. However, these countries do not hurry to give users a complete in-patient communication. According to estimates, each mobile phone user acceptson the average 780 calls, 400 SMS and 8 MMS per month.

The term of the contract signed by the customer, operator of Europe's leading countries in this period of time, usually doesn't exceed 2 years. According to the agreement, the customer must use the services of the same operator. As for tariffs, for example, in Germany, paying 22-29 euros per month allows getting unlimited calls to all destinations. In this case, several tariff packages are offered, according to the web traffic

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<sup>&</sup>lt;sup>28</sup>Azadliq. *Countries and prices*. [online]. [cit. 2014-05-28]. Available from: <a href="http://www.azercell.com/en/personal/roaming\_prepaid/roaming\_countries\_prepaid/#.VCq1m\_l\_v1g">http://www.azercell.com/en/personal/roaming/roaming\_prepaid/roaming\_countries\_prepaid/#.VCq1m\_l\_v1g</a>

and SMS as well as other operators connected calls. Even the customer with his choice can get free calls with one of the other operators.

There are 4 mobile operators in Germany and in all areas of the country, there are high-quality mobile communication services. In the case of calls to foreign countries, the price makes up about 50 cents per minute, but there are special discounts for European countries and Turkey. However, if the customer does not want to sign a two year contract with any mobile operator, very cheap rates will be used in this case. A total of 5 cents per minute will be charged for a call. And 19 cents per minute will be charged for calls to other countries. Roaming services are provided to those who do not pay for incoming calls.

The United States is one of the countries in the world that provide the cheapest mobile telecommunications services, and domestic and international calls are charged according at minor rates. Most operators offer unlimited calls in exchange for a few dollars per month. The price of international calls, depending on the package of your choice can be arranged at 1 cent per minute. Sometimes, in accordance with the customer's choice, local calls are free-of-charge, but international calls are a bit more expensive.

According to the Azerbaijani mobile operators and their comparative analysis, it has become clear to us that each of the 3 mobile operators in the country operating in the domestic and international calls and SMS service is much more expensive compared to other countries.

The marketing activities run by Bakcell, Azercell and Nar Mobile significantly differ, which is deeply rooted in each company's own vision of the Azerbaijani telecommunications and mobile communication market, and the customer segments each of them targets as a key priority in its operational activities.

For Azercell, there is no distinct segregation of different customers in terms of their priority or attractiveness for the company. The mobile operator holds the greatest market share in Azerbaijan, and has the required financial and human resources in order to be able to target different segments of customers at once with differently vectored marketing strategies, campaigns and events. For instance, Azercellpursues its goals at once on the segments of individual and corporate customers, and allocates significant amounts of funds to finance all such marketing campaigns. The company's offers to the corporate segment are not well differentiated though, and here, the mobile operator rather relies upon the quality of its services offered on the market, and the scope of geographical coverage in

Azerbaijan. At the same time, the company' marketing campaigns run on the individual customer segment are well differentiated: Azercell not only offers different tariff programs and individual packages to its customers, but also runs various promo events for the purpose of attracting new clients and raising the interest and loyalty of the old ones.

In contrast to Azercell, Bakcell to a large extent focuses on the corporate segment of the Azerbaijani telecommunications and mobile communication market, and sees corporate customers as its top-priority target customers. Due to this, the company's marketing efforts mainly focus on the corporate customer segment. The company offers different tariff plans and product packages to corporate customers, at the same time constantly organizing various promotional events and campaigns in order to further penetrate the corporate customer segment. However, due to such focus on the target market, the company doesn't run any massive marketing campaigns or events aimed at the individual customer segment, which is rather regarded as secondary by the corporate management of Bakcell. Still, the company's promotional activities in this field have lately been quite successful, even despite their relatively small scale.

Nar Mobile differs from the two previous companies due to the fact that it targets the individual customer segment of the Azerbaijani telecommunications and mobile communication market, largely focusing on young people. The company's marketing activities on the corporate segment are the weakest as compared with Azercell and Bakcell, and are in fact limited to basic packages offered to all companies on the same terms and conditions. On the individual customer segment of the market, the company covers the entire range of possible audience, but its products are especially well differentiated for young people. In contrast to Azercell and Bakcell, Nar Mobile stresses on the need to provide young people with permanent online connectivity and the ability to reach each other at the lowest price. Thanks to this, the company has stable positions in its target market niche, but considerably loses to Azercell and Bakcell in terms of the aggregate share on the Azerbaijani telecommunications and mobile communication market.

It is worth noting that only Nar Mobile has comprehensive product differentiation within its target market segment: the company mainly focuses on the needs and wants of young people, at the same time considering other customers as secondary in its operational activities. In the case of Azercell and Bakcell, they also have their target market segments, but fail to further comprehensively differentiate them for the purposes of marketing.

Azercell simply covers all ranges of customers, while Bakcell tends to provide the same services to all companies, regardless of their target industry, market sector, and so on. This testifies that the companies prefer using their competitive advantages currently available in order to maintain their market shares, while their marketing strategies are far from being perfect.

Another important aspect in the marketing activities of the three Azerbaijani operators is that they do not have any large-scale marketing programs for retirees or people interested in calls abroad. Retirees may become an important segment of the customer market, and therefore, in my opinion, they should be targeted by the Azerbaijani mobile operators. The roaming functions offered mainly assume the same tariff grids, without any special promo events or bonuses. This is a major drawback of the three mobile operators, as calls abroad represent a very attractive telecommunications and mobile communication market niche, and therefore should be targeted as a key segment.

Finally, in my opinion, in the near future, all the three operators of mobile communication in Azerbaijan should focus on the implementation of new mobile communication opportunities, such as the 4G connectivity or satellite communication which currently remain unaccessible for most people inside the country. The rapid development of new technologies in telecommunications and mobile communication obviously proves that those segments may become crucial already in the near future.

# 7 Comparative analysis of mobile operators network of Azerbaijan and Turkey

In order to carry out a comparative analysis of mobile operators in Azerbaijan and Turkey, we first conducted an analysis of the most advanced mobile operators and mobile operators, and finally chose Azercell Telecom MMC and Turkcell mobile operators. We made an analysis of their role and position in the domestic and foreign market, priority areas and competency.

#### 7.1 The predominance of mobile operator Azercell Telecom

In 2011, for its exceptional contribution to the development of the telecommunications sector, the company gained "The best PR service" award, "the Company of the Year" National Business Award. In 2011, the company won the European Business Assembly (EBA) award established by the prestigious Socrates Award, and the International Business Award (International Business Awards - Stevie). The company was also the first corporation in the service sector, which is considered authoritative quality certification EN15838 Customer Contact Center (Customer Contact Center) mark of the region.

It should be noted that Azercell's current investor is Fintur Holdings B.V company.

Fintur Holdings BV company TeliaSonera (58%) and Turkcell (42%) joint venture companies. The main founder of the company, the company TeliaSonera Finland, Sweden, Spain, Turkey, Russia, Estonia, Nepal and other countries in more than 20 countries, and the total number of branch-plant serves a population of 460 million people. TeliaSonera has a strong position in the field of mobile communications in Eurasia, is one of the leading telecommunications holdings.

#### 7.2 The advantages of mobile operator Turkcell

Turkcell is the leading GSM operator in Turkey and one of the largest operators in Europe. Turkcell is the first operator of Turkey's GSM, 2G and 3G. The company provides

services using GSM 900 technology. As of March 31, 2006, the number of Turkcell's subscribers reached 36.3 million. The company makes a profit of U.S. \$ 17.1 per subscriber per month. The rate of speech is 109.2 minutes per month per subscriber.

Note: There are 4 private companies that offer services for mobile communications in Turkey: Turkcell, Telsim, Aria and Aysel.<sup>29</sup>

On 27 April, 1998, Turkcellsigned a 25-year GSM license agreement with the Ministry of Transport. Turkcell's subscribers reached 34.3 million as of March 31, 2010.

Turkcell is Turkey's leading operator in the region with the position at the beginning of 2003, was a member of the GSM Association, a private Cabinet. This organization, along with Turkcell Vodafone, Orange, NTT DoCoMo, AT& T Wireless has the world's largest GSM operators. 27.05% of Turkcell's shares in Cukurova group, 37,09% by Sonera Holding, 17.59% of the publicly traded, 13.22% of Alfa Telecom, 6.04% by MV Group 0, is 01% of the other partners.

As of March 31, 2008, Turkcell covers 81.1% of Turkey, and the total population coverage is 98.12%. OnJanuary, 2006 from Turkcell 491 operators in 209 countries with 240 operators in 90 countries, with international roaming and international roaming service have GPRS.<sup>30</sup>

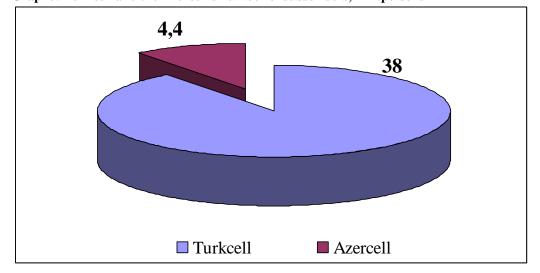
Unlike Turkcell, Azerbaijan's leading mobile operator Azercell has 4.4 million subscribers.

The population of the country is directly linked with the number of subscribers. Therefore, subscribers of Turkcellexceed the number of subscribers of Azercell. However, when running a comparative analysis of the number of subscribers and the number of people, we can clearly see that Turkcell covers 98.12% of the total population, while Azercellcovers 99.7% of the country's population.

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<sup>&</sup>lt;sup>29</sup>Turkcell. *About us.* [online]. [cit. 2014-05-28]. Available from:<a href="http://www.turkcell.com.tr/en/aboutus">http://www.turkcell.com.tr/en/aboutus</a>.

<sup>&</sup>lt;sup>30</sup>Turkcell. *About us.* [online]. [cit. 2014-05-28]. Available from:<a href="http://www.turkcell.com.tr/en/aboutus">http://www.turkcell.com.tr/en/aboutus</a>.



Graph6: Turkcell and the Azercell's number of subscribers, mln.persons

Source: Azercell. *Home*. [online]. [cit. 2014-05-28]. Available from: <www.azercell.com>.,Turkcell. *Home*. [online]. [cit. 2014-05-28]. Available from: <www.turkcell.com>.

At present, Turkcell has agreements in 209 countries, whileAzercell— in 68 countries. This means that Azercell's and Turkcell's subscribers can use roaming services when traveling abroad. There are different prices for roaming services in different countries.

It is worth noting that the ability of differentiating both companies is its marketing assets, the characters and their participation in the market, or the distribution network, or post-sale service. The distinctive capability is a key factor in its ability to be used on the market. For this purpose, each of the more simple methods of service to the customer prior to the submission should be selected and used to explain the rules.

To connect to mobile operators Azercell roaming dial \*135\*1#YES, in order to deactivate the service dial \* 135 \* 0 # YES

#### Roaming dialing rules:

- Number, and dialing rules remain unchanged;
- The phone numbers dial in the international format: + country code, area code and telephone number;
- Customer Service dialing: +994502002000 (The price for the relevant country is equal to the call to Azerbaijan).

However, even as compared with Turkey's largest mobile operator Turkcell, Azercell's international call pricesare more expensive.

#### Note:

- Regardless of the direction of outgoing calls, the interval is 60 seconds, but for incoming calls, the calculation interval is 1 second;
- Rates are valid only in the case of collection of recorded calls: access code, country code, area code (or operator code), number.

In developing its marketing strategy, each operator first has to determine the scope of interest of consumers, and provide high quality service. To do so, customers are offered discount packages. Thus, as proposed by the operator Turkcell, subscribers are entitled to use the preferential tariff packages.

#### Turkcell's proposed preferential tariff packages:

- Europe, 1 hour U.S. \$ 5.05;
- American, 1 hour U.S. \$ 2.52;
- Cyprus, 1 hour U.S. \$ 10,11.<sup>31</sup>

InAzercell, incoming calls from Europe to Azerbaijan cost of U.S. \$ 3-5 for a minute. An incoming call in roaming for mobile subscribers in the country in total costs U.S. \$ 1-1.5.

In addition, with Azercell SMS service in roaming, messages can be sent and received.

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<sup>&</sup>lt;sup>31</sup>Turkcell. *To use your phone abroad without leaving What DO I DO?*[online]. [cit. 2014-05-28]. Available from:<a href="http://www.turkcell.com.tr/bireysel/Sayfalar/yurtdisi/yurtdisindakullanim.aspx">http://www.turkcell.com.tr/bireysel/Sayfalar/yurtdisi/yurtdisindakullanim.aspx</a>.

Table 5: Price for sending an SMS with Azercell and Turkcell mobile operators. in U.S. dollars

Country	Operator	The price for sending an SMS withAzercell	The price for sending an SMS with Turkcell
Turkey	Vodafone	0.44	0.13
	AVEA	0.25	0.13
	Turkcell	0.22	0.13
Kazakhstan	Kcell	0.11	0.13
	Beeline/Ka rtel	0.12	0.13
Uzbekhistan	Unitel/Bee line	0.38	0.13
	Ucell	0.11	0.13
Iran	MTN	0.25	0.13
	Irancell		
	MCI	0.31	0.13
Georgia	Beeline/M obitel	0.19	0.13
	Geocell	0.11	0.13
Russian	MegaFon	0.19	0.13
	MTS	0.19	0.13
	Rosteleco m	0.12	0.13
Ukrainian	Astelit - Life	0.25	0.13
	Kyivstar/B eeline	0.38	0.13
	UMC/MT S	0.38	0.13
UAE	Dubai Holding	0.63	0.13
G A III. G	Etisalat	0.38	0.13

Source: Azadliq. *Countries and prices*. [online]. [cit. 2014-05-28]. Available from: <a href="http://www.azercell.com/en/personal/roaming/roaming\_prepaid/roaming\_countries\_prepaid/#.VCq1">http://www.azercell.com/en/personal/roaming/roaming\_prepaid/roaming\_countries\_prepaid/#.VCq1 mlv1g>.

Turkcell. To use your phone abroad without leaving What DO I DO? [online]. [cit. 2014-05-28]. Available from: <a href="http://www.turkcell.com.tr/bireysel/Sayfalar/yurtdisi/yurtdisindakullanim.aspx">http://www.turkcell.com.tr/bireysel/Sayfalar/yurtdisi/yurtdisindakullanim.aspx</a>.

*Note:* unlike in Azercell, inTurkcell, the price for sending an SMS in all directions remains the same.

If we look at the comparative analysis of roaming services mentioned above, we can see that the price of Azercell is more expensive.

# 8 Research marketing network in mobile communication

Exchange is the process of identifying the needs of consumers in order to effectively carry out the requirements of the appropriate products, product marketing, delivery, evaluation, organization before the sale and after-sales service and advertisement is required to be made by all of these marketing activities.

The main purpose of marketing is the analysis of market conditions, ways and methods of production of goods to the market development and sales, as well as increased activity of the enterprises, provision of movement of marketing products from the producer to the consumer with optimal speed. On the one hand, optimal exchange means effective implementation, but on the other hand, the full and timely payment needs to be understood by the manufacturers.

The management process of marketing is defined as follows:

- Analysis of market opportunities;
- Selection of target markets;
- Development of marketing complex;
- Implementation of marketing activities.<sup>32</sup>

#### 8.1 The place and role of marketing in the system of market economy

The administrative-command economic system that took place a long time and now another, transition to a modern market economy system, the main content of the current period of economic and social development, as well as the solution of many important problems is also required.

It should not be overlooked that the present transitional period on the one hand can be characterized as local, but on the other hand as global. At the same time, difficult road for a long time in the market economic system it has a lot of difficulties.

In addition, it should be noted that the basis for the development of market relations, definition of key terms, subject of market has to be free from all political and economic points of view. At the same time, the market itself requires economic freedom,

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<sup>&</sup>lt;sup>32</sup>IMRANOV, A. Marketing management, p. 12

free choice and equality of competition. Therefore, it is necessary to strictly comply with these terms. Otherwise, you will not get any success.

### 8.2 To determine the market value of marketing

The main objective of the study is the determination of the market value of marketing. When we speak about the volume of market, we mean the farm products with different price level and the rate of the sales volume. The size and quantity of the proposed product market is characterized by the requirements of buyers. It is always determined by the quantity and quality indicators, namely the volume sold, it is expressed in terms of the production value and kind.

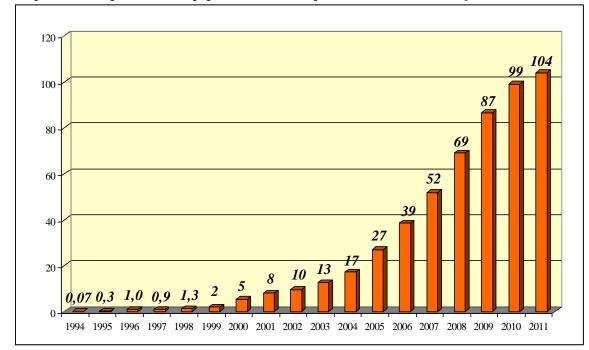
At the time of the appointment of the national commodity market, products "appears" that is used in the production concept, the product of the amount produced in the country of export and import gap is defined as the total amount of the product. Two levels are distinguished the volume of market.

The potential volume of the market is regarded as its true size. Individual and social demands of the market potential are determined by the level of product sales and corresponding displays.

The real level of the market may not be appropriate to the level of its potential. In determining the volume of the market, a great importance is played by time and spatial factors, they should also be taken into account.

Marketing research helps identify the areas of potential business development. When they decided to access new markets, new products, brands, change, channels and methods of applying the progress of goods, sales promotion policies and methods of forming the clients, the company's products (services) should be made in determining prices.

Each company is based on relationship marketing, because it is trying to establish closer relations with customers. Maintaining relationships over the long term is beneficial for both sides. The creation of a new strategy, as well as the development of new approaches to the overall strategy may be necessary.



Graph7: Per 100 persons of the population of mobile phone numbers in Azerbaijan

Source: The State Statistical Committee of The Republic of Azerbaijan. *Telecommunication and post*. [online]. [cit. 2014-05-28]. Available from: <a href="http://www.stat.gov.az/source/communication/">http://www.stat.gov.az/source/communication/</a>>.

If we look at the chart, we can see that mobile operators began to operate in the Republic of Azerbaijan from 1994 to 2011, the number of mobile phones per 100 population sharply increased. If we take the last 5 years, it is clear to us that for every 100 people in 2006, the population fell to 39 mobile phone numbers in the case of an increase in the number of mobile phones in 2011 was 104. This Bakcell Ltd, the business activities of the company and marketolog offered by mobile operators, as well as a few number of people connected with the simultaneous use of the services and mobile operators.

#### 8.3 The strategy of Marketing

Marketing strategy to increase the competitiveness of the enterprise market research in the future will be realized, the forecast of the enterprise in the field of marketing to achieve strategic objectives, and the production of commodities for future improvement will be made to develop new and innovative products and projects areas.

Strategic marketing is implementation of the requirements of consumers and exceeds other competing firms (quality and relatively cheap commodity).<sup>33</sup>

One of the components that make part of the marketing strategy is strategic segmentation of the market. Intensification of sales and marketing activities for the division of the market segments to achieve high efficiency is very important.

Implementation of strategic requires the implementation of strategic control. Because of the control strategy, its stages, tactics and processes to ensure proper implementation of the mechanism.

In 2011, operating in each of the 3 mobile operators: Bakcell LTD, company, and offered the dynamics of the number of subscribers in the region have been identified. We can say that there has been growth in every region. However, the fastest growth rate was recorded in Baku, Sumgait, Ganja and Nakhchivan.

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<sup>&</sup>lt;sup>33</sup>IMRANOV, A. Marketing management, p. 14

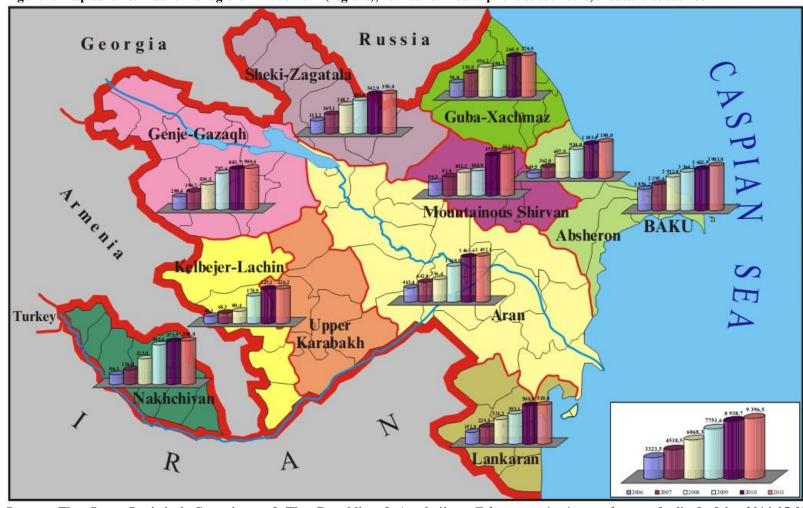


Figure 2: Map-scheme: Economic regions in 2006-2011 (regions), number of mobile phone subscribers, thousand subscriber

Source: The State Statistical Committee of The Republic of Azerbaijan. *Telecommunication and post*. [online]. [cit. 2014-05-28]. Available from: <a href="http://www.stat.gov.az/source/communication/">http://www.stat.gov.az/source/communication/</a>.

Looking at the above chart, we can see that in 2006-2011, the number of mobile phone subscribers in Azerbaijan increased. It covers up all the regions of the country. The highest growth was recorded in the capital city of Baku.

Recently, the mobile industry and the marketing strategy have been dealing with the modern youth workers, young people who want to always be active social for customers to communicate and develop a unique package of proposals. In this regard, new information and communication technologies, which are considered an important part of their lives, BakcellCINeration, company GəncSim, the blank Nar services offered to its customers.

Tariff policy and campaigns in the mobile sector, as well as the expansion of the base between the operators compete for customers through lower prices for mobile communications has led to lower prices. If a mobile user's average annual income per capita was U.S. \$ 145.8, in 2004, the average annual income per capita was U.S. \$ 145.8, U.S. \$ in 2011, this figure was 96.4.

While making marketing network analysis of mobile operators in Azerbaijan along with gained success the negative points have to be mentioned. However, mobile operators are interested in services and prices, new services always, there are very few who are aware of the campaign. However, it is proven that the mobile operator pages on social networks. Many people in connection with any order of service, shift from tariff to tariff, each service activation / deactivation of the new campaign working conditions and social networks, as well as customer services and telephone centers can learn. For example: In 2011, the company Chat, Mobile Guide, Call Screening, virtual work space for use as a membership services. Targeted to different categories "Mediacell" and "Student 1-liyi as" tariff packages enable subscribers to talk more favorable.<sup>34</sup>

Azercell makes all types of innovation for students, young people, civil servants. The company further its subscribers communication and advanced technology to provide high-quality, interesting and surprising them with new campaigns, favorable tariff packages, is expected to fulfill various projects.

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<sup>&</sup>lt;sup>34</sup> Modern. *Azercell Telecom LLC has announced the results of 2011*. [online]. [cit. 2014-05-28]. Available from: <a href="http://modern.az/articles/21261/1/">http://modern.az/articles/21261/1/</a>.

#### 9 Conclusion

As mentioned above, we may come to a conclusion about marketing that modern marketing has to be satisfied not only in sales, but should learn more about what and how to produce, and should seriously deal with the fate of the product after sales. Only in this case, it is economically beneficial for both parties (producers and buyers).

In other words, marketing is a complex process of market analysis and forecasting for creating favorable conditions for the sale of product, its quality, variety and volume of production in order to adapt to the needs of the consumer.

There is a need for marketing only at a certain stage of development of production and marketing. Depending on each country's own development, marketing activities are required for an effective approach. Only in this case, economic activities of the country's institutions to implement marketing activities to increase the efficiency of their production, sales and trading activities can be achieved.

Research work carried out on the mobile network operators of Azerbaijan and their marketing network, as well as information and communication technologies, mobile network operators and the subscribers to the services and other issues was carried out by me in this thesis.

Analysis of mobile operators, results obtained from the use of the suggestions and predictions was development strategy of area and the basis for sustainable development in a market economy.

Information and communication technologies (ICT) are leading in the economy of the Republic of Azerbaijan. In 2012, the share of ICT in GDP was 1.74%, while the non-oil sector's one made up 3.7%. I would like to note that the yield on the sector accounted for about 65.4% which was the share of mobile operators. Launch of Azerbaijan's first satellite "Azerspace-1" helped improve the quality of communication services and reduce the prices. Thus, when mobile operators use the features of the satellite, they will save costs. Satellite resources will be used to meet the needs of 20%, while the remaining 80% will be exported to world markets.

Taking into consideration the advantages of mobile service of Azerbaijan in the future regulation of market prices, the population will help create a better quality and more convenient access.

Each of the three mobile operators operating in Azerbaijan - Azercell, Bakcell and Azerfon are only operator offering discounts for local calls. Call to another operator will be much more expensive for the customer. For this reason, most citizens are forced to use numbers in each of the three operators. This means additional costs for citizens. Currently, as a result of lower prices for mobile phone subscribers in the tariff negotiations between operators is not only one operator services through the use of several other mobile operators will allow it to maintain contact.

The price per minute of mobile phone talk is about 0.12 U.S. dollars, according to our political and economic situation we would be closer to former Soviet states of Uzbekistan is \$ 0.02, in Moldova is \$ 0.11, in Belarus is \$ 0.08, in Ukraine is \$ 0.07, in Tajikistan and Kyrgyzstan is \$ 0.05, in Georgia is \$ 0.15, Kazakhstan is \$ 0.13. A new market strategy for the future development of mobile operators can help achieve stable prices for communication services.

I have also carried out a comparative analysis of mobile operators in Azerbaijan and Turkey. I have carried out a comparative analysis of packages they offer for roaming services. At present, there are the agreements of Turkcell in 148 countries and the agreements of Azercell in 68 countries. When mobile operator of Azercell from Azerbaijan is in Turkey calls to other mobile operators a cost of minute call is \$ 1.40 by U.S., in the case of incoming calls are U.S. \$ 0.51, calls in both directions through the mobile operator, Turkcell of Turkey 1 minute per 0.69 U.S. dollars. The figure was revealed as a result of the comparative analysis of roaming services. Thus, the cost of mobile operator Azercell is more expensive in comparison with the cost of Turkcell mobile. This is for the purpose of business or leisure travel to the majority of citizens who turned out to apply to the state, resulting in local operators. The implementation of market research and marketing in the field of mobile phone operators have been predicted, the prospects for a future period should be determined.

Based on the results of the research carried within the framework of this thesis, a conclusion can be drawn that the market of mobile communications is very prospective in Azerbaijan. This field of the national economy can gain significant development in the near future, as the current trends obviously testify its potential. However, in order for the local mobile communications market to further develop, the quality of services provided to the Azerbaijani customers should be enhanced. Namely, the local mobile operators should

pay higher attention to the quality of both domestic communication and roaming services provided. Also, the current level of prices on mobile communication is relatively high in Azerbaijan, which slows down the development of the local mobile communications market, and doesn't allow many prospective customers using the services of the local Azerbaijani mobile operators. The implementation of internationally recognized mobile communication standards in Azerbaijan, and further expansion of the area covered with the local operators' mobile services will definitely favor the rapid development of the country's national mobile communication market.

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