An Analysis of Consumer Trends in the

Telecommunications Markets of Russia and Vietnam

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Abstract: By way of descriptive and comparative analysis, the subscriber bases and revenues of television, fixed and mobile telephony, and fixed and mobile broadband segments of the Russian and Vietnamese telecommunications markets for the period of 2015-2019 were analysed. The results of the study revealed similar global trends in the telecommunications markets of Russia and Vietnam. Fixed and mobile telephony revenues are declining, since customers prefer new communication technologies to the old ones. The television subscriber base is growing in both countries; TV revenues are increasing in the Russian market and somewhat declining in the Vietnamese telecommunications market. With further penetration of broadband, more customers are upgrading their television from Free TV to Pay TV (IPTV and OTT services). The results of the study confirmed the global consumer trends in telecommunications markets and the applicability of approaches used herein for other countries.

Keywords: telecommunications, subscriber base, revenue, ARPU, broadband

Introduction

The development of communication as a linking element of the digital economy has led to a variety of different communication modes. Today the consumer has a wide choice. When landline telephony is gradually losing its popularity and traditional mobile telecommunication services are receding into the background with the appearance of services such as WhatsApp, Viber, and the like, the market is gradually shifting to the Internet space with a significant range of services (Lugovskaya & Simakina, 2019). The ease of transition between not only individual mobile operators and the tariffs they offer, but also between types of communication (Internet and/or mobile), has led to the emergence of a new consumer

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characterised by market awareness, insistence on high standards, individualism, mobility of consumer decisions, and critical evaluation of market offers. In view of this, the development of a scientific and practical approach to analysing the process of making consumer choice and the formation of consumer reactions in the modern digital economy is relevant. The telecommunications market is a very representative example in this field as it reflects all the trends of the world economy – coronavirus pandemic, growing unemployment, reduction in the number of active business projects, general decline in economic activity – and remains the basis of the modern digital economy. At the same time, individual consumer demands will maintain their steady growth, if not multiply.

A modern consumer of telecommunication services values time most and prefers those market operators who are able to provide them with high-speed access to the service and convenience of its use (<u>Litvinenko & Tarasova, 2020</u>). These user attitudes set the tone for industry development.

The purpose of the study is to define trends in telecommunications customer behaviour using global industry-specific indicators. The following objectives have been set:

- to analyse the dynamics of the development of the telecommunications industry on a national scale (based on the examples of Russia and Vietnam) over the past five years;
- to search for the relationship between the changes in the structure of consumer preferences in the analysed markets;
- to compare results of the study for Russian and Vietnamese markets and define whether the approach and methodology used herein can be universal for any telecommunication market.

Materials and Methods

Domestic Russian and Vietnamese telecommunications markets were chosen as the basis of the study as a reflection of overall global dynamics. According to the World Bank's country income classifications for the 2020 fiscal year, the Russian Federation belongs to the upper middle-income group of countries, while Vietnam is a lower middle-income country (World Bank, 2020). Despite both countries belonging to the developing category, the structures of the economies, the telecom market scales and the levels of development of the two countries differ significantly. Therefore, the comparison of the results for each market will allow us to determine whether the approach used herein is universal for any market and the trends in each telecommunications market are comparable.

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There are three main indicators for the telecommunications industry: number of subscribers, revenue, and average revenue per user (ARPU) (<u>Yadav, Sushil & Bititci, 2018</u>). The latter indicator is the total recurring (service) revenue generated per connection per month in the period and is specific for each telecommunications company (<u>Faccio & Zingales, 2017</u>). ARPU should be treated with caution. Despite growing figures of number of subscribers and revenues, ARPU tends to decline and cannot be used to track customers' preferences and behaviour (<u>Hendrawan & Nugroho, 2018</u>; <u>Pfeifer & Conroy, 2017</u>; <u>Son *et al.*, 2019</u>; <u>Stork, Esselaar & Chair, 2017</u>).

For the purposes of the study, the following telecommunication market indicators were collected and systemised (each indicator separately for the Russian and Vietnamese markets) for the period of 2015-2019:

- 1. Total number of mobile telephony subscribers;
- 2. Total number of fixed telephony subscribers;
- 3. Total number of fixed broadband subscribers;
- 4. Total number of mobile broadband subscribers;
- 5. Total number of TV subscribers;
- 6. Average revenue per user;
- 7. Annual mobile broadband revenue;
- 8. Annual mobile telephony revenue;
- 9. Annual fixed broadband revenue;
- 10. Annual fixed telephony revenue;
- 11. Annual TV revenue;
- 12. Total annual industry revenue.

The number of subscribers and revenues of the television segment include Pay TV services like cable television, Pay TV Direct-To-Home and Over-The-Top services and do not include free TV like analogue and digital terrestrial television, free TV Direct-To-Home, etc.

Average revenue per user (ARPU) was determined according to generalised data for the entire market provided by the Ministry of Digital Development, Communications and Mass Media of the Russian Federation (<u>https://digital.gov.ru/ru/activity/statistic/rating /telekommunikacii/</u>) and individual companies – MTS PJSC (<u>MTS, 2021</u>), AC&M (<u>AC&M</u>, 2021), VimpelCom PJSC (<u>VimpelCom, 2021</u>), and MegaFon PJSC (<u>MegaFon, 2021</u>).

Apart from this, the following data sources were used.

For Russian telecommunication market:

- 1. RosTelecom Strategic Report (<u>RosTelecom, 2019a</u>): Industry Overview and Competitive Analysis;
- 2. RosTelecom Annual Report (<u>RosTelecom, 2019b</u>);
- 3. Digital industry statistics (Ministry of Digital Development, 2020).

For Vietnamese telecommunication market:

- 1. Vietnam Telecommunication Market Report (2020-2025) (<u>Global Monitor</u>, <u>n.d.</u>);
- 2. Vietnam Number of Subscriber Mobile (<u>CEIC, n.d.</u>)
- 3. STATISTICAL SUMMARY BOOK OF VIET NAM 2020 (General Statistics Office, 2020)

Analysis of the behaviour of telecommunications industry users in Russia and Vietnam based on open data was performed under the sequence of steps shown in Figure 1.

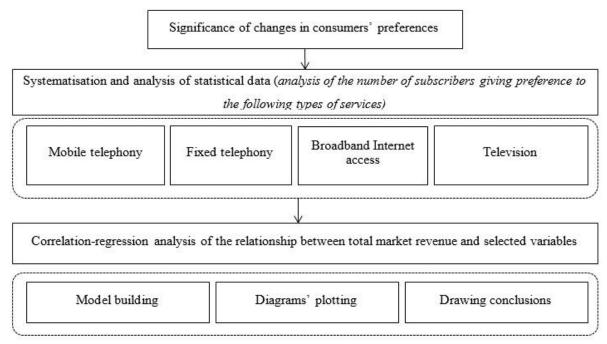


Figure 1. Research plan

The influence of variation of the independent variable (X) on the dependent one (Y) was analysed with the help of the following linear equation:

where X is the independent variable (number of subscribers);

Y - dependent variable (revenue);

a - regression coefficient, showing the value of Y at X = 0;

b - regression coefficient, showing the average value of changes in Y from X to X+1.

Descriptive and comparative analysis methods of quantitative data were used for the purposes of the study. Based on the above indicators, the following parameters were calculated and analysed:

1. Total amount of subscribers in telecommunications industry in each country in question.

- 2. Dynamics of total number of subscribers and dynamics of number of subscribers of each industry segment within the time period in question.
- 3. Dynamics of annual revenues, both total and per industry segment, within the time period in question.
- 4. Share of each segment indicator in total number of subscribers in the industry and dynamics thereof within the time period in question.
- 5. Share of each segment indicator in total annual industry revenue and dynamics thereof within the time period in question.

Results

Russian telecommunications market

In the period 2015 to 2019, the total number of subscribers in the Russian telecom industry grew from 385 to 432 million subscribers, and the total revenue grew from 1,492 to 1,687 billion Russian roubles (RUB). As of 2019, the Russian telecommunications market had the largest number of subscribers in the mobile telephony segment (261 million subs) and the lowest in the fixed telephony segment (24 million subs). In terms of annual revenues, the mobile broadband segment was the leader among the segments of the industry (822 billion RUB), while television had the lowest revenues per year: 55 billion RUB (Table 1).

Indicator	2015	2016	2017	2018	2019
Number of subscribers, million					
Mobile telephony subscribers	248	256	255	256	261
Mobile broadband subscribers	50	56	66	73	85
Fixed telephony subscribers	33	30	28	26	24
Fixed broadband subscribers	30	31	33	33	34
TV subscribers	24	25	26	27	28
Industry subscribers	385	398	408	415	432
Financial indicators, billion RUB				I	
Mobile broadband revenue	660	710	750	798	822
Mobile telephony revenue	487	466	409	347	299
Fixed broadband revenue	222	234	303	376	455
Fixed telephony revenue	88	77	72	64	56
TV revenue	36	35	46	51	55
Total industry revenue	1492	1522	1579	1636	1687

Table 1. Dynamics of performance and financial indicators of telecommunications industry in Russia, 2015-2019

Source: Authors based on data from Rosstat (2019) and AC&M (2021).

As can be seen from Table 1, mobile communication is the most popular among the studied communication means, occupying 74% of the whole range of services. This can be explained by the fact that it grants open access to information, lack of attachment to the place of residence, compactness of the device, and the availability of favourable tariff plans from the leading operators. Fixed telephony, on the other hand, cannot be enhanced by such conveniences, so consumers are gradually abandoning it altogether. As a result, the provision of services of this kind is becoming unprofitable. Confirmation of this can be found in the results of the correlation analysis (Table 2).

	Revenue (Y)	Mobile telephony (X1)	Fixed telephony (X2)	Broadband Internet access (X3)	Television (X4)
Revenue (Y)	1				
Mobile telephony (X1)	0.906496	1			
Fixed telephony (X2)	-0.98495	-0.94804	1		
Broadband Internet access (X3)	0.957742	0.98034	-0.96557	1	
Television (X4)	0.995286	0.925696	-0.99639	0.959373	1

 Table 2. Correlation analysis results

The obtained correlation coefficients are almost equal to 1, which indicates the presence of a high correlation between the analysed indicators. This means that subscriber's preferences are one of the decisive factors in the described situation. No less fascinating is the inverse relationship between revenues and the number of fixed telephony users. Although the profitability of this communication means is falling, this does not affect the overall situation in the industry. On the contrary, consumers are not leaving the market but choose another communication method (mobile), which contributes to its rapid growth and development.

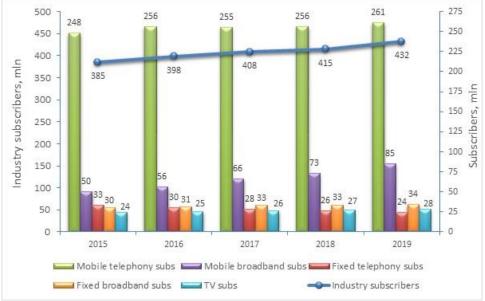
The results of the multifactor regression analysis outlined that the coefficient of determination is equal to 1 (R=1), which implies a functional relationship between the studied factors. From this it follows that any change in at least one of the values of X will lead to a change in the dependent variable, and the model can be deemed highly reliable.

The obtained regression equation has the following form:

$$Y = 60 + 20X1 - 18X2 + 38X3 + 3X4$$

Hence, each new mobile telephony subscriber brings, on average, 20 RUB of income, while the installation of a fixed-line phone, on the contrary, leads to losses in the future.

The analysis of dynamics shows that the number of subscribers of the telecommunications industry, as well as subscribers of mobile telephony, mobile broadband, fixed broadband and



television, were growing, while the number of subscribers of fixed telephony was declining (Figure 2).

Figure 2. Comparative dynamics of Russian telecommunications market indicators: numbers of subscribers in each market segment and total industry subscribers in 2015-2019. Source: Table 1.

In terms of revenues, the industry in total, mobile broadband, fixed broadband, and television showed positive dynamics, while mobile telephony and fixed telephony revenues were declining within the period in question (Figure 3). Comparative dynamics of television revenues and subscribers show a positive trend for both indicators (Figure 4).

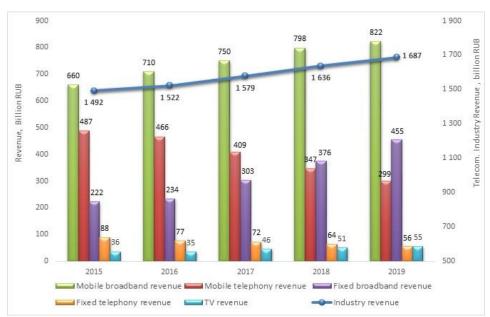


Figure 3. Comparative dynamics of Russian telecommunications market indicators: annual revenues in each market segment and total industry revenues in 2015-2019. Source: Table 1.

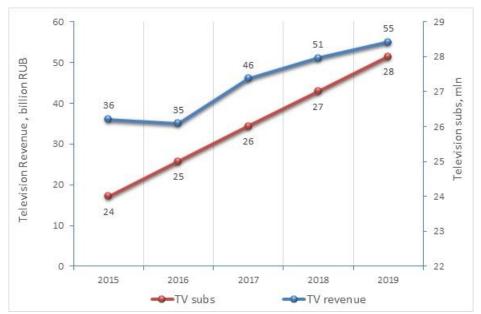


Figure 4. Comparative dynamics of television subscribers and revenues in Russian Federation in 2015-2019. Source: Table 1.

The comparative dynamics of mobile telephony subscribers and revenues reveal two opposing trends: growing number of subscribers (248 to 261 million subscribers) and declining revenues (487 to 299 billion RUB) (Figure 5). This can be explained by market saturation, high competition and more focus by subscribers on using mobile Internet and message services, and less usage of voice telephony services.

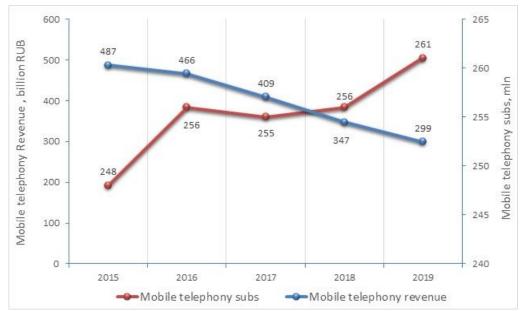


Figure 5. Comparative dynamics of mobile telephony subscribers and revenues in Russian Federation in 2015-2019. Source: Table 1.

The positive dynamics of mobile broadband subscribers and revenues confirm customers switching from voice mobile telephony to usage of mobile Internet: subscribers grew from 50 to 85 million, revenues from 660 to 822 billion RUB (Figure 6).

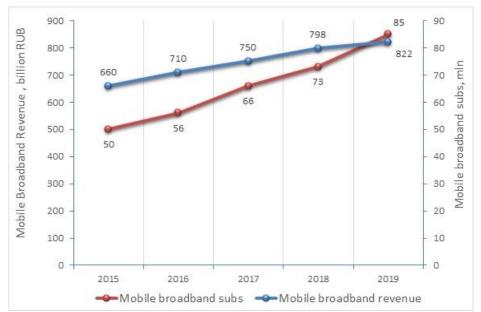


Figure 6. Comparative dynamics of mobile broadband subscribers and revenues in Russian Federation in 2015-2019. Source: Table 1.

As a result of development of new communication technologies, traditional fixed telephony in the Russian Federation is decreasing, both in terms of subscribers (from 33 to 24 million) and revenues (from 88 to 56 billion RUB) (Figure 7).

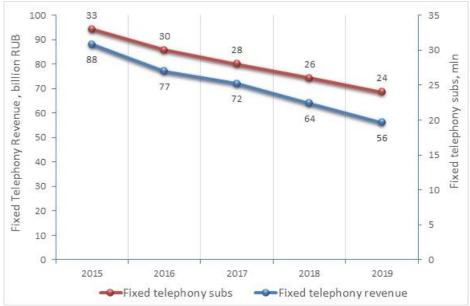


Figure 7. Comparative dynamics of fixed telephony subscribers and revenues in Russian Federation in 2015-2019. Source: Table 1.

Fixed broadband subscribers and revenues have been rapidly increasing during the time period in question: from 30 to 34 million subscribers and from 222 to 455 billion RUB (Figure 8).

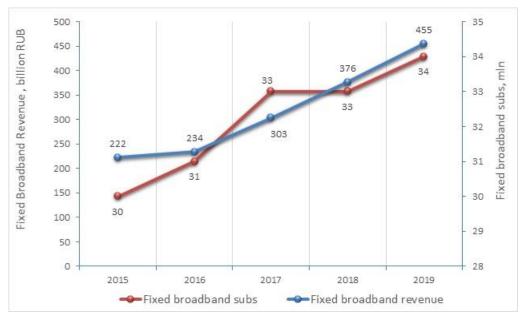


Figure 8. Comparative dynamics of fixed broadband subscribers and revenues in Russian Federation in 2015-2019. Source: Table 1.

In terms of telecommunication sector revenues as a share of the total revenue of the industry, the most rapid growth was found in fixed broadband revenues (from 15% to 27%), and the most rapid decline in mobile telephony revenues (from 33% to 18%). The share of mobile broadband revenues in total industry revenues grew insignificantly, from 44% to 49%; in absolute terms, the growth was 35 billion RUB. There was a fall in fixed telephony share from 6% to 3% and television share remained almost constant: a slight increase from 2% to 3% was detected. (Figure 9)

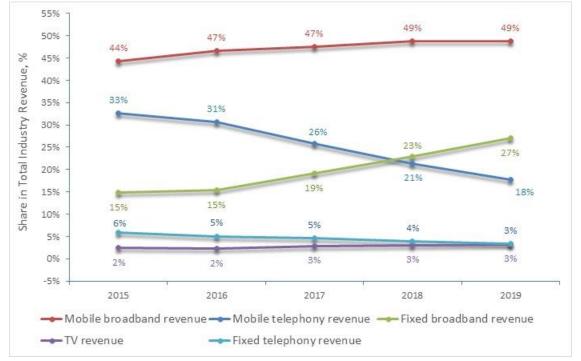


Figure 9. Comparative dynamics of share of annual industry sectors' revenues in total annual industry revenues in Russian Federation in 2015-2019. Source: Table 1.

A comparative analysis of such parameters as subscriber base, revenues, and share of each segment revenues within total industry revenues clearly demonstrates the redistribution of consumer focus: people pay less for traditional means of communication like fixed telephony and mobile (voice) telephony and are ready to pay more for new means of communications like mobile and fixed broadband.

ARPU in the telecom industry in Russia is quite low (<u>Statista, n.d.</u>): in 2019, it was valued at 5.17 USD, while in developing countries, ARPU was 10.2 USD and in the world 13.6 USD on average (Figure 10).

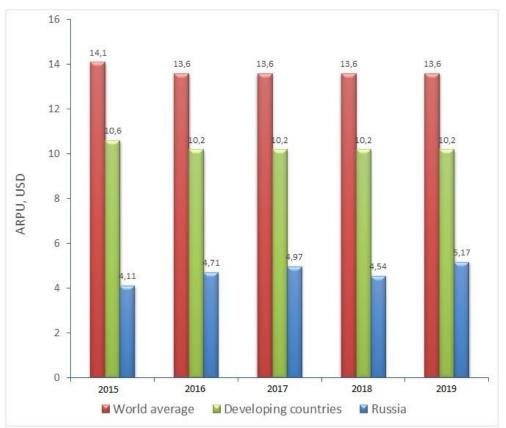


Figure 10. Comparative dynamics of ARPU in Russian Federation, developing countries and in the world (Average revenue per user (ARPU) of federal mobile operators in Russia from 3rd quarter 2017 to 3rd quarter 2019(in RUB)). Source: Statista (n.d.)

According to Figure 10, the ARPUs in Russia, developing countries and the world were approximately stable in 2015-2019.

Vietnamese telecommunications market

Telecom industry subscribers in Vietnam grew from 181.5 to 219.5 million in 2015 to 2019, while total industry revenues declined from 6491.2 to 6111.8 million USD. The leading industry sector in terms of subscribers was mobile telephony, with 126.2 million subscribers as of 2019, while the fixed telephony sector had the least number of subscribers, 3.7 million. The highest

revenue of 3208.8 million USD was detected in mobile telephony in 2019, the lowest in fixed telephony: 270.5 million USD (Table 3).

Table 3. Dynamics of the performance and financial indicators of telecommunications industry in Vietnam,	
2015-2019	

Indicator	2015	2016	2017	2018	2019
Number of subscribers, million					
Mobile telephony subscribers	126.5	129.0	120.0	136.1	126.2
Mobile broadband subscribers	32.0	36.0	45.0	53.0	61.0
Fixed broadband subscribers	7.7	9.1	11.3	13.0	14.8
Fixed telephony subscribers	5.4	5.6	4.4	4.3	3.7
TV subscribers	9.9	12.5	13.2	14.5	13.8
Total Industry subscribers	181.5	192.2	193.9	220.9	219.5
Financial indicators, million USD					
1. Mobile revenue	4885.4	5015.6	4541.8	4198.7	4257.9
1.1 Mobile telephony revenue	4330.9	4352.5	3793.8	3393.8	3208.8
1.2 Mobile broadband revenue	554.5	663.1	748.0	804.9	1049.1
2. Fixed land telecommunications service revenue	1176.8	1142.5	1337.6	1474.9	1482.9
2.1 Fixed broadband revenue	254.0	375.1	866.5	1047.0	1212.4
2.2 Fixed telephony revenue	922.8	767.4	471.1	427.9	270.5
3. TV revenue	429	528	323	357	371
Total industry revenue	6491.2	6686.1	6202.4	6030.6	6111.8

Sources: Authors using data from the General Statistics Office (2020), IctNews (2019), Hanoimoi (2020), and Ministry of Information and Communications of the Socialist Republic of Vietnam (2019).

A correlation and regression analysis with the corresponding indicators was also performed for Vietnam. Its results show the same trends as for the Russian Federation, with correlation coefficients ranging between 0.89 and 0.95. Besides, as in the case of Russia, mobile communication services were revealed to be the most popular.

The resulting regression equation is as follows:

$$Y = 68 + 23X1 - 17X2 + 35X3 + 4X4$$

That is, each new mobile subscriber brings, on average, 28 units of income, while the installation of a landline incurs losses.

In general, the subscriber bases of mobile and fixed broadband and television grew; fixed telephony subscribes declined; and the mobile telephony subscriber base remained the same within the period in question (Figure 11).

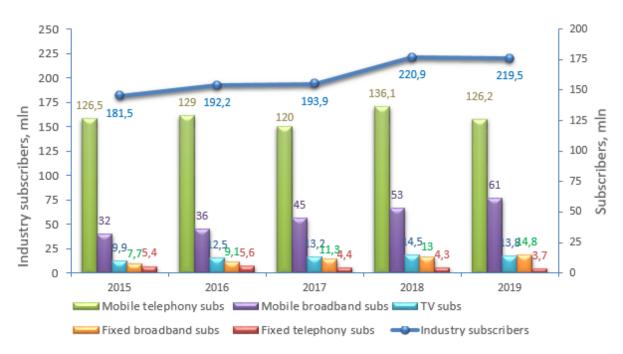


Figure 11. Comparative dynamics of Vietnamese telecommunications market indicators: numbers of subscribers in each market segment and total industry subscribers in 2015-2019. Source: Table 3.

From 2015 to 2019, mobile broadband and fixed broadband revenues grew, while mobile telephony, fixed telephony and television revenues decreased (Figure 12).

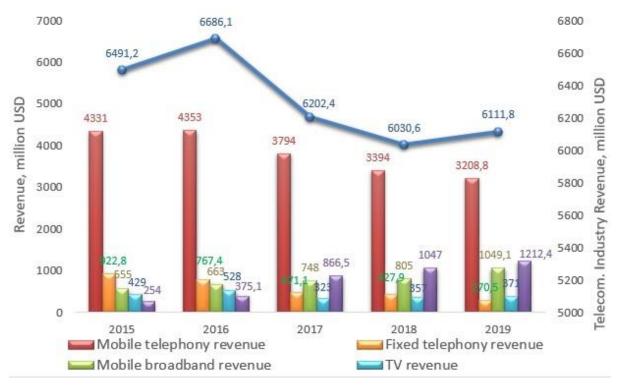


Figure 12. Comparative dynamics of Vietnamese telecommunications market indicators: annual revenues in each market segment and total industry revenues in 2015-2019. Source: Table 3.

While television subscribers increased from 9.9 to 13.8 million, revenues generated by this sector of the market decreased from 429 to 371 million USD (Figure 13). Such opposing trends

can be explained by high competition in the Pay TV market in Vietnam and people spending more money on Internet than on TV.

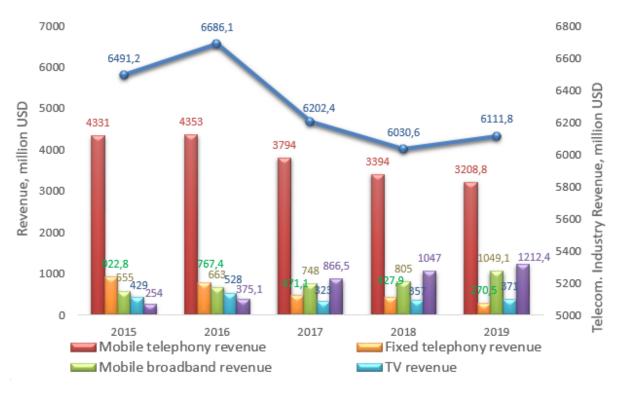


Figure 13. Comparative dynamics of television subscribers and revenues in Vietnam in 2015-2019. Source: Table 3.

Despite approximately the same number in the subscriber base in 2015 and 2019 (126.5 million and 126.2 million, respectively), mobile telephony revenues declined from 4331 to 3208.8 million USD (Figure 14). Such a picture is similar to that detected in the Russian communication market, where a rising number of mobile (voice) communication subscribers pay less for the service.

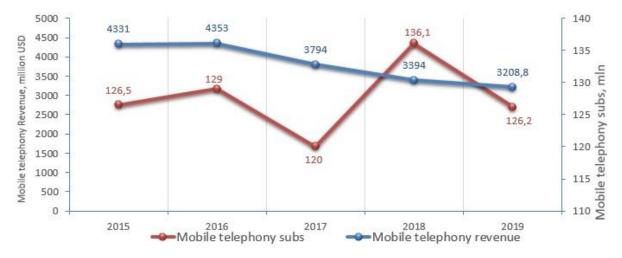


Figure 14. Comparative dynamics of mobile telephony subscribers and revenues in Vietnam in 2015-2019. Source: Table 3.

Mobile broadband, both subscribers and revenues, grew rapidly during the period in question: from 32 to 61 million subscribers and from 555 to 1049.1 million USD, respectively (Figure 15).

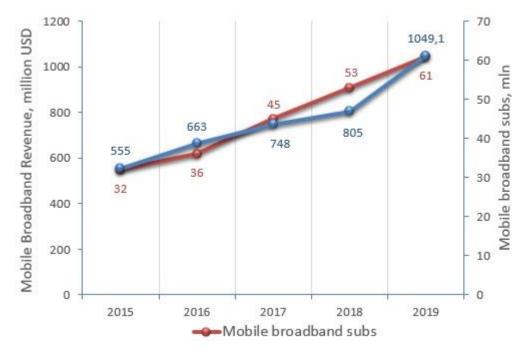


Figure 15. Comparative dynamics of mobile broadband subscribers and revenues in Vietnam in 2015-2019. Source: Table 3.

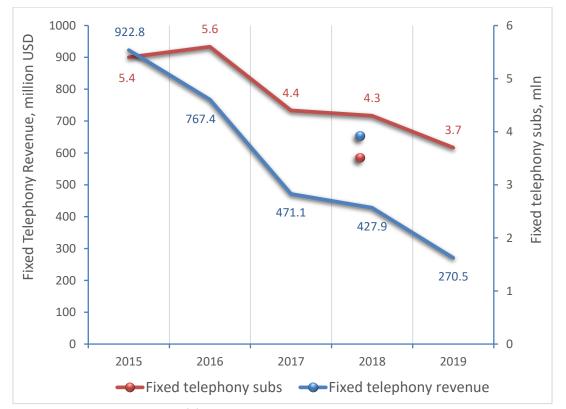


Figure 16. Comparative dynamics of fixed telephony subscribers and revenues in Vietnam in 2015-2019. Source: Table 3.

Together with a decline in the subscriber base (from 5.4 to 3.7 million subscribers), the fall in revenues in fixed telephony was 3.4 times: from 922.8 million USD in 2015 to 270.5 million USD in 2019 (Figure 16).

Fixed broadband subscribers almost doubled (from 7.7 to 14.8 million) and revenues from this sector of the telecommunications market increased by nearly five times: from 254 to 1212.4 million USD (Figure 17).

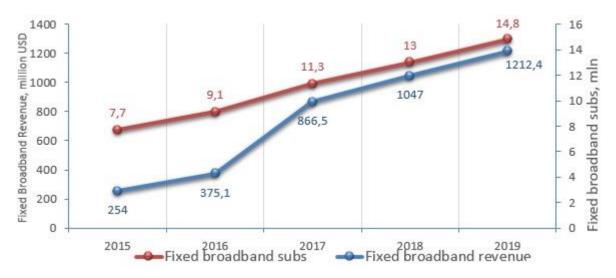


Figure 17. Comparative dynamics of fixed broadband subscribers and revenues in Vietnam in 2015-2019. Source: Table 3.

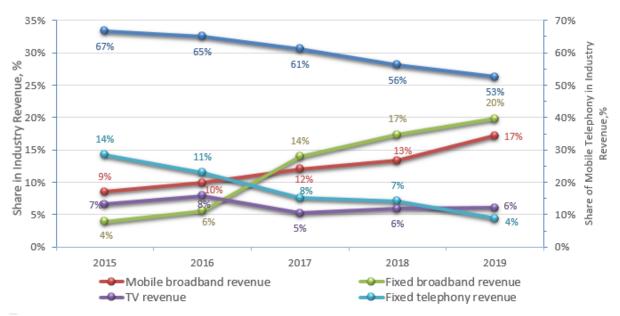


Figure 18. Comparative dynamics of share of annual industry sectors' revenues in total annual industry revenues in Vietnam in 2015-2019. Source: Table 3.

The comparative analysis of the dynamics of share of annual industry sectors' revenues in total annual industry revenues in Vietnam in 2015-2019 showed the redistribution of shares among sectors. While the share of mobile telephony decreased from 67% to 53%, the shares of mobile broadband and fixed broadband increased from 9% to 17% and 4% to 20%, respectively

(Figure 18). There was a slight decline in the share of TV revenue (from 7% to 6%) and a significant fall in fixed telephony (from 14% to 4%).

As shown in Figure 19, the ARPU in the telecom industry in Vietnam in 2019 (2.82 USD) (<u>Statista, n.d.</u>) was almost three times less than that in developing countries (10.2 USD), and almost five times less than the average ARPU in the world (13.60 USD).

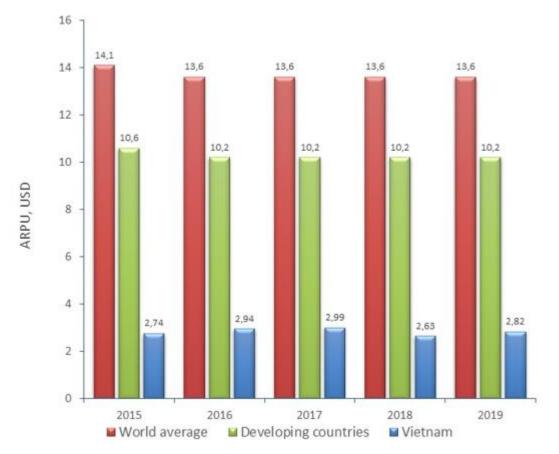


Figure 19. Comparative dynamics of ARPU in Vietnam, developing countries and in the world. Source: Statista (<u>n.d.</u>)

According to Figure 18, ARPU in Vietnam was almost stable and grew from 2.74 USD to 2.82 USD from 2015 to 2019.

Comparing trends in the telecommunications markets of the Russian Federation and Vietnam

The results of the study revealed the same global trends in the Russian and Vietnamese telecommunication markets. Despite growth of mobile telephony subscriptions, revenues of this sector of the industry are decreasing and the shares of the sector revenues within the total telecom market revenues are redistributed in favour of fixed and mobile broadband, the subscriber bases and revenues of which have been rapidly increasing for the previous five

years. Fixed and mobile telephony revenues are declining, since customers prefer new communication technologies to the old ones.

The television subscriber base is growing in both countries. TV revenues are increasing in the Russian market and somewhat declining in the Vietnamese telecommunications market. This shows that (Pay) TV is still in demand as a means of communication and leisure.

To summarise, the results of the study confirmed the global trends in consumer behaviour in these telecommunications markets and suggest the applicability of approaches used herein for other countries.

Discussion

Forecasting and modelling the development of the telecommunications market is also complicated by the fact that the structure of market agents changes depending on the stage of development of communication technology in the country. An interesting feature of the telecommunications market is the distribution of new technologies and their perception by the population. As evidenced in some recent studies, the problem of telecommunications market development is caused not only by the emergence of new technologies but also by the human factor, which actually determines the speed of new technologies' perception, acceptance, and/or rejection.

Telecommunication businesses are challenged by a need to retain existing customers coupled with the high cost associated with acquiring new ones (<u>Amin *et al.*, 2017</u>). In the global telecommunications industry, there has been a rather high level of customer churn recently (from 10 to 60%) (<u>Statista, n.d.</u>). Attracting or retaining a long-term customer is 5–10 times more valuable than acquiring a new short-term one (<u>Sharma *et al.*, 2020</u>). Thus, customer attraction and retention is one of the key tasks in the telecommunications industry. It is very important to identify the most important factors that influence customer behaviour in order to channel efforts to retain customers and attract new ones (<u>Al-Mashraie, Chung & Jeon</u>, 2020).

In this day and age, the Russian and Vietnamese telecommunications markets have reached a high level of saturation, which dramatically enhances the importance and role of the competitive tools used by their mobile operators. In general, the markets of these countries display the same trends as are in force in the developed states. During the period under consideration, the telecommunication resources of networks using CDMA EV-DO technology increased considerably. The interest in the development of CDMA EV-DO on the part of enterprises is a sign of its further accelerated development following global trends. At the same

time, there is no tendency to abandon mobile communications and increase the use of the Internet, just as in the case of fixed telephony.

To attract and retain customers, it is vitally important for a telecom company to understand the global trends in customer behaviour. This is usually done by analysing such specific telecommunications KPIs as subscriber base, revenue, and ARPU for each kind of service (<u>Yadav, Sushil & Bititci, 2018</u>). Still, as soon as customers use bundles of services, ARPU is usually calculated as a company financial performance indicator. The tendency of ARPUs to decline makes this KPI a somewhat unreliable indicator (<u>Hendrawan & Nugroho, 2018</u>; <u>Pfeifer & Conroy, 2017</u>; <u>Son *et al.*, 2019</u>; <u>Stork, Esselaar & Chair, 2017</u>).

Subscriber base and revenues are not sufficient indicators by themselves. As shown by the results of this study, the subscriber base may be rising but revenues may decline. Or revenues for a segment may increase, but its share in total revenues may be redistributed in favour of other services. All this is caused by changes in consumer behaviour (<u>Confraria, Ribeiro & Vasconcelos, 2017</u>).

With the opportunities provided by new technologies, including fixed and mobile broadband, more and more customers are reducing voice telephony usage and increasing spending on broadband-related services; and such a redirection of cash flows causes a large increase in fixed and mobile broadband subscriptions and revenues (<u>Whalley & Curwen, 2018</u>). While numbers of mobile telephony subscriptions grow, the revenues from voice telephony are declining (<u>Ogidiaka & Ogwueleka, 2019</u>).

The increase in subscriber base and revenues in the television sector reveals another trend in consumer behaviour. With further penetration of broadband, more and more customers upgrade their television from free TV to Pay TV, mainly using IPTV and OTT services (<u>Kim, Nam & Ryu, 2019</u>).

Consumer behaviour is influenced by numerous factors, like brand, price, usefulness, compatibility, product or service attachments, social influence, global changes and breakthroughs in technology and communications, smartphones and broadband penetration (<u>Ting *et al.*</u>, 2019). The companies that take into account all the factors influencing consumer behaviour in their activities are more likely to be competitive in this market. Overall, the modern telecommunications services user is not likely to be distinguished by loyalty; this concerns both the Russian Federation and Vietnam.

Conclusions

Subscriber bases and revenues of television, fixed and mobile telephony, and fixed and mobile broadband segments of the Russian and Vietnamese telecommunications markets for the period of 2015-2019 were analysed by way of descriptive and comparative analysis methods.

The results of the study revealed similar global trends in Russian and Vietnamese telecommunications markets. Despite growth of mobile telephony subscriptions, revenues of this sector of the industry are decreasing and the shares of sector revenues in total telecom market revenues are redistributed in favour of fixed and mobile broadband, the subscriber bases and revenues of which have been rapidly increasing for the previous five years.

Fixed and mobile telephony revenues are declining since customers prefer new communication technologies to the old ones. The television subscriber base is growing in both countries. TV revenues are increasing in the Russian market and somewhat declining in the Vietnamese telecommunications market. With further penetration of broadband, more and more customers upgrade their television from free TV to Pay TV (IPTV and OTT services).

The results of the study confirmed the global trends in consumer behaviour in these telecommunications markets and the applicability of approaches used herein for other countries.

This study is limited to the countries of this research (Russian Federation and Vietnam), investigated indicators (subscriber base, revenue and ARPU) and methodology. There is room for further research with a wider set of countries, other or additional indicators, and other methodologies like correlation and regression analysis.

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