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# The impact of new alternative telecommunication services on the strategy of traditional telecom providers in Kosovo

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**Abstract.** The main purpose of this paper is to analyze the impact of new alternative telecommunication services (voip, skype, facebook and twitter) to the strategy of traditional telecom providers in Kosovo from the both areas of social media and telecommunication industry. Telecommunication industry is considered as the most dynamic industry in terms of technology and services. The last decade has been the evolution of new technologies and services that changed not only the world but also the meaning of our voice and messages to the world. Comparing with last decade's communication tools and prices, today we have enormous number of communication tools that keeps us informed for every single issue that doesn't matter where it happens. All these changes and trends will be analyzed and presented thru a proper research on consumer's behavior and product development teams.

**Keywords:** telecommunication in Kosovo, innovation in telecom, viber, skype

## 1 Introduction

Telecommunication can be considered as the most dynamic industry in the services sector with many new services and technologies every year. New forms of communication are invented most likely every year, while consumer's behavior is changed very dynamically from one platform to another. The importance of these platforms, traditional and alternative forms of communication, within the industry of telecommunication is very important for the future of them but in our case for traditional telecommunication companies.

Today's researches of traditional telcos are mainly concentrated in competitions like: the choice between mobile operators, technology competences between them, reliability between them, active subscribers but most of them don't consider the number of users that are switched from traditional form into new alternatives that are mainly based on IP (Internet Protocol) and offers different forms of communication. We know the benefits of the internet and its ability to cross borders without special permissions in contrary with traditional international interconnections and terminations of voice traffic that is more complicated and in most cases more expensive in both infrastructure and maintenance. Comparing these facts the price/revenues that are generated from this industry are lowered in such amount that one day it will threaten future investments within the industry. In our case I will analyze the case of the main national telecom of Kosovo that covers more than 67% of the market and IPKO that is the second and the last mobile operator with 25% of the market within the territory of the Republic of Kosovo till now (TRA Report 2011). PTK revenues in the last years went down and down (PTK Financial Reports, 2007, 08, 09) while investments are crucial for keeping the performance of the dynamic developments in the industry. There is a need to focus in more depth on how peoples are changing the behavior of their need for communication and their perception about both traditional and new alternative forms like VoIP (Voice over Internet Protocol) and social media as well. The market itself is entering a new era of development where broadband services demand is forcing the operators to upgrade their technologies with higher transfer rates. Applications like video-on-demand, youtube, file-transfer require more bandwidth for their performance, even VoIP and Video phones are another type of services that eager more bandwidth for performing as planned. Current operators, both ISP's and mobile ones are under a real pressure on technological changes while revenues for their services are not increased accordingly.

Today's youth has access to technology at the greatest level; they use their cell phone all the day to get in touch with their friends, news and entertainment while day-to-day apps development is increasing the opportunities that you can do with your cell phone operating system. Another issue that operators feel pressure is their pricing structure for their services, as Kosovo has two mobile operators both of them brought their international expertise, except their technical skills they brought their way of pricing strategy. Now, we have PTK-Vala that uses the Monaco Telecom expertise and infrastructure while the second operator IPKO uses Mobitel Slovenija's infrastructure and management. The market itself is targeted by two types of pricing where Vala uses "open" and well-defined packages with one line of post-paid offers and one-line of pre-paid offers where the user can choose the volume of minutes/sms/mb into their subscription. On the other side, IPKO uses more complex and less structured pricing scheme, where packages has many options with dynamic values of minutes/sms/mb so users that were adopted to Vala offers used to have difficulties and miss-understandings with IPKO offers while all new IPKO subscribers faced the same if they wanted to switch to another operator, in this case Vala.

Economic and social impact on telecommunication industry is another topic that is a part of our research especially for Kosova's telecom market. As we know the development and invention of information and communication technologies ICT comes from industrialized countries that have a direct impact into developing world which Kosovo is a part of. Regulatory statistics from a research done by TRA in regard of mobile operators presents a decrease of incoming minutes as well as decrease of outgoing minutes for both mobile operators Vala and IPKO, so we have a shrink of overall mobile telecommunication industry comparing with last three years. One of the conclusions drawn from the same regulatory research (Art Research, 2012) for the decrease of mobile telephony market is cited that: "the continuous increase of smart phone usage, increase of internet penetration will increase chances for using free communication applications like Skype, Viber, Gmail, Facebook etc." p.10

This research will try to cover these details and understand the trend of the effects of such new alternative communication tools into traditional telecommunication systems and also try to bring a conclusion of possible solutions or directions that must be considered during these changes.

## 2 Drivers of Change

**Globalization** - There is a trend of globalizing of several services worldwide, especially in the field of telecommunication where with the development and penetration of internet network it's becoming less expensive and more available to the global companies. It's considered as a pressure by many companies to retain customers from international borderless services. Companies are investing on loyalty programs in order to retain long-term customers for maintaining and increasing their profit margins. Services like VoIP, Skype, Viber, Facebook are a real threat for local telecommunication companies which don't take them into account.

**Customer expectation and customized demand** - There is a change on customer expectation for telecommunication services; customers are seeking customized offers for their needs. Many telecom companies have they offers designed by customer needs but the expectation of customers are dynamically increasing every day. Companies must listen to such demands and prepare themselves of custom offers required by their customers, there might be clients asking for more minutes but less messages or vice versa; or there might be customers asking for messaging services only, so service design must take into account such changes on customer expectations.

**Competition**-There is an increase of competition in the field of Telecommunication, not only in the global scale but also in Kosovo with liberalization of telecommunication services and licenses. According to Regulatory Yearly Report 2011 "During 2011, telecommunication industry in Kosovo continued to register positive trends characterized with fast developments and competitiveness of service offerings with decrease of base services enabled just after market liberalization" p.26 This fact pushes companies to focus more and more into their core competence operations that increase their revenues and profits.

**Dynamic change of technology** - There is an increase of communication technology worldwide, with leading penetration of Internet, development of new software applications, mobile communication

including smart phones. As a whole it can be considered that there is an increase of telecommunication sector and this increase need an effective and efficient management of the customers.

### 3 Indicators of Telecommunication

According TRA, the industry of telecommunication is increased year by year. There are 86 existing companies that are licensed for telecommunication services in Kosovo.

**Table 1.** Number of companies that are licensed in Kosovo

ISP licenses	38
Value added services	29
International telecommunication services	6
International telecommunication POPs	6
Fixed telephony	3
Mobile Operators	2
Virtual Mobile Operators	2
Total	86

Source: TRA, 2011

**Table 2.** Is generated from data collection of TRA

Description	2011	2010
Fixed telephony users	86,014	88,372
Fixed telephony penetration	5.02%	5.09%
Mobile telephony users	1,478,944	1,451,747
Mobile telephony penetration	84.96%	82.96%
Internet users	143,243	126,415
Internet penetration	7.92%	6.33%
Revenues of the industry (€)	239,518,037.36	222,491,069.80
Rev. from fixed telephony (€)	20,039,454.93	20,026,000.00
Rev. from mobile telephony (€)	199,243,326.00	181,236,432.00
Rev. from internet services (€)	18,606,406.89	19,571,486.80
Rev. from leased lines (€)	1,628,849.54	1,657,151.00
Investments in the industry (€)	2011	2010

Telecommunication industry in figures Source TRA, 2011

According to the figure above we see that we have a decrease of fixed telephony users in the industry including the decrease of revenues from the fixed telephony. Another important fact is that there is a decrease of internet services revenues while the internet users faced a slight increase always comparing year 2010 and 2011 with data gathered from regulatory yearly report for 2011 (TRA, 2011). Further elaboration of these numbers will be done on the findings part after the research is done.

**Technologies** can be found of different categories but they mostly are identified based on the services that are offered. They are identified as: Fixed Telephony, Mobile Telephony, Internet etc, but there is a list of new technologies that are developed based on above technologies or alternative to them such as (NGN, IPTV, VoIP etc). In local level there are several technologies implemented until now: ADSL, xDSL, IPTV and traditional ones like fixed and mobile telephony where some of them are offered as a standalone or as a combination of them as they are called “triple-play” for a combination of telephony, TV and internet service

**Operators** - Telecommunication operators are licensed from TRA in Kosovo with a reason that is needed for the market than approved by parliament. They are measured with yearly revenues and market share of local market for fixed, mobile and internet services. Operators should comply with national law of telecommunication of the Republic of Kosovo which is regulated by the Telecommunication Regulatory Authority. Operators are obliged to report all traffic and revenue data on yearly bases for

statistical reports that are presented by TRA. All incompatibilities and disagreements should be reported and solved thru Regulatory which applies an existing law of telecommunication. A list of licensed operators is attached to appendix of this research.

**Services** that are offered in telecommunication market of Kosovo are as described below:

- Fixed telephony
- Mobile telephony
- Internet
- VAS – Value added services (Cable TV, IPTV, Toll-free, Premium numbers)

Based on these services and its revenues within the industry for year 2011, the market is divided as below:

- Fixed telephony: 8.37%
- Mobile telephony: 83.19%
- Internet: 7.77%
- Leased lines: 0.68% (TRA, 2011)

There is a lack of data statistics for services like: IPTV, Cable TV and other value added services. Customer segmentation - An important part of the marketing strategy and product developing strategy is the customer segmentation, where a company divides its customers based on age, gender, interest, habits and so on. Based on an article by Bayer (2010) there is no question of which segmentation is the right one for our company but what are the right ways to segment customers in order to solve variety of business problems (Bayer, 2010) He then presents four types of customer segmentation:

- Customer Value Segmentation
- Customer Behavior Segmentation
- Customer life cycle Segmentation
- Customer Migration Segmentation

He cited that “advanced use of segmentation allows each customer to be a part of a micro-segment, which allows for precise targeting, with knowledge of what the retention and value drivers are for each customer” p.247

Except segmentation problems that may be from different views like lack of data, operational issues or resistance to change, that many times is overcome, is a real pressure for manager to present the effectiveness of the segmentation that is choose (Dibb and Simkin, 2009). Because the segmentation process is considered as complex and rarely problem free, in another research done by Dibb and Simkin (2010) they cite “Regular contact with senior and middle managers within the telecommunications organization was necessary for the entirety of the segmentation process and its implementation. Access was also needed to the research company which was working with the company to develop and implement the segment solution” p.117

It is considered that market segmentation is widely used but according to many researches that is considerable fragile process with low availability of result measurement, in that case is it important to have access in the very beginning of the marketing plans so that the team have a quality access.

**Cooperation of development teams and sales people** - Customer feedback is of its own importance within service development teams, which can be achieved with a proper cooperation within the feedback receiver and developers or better to say a channel of communication between front and back-office. Feedbacks including customer satisfaction issues can be analyzed from the service development teams after getting them from sales people.

## 4 Market Research

Today, in telecommunication sector it is considered that the old fashioned research of the market is not just enough to build a strategy; it is not capable of identifying the new consumer’s prediction of the services. Because of the new and dynamic development of technology in the telecommunication

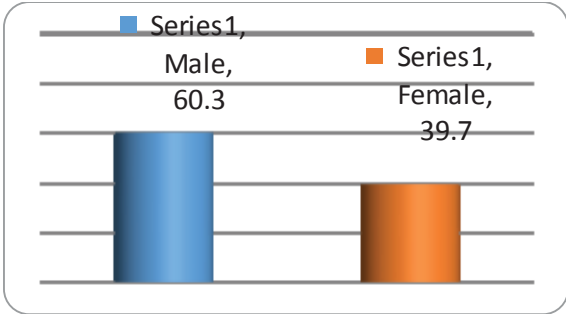
industry it is becoming more difficult to rely only of traditional researches, now there are new forms of involving customers into new production labs so that new products and services will be design based on direct customer behavior and will leave more space to comply with new customers demand including customized needs of customers. Product development teams usually are not in the same line as customers and many times what they design is not always on what customers expected. This type of research leads to another important fact that is aspiration for most of operators, developing loyal customers that are satisfied with all the category of the services which fulfills their need, and all this point to the fact that “growing the number of loyal customers is an attractive goal for any provider” Bogomolova (2011) p.794

New types of research are to be followed where companies are to gather unspoken type of information and it leads to more accurate product and service developments.

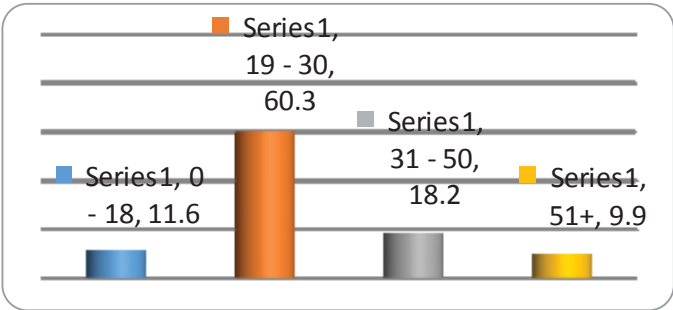
**5 Research Results**

In order to analyze the impact of alternative forms of communication into the strategy of traditional telecommunication companies it is impossible to draw trends without doing a field research with end-users of this market, so in our case we did quantitative research with users of telecommunication serctor where we got statistics on what they use for their communication and what is their behavior for future impact of these alternative forms into traditional telecommunication tools like mobile and fix line telephony.

Below are the graphs, tables and description of our research results done thru questionnaires?



**Fig. 1.** Gender comparison



**Fig. 2.** Age comparison

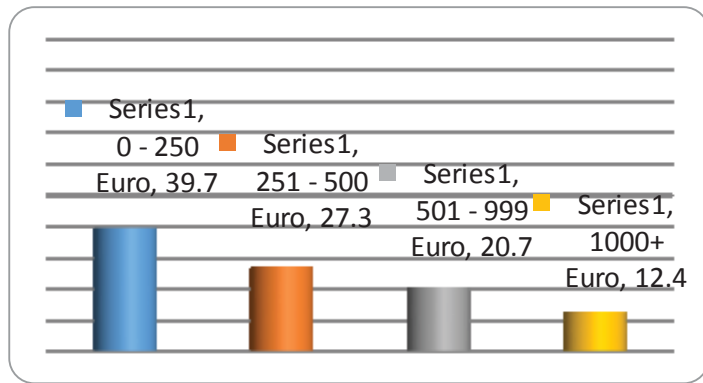


Fig. 3. Monthly net income

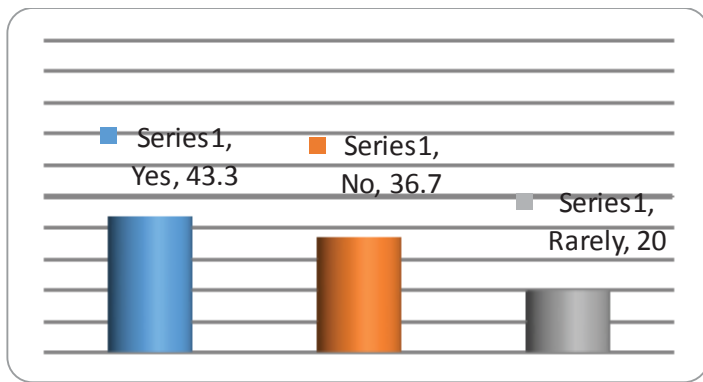


Fig. 4. Mobile data service usage

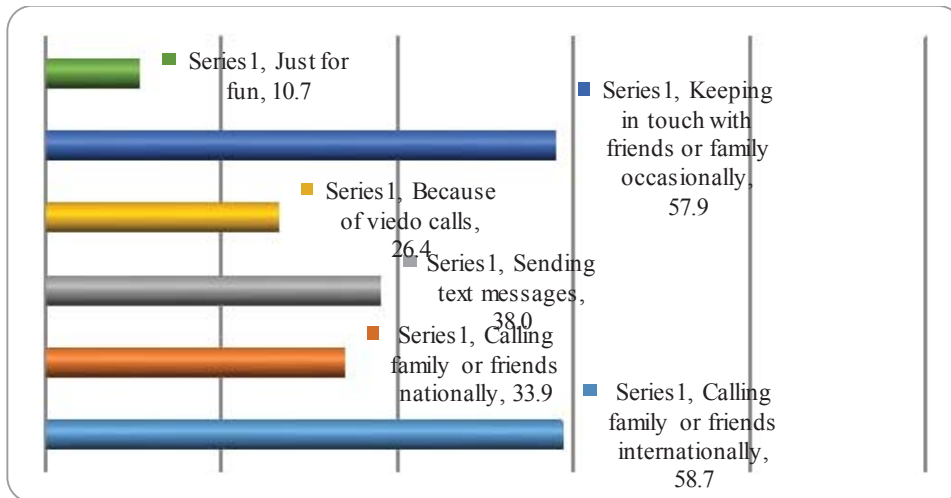


Fig. 5. Why do you use Skype, Viber, Facebook, Twitter mostly

Reason for using alternative forms of communication can be as many as possible but in our case as presented in figure 4.9 first choice has been “Calling family or friends internationally” with 58.7% and then followed by “Keeping in touch with friends or family occasionally” with 57.9% which also gives us a hint that a lot of international communication has been switched to these alternative forms of communication. Preferences of the users on what is their choice of communication if the price doesn’t

matter than 70.2% of respondents choose Mobile followed by 48.8%. An interesting detail in question where we asked respondents what will they choose for communication if quality doesn't matter they again responded positively for Mobile with 56.2% followed with a very near percentage 51.2% for alternatives. In the very end of the questionnaire has been a question for respondents on how they would feel if they can imagine a day without their mobile and the most selected answer was "Can't imagine at all" with 57% as presented in figure 4.23 and it confirms how important mobile service in nowadays life is.

## 6 Conclusion

The main aim of this part of our research is the question to what extent the research objectives is achieved. This research is not the final result on what dynamic trends of telecommunications are on the market, but this is just the beginning and will be an incentive for other researchers to follow the trends of the new developments in the telecommunication industry. This study was launched with the aim to understand and measure the impact of alternative forms of communication into the strategy of traditional telecommunication providers in Kosovo, and by analyzing the research findings we have figures that presents all players in the market starting from the traditional companies, alternative forms like Skype, Viber, Facebook, Twitter, Voip and the very important player in our research the consumer.

Research results drawn from this study are in line with literature review and market data, and this conclusion draws attention to traditional companies for moving forward and putting all alternative forms of communication in their table during designing and re-designing their business strategy especially when designing new products and services. Another important part of this conclusion goes to companies which still do not apply innovation labs while now and the future development of this industry is accelerated exponentially and new innovations are the only process to survive these dynamic changes. According to the data gathered during research we see that from 94.2% of respondents that already heard about these forms of communication, mostly use Facebook (87%), Skype (61.2%) and Viber (56.2%) as in figure 4.7 and this confirms the trend of usage of such applications that basically offers voice, messaging and video. This is related also to the fact that all remaining respondents that didn't use these applications expressed their interest to use these applications where Skype (41.3%) was among the first followed by Facebook (38%) and Viber (33.9%) as in figure 4.13.

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