A STUDY OF COURIER SERVICES MARKET IN BULGARIA

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Abstract: *Courier services industry in Bulgaria had a stellar performance in the past ten years. The market is becoming increasingly competitive, with local companies competing with multinational companies for market share. The present paper discusses the competition at the courier services market in Bulgaria and the main factors determining the choice of particular courier provider. The study used primary data from 635 individual and 108 business customers of courier services. The results found that the most important factors for individual customers when choosing courier operator are service price, service quality and the ability to change the service according to individual requirements and customer needs. For business customers, timeliness is a key factor in selecting a particular operator. This implies the need to develop different strategies for individual and business customers, as well as the application of a differentiated approach to different market segments.*

Keywords: *Courier Services, Courier Operators, Courier Services Market, Competition and Concentration*

INTRODUCTION

The postal services, as services of *General Economic Interest* have been evolving rapidly in recent years and pay an important role in an effective European Union (EU) Single Market. Postal services are of crucial importance to businesses and EU citizens alike (https://ec.europa.eu/growth/sectors/postal-services_bg). The role of postal services has changed as electronic communication services change traditional patters of communication and business (Pilinkienė et al., 2017).

Postal services had faced significant challenges due to a liberalization of the EU postal market. The development of the EU postal market can be structured in three main phases: the phase before liberalization (before 1980s), the phase of liberalization (between 1990s and 2012) and the digital age (starting around 2005) (Finger et al., 2014).

During the phase before liberalization most of the EU postal operators were state-owned enterprises. They had the monopoly over letters, parcels and money transfer services.

Between 1990s and 2012 the European Commission accepted the EU law on postal services. This law consists of three main directives (Directive 97/67/EC of 1997, Directive 2002/39, Directive 2008/6/EC) and gradually liberalized the postal market. The liberalization was in form of stepwise reduction of the monopoly. Full liberalization allows new operators and innovative services to appear, thus promoting competition in terms of quality and price of postal services. At the same time, liberalization had created new European global postal players (Deutsche Post DHL, TNT).

The digital age is a consequence of profound technological changes that have occurred since 1970s in the area of information and communication technologies (ICT) and internet (Finger et al., 2014). Some of the consequences of digital age are: globalization; growing mobility of people, goods and capital; growing individualization and changes in customer behaviour (Dimitrov, Novakova Nedeltcheva, 2017).

In Bulgaria the postal market liberalization is fact since 01.01.2011. From this date the postal services market has been open to competition, thereby ensuring equal opportunities for private business entities to operate in the market, creating conditions for competition, and thus improving service quality for customers.

The Bulgarian postal services market comprises two main categories of services: universal postal services (UPS) and non-universal postal services (NPS).

In accordance the Bulgarian Postal Services Act, UPS include:

- acceptance, transport and delivery of domestic and international postal items, as follows: items of correspondence up to 2 kg; small packets up to 2 kg; printed matters up to 7 kg, and secogrammes up to 7 kg;
- acceptance, transport and delivery of domestic and international postal parcels - up to 20 kg;
- additional services "*registered*" and "*declared value*".
- NPS include:
    - acceptance, transport and delivery of direct mail;
    - acceptance of messages submitted in a physical or electronic form by the sender, processing and transmitting them by electronic means, and delivery of these messages to the addressee as postal items - the so called "*hybrid mail*";

- courier services and
- postal money orders (Postal Services Act, 2012).

Non-universal postal services in Bulgaria continue to play a leading role in the postal market revenue. According to Annual Reports of Communications Regulation Commission (CRC) courier services determine the postal services market structure. Courier services in Bulgarian formed about 70% of the total amount of revenue from postal services.

Over the past decade the role of postal services has changed fundamentally. The volume of letter postal items has decline as paper has been supplanted by new and improved types of electronic communications. On the other hand, the advanced electronic communication systems are expanding the volumes of courier services.

Courier services play an integral part in the success of many businesses by providing the vital link between suppliers and consumers. The items vary from documents to small packages and parcels. Courier services enable cost-effective distribution of time-critical goods and documents (Pholsuwanachai, 2011).

The growing demand of courier services, automation, new technologies and increasing use of electronic means, is considered the as most significant change driver in the courier services sector. Taking into consideration the above-mentioned changes, new courier services are constantly being developed both internationally and nationally.

Courier service activities should be arranged in the way for better control of costs and quality of service. The contemporary courier operators have to transform their services to meet changing customer needs - growing parcel market and e-commerce. The courier services market is being challenged by new customer habits and has had to adapt new technologies.

E-commerce trade is one of the major drivers of the global courier services industry. The market is expected to generate huge volumes and could garner revenues of about $2.4 trillion by 2018 (Market Realist, 2015). The e-commerce trade primarily involves "*business to business*" (B2B) businesses and online shopping. It is growing rapidly in the whole Europe and in Bulgaria too. Moreover, the demand for "*business to consumer*" (B2C) e-commerce trade is also increasing.

Hence, this *study aims* to analyze the courier services market in the Republic of Bulgaria.

To achieve this goal, the *following tasks* have been set:

(1) to analyze the courier services market in the country in the destinations: number of registered courier operators (providers), revenue from the provision of courier services, number of processed items and types of users;
(2) to analyze the level of competition and concentration;
(3) to identify the main factors for courier provider selection.

METODOLOGY

The present study was based on systematized and processed information from the Annual Reports of the Communications Regulation Commission in Bulgaria for a period of ten years and on the basis of an empirical survey conducted among users of courier services in the country.

The survey was conducted between June 2016 and June 2017.

Individual and business customers of courier services in Bulgaria are the main units of the study.

Quantitative data collection methods were used to collect all the necessary data. Therefore, a structured online questionnaire, administered by *Survey Gizmo* software was conducted.

Due to the inability to create a sample that meets the requirements for a complete random selection we used two types of non-random sample - volunteers who agree to participate and snowball sample.

According to the *National Statistical Institute of Bulgaria* at the beginning of 2017 the population of Bulgaria is N_{ic}=7 101 859 people and the number of enterprises is N_{bc}=393 460. At significance level α=0,05 and margin of error ε=0,05 minimum sample size determined to be 384 for individual customers and 96 for business customers (Creative Research System). The number of returned and valid questionnaires is 635 for individual customers and 108 for business customers.

COURIER SERVICES INDUSTRY IN BULGARIA

The courier services in Bulgaria primary provide express delivery and pick up of parcels. The industry transport goods that are non-palletized and weigh less than 35 kg.

The Bulgarian courier services industry consists of about 151 companies both large and small, which have combined annual revenue of about 282 million BGN. The industry has seen steady growth in the last ten years (*Figure 1*).

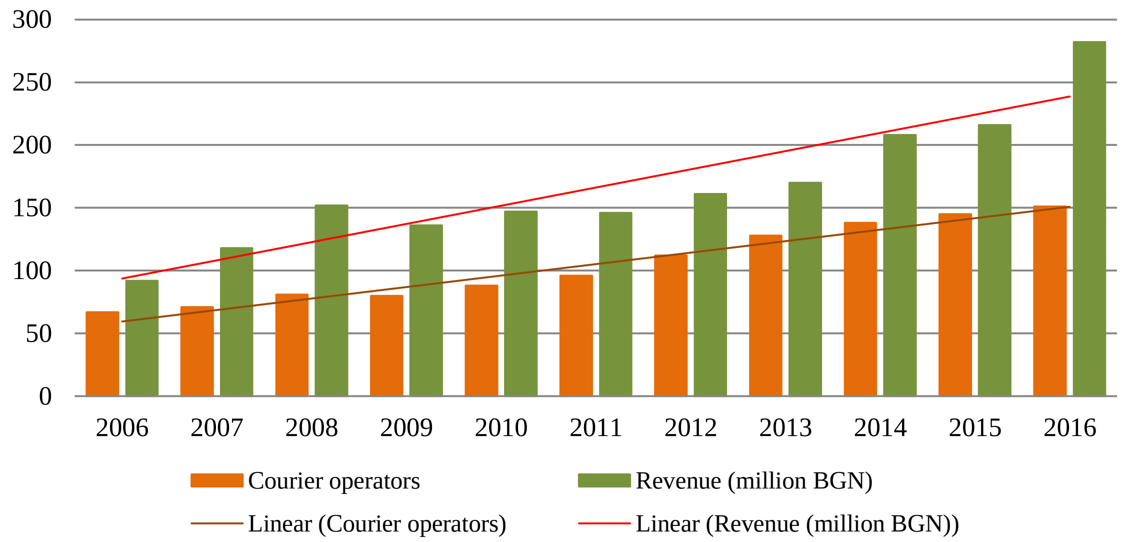

Fig. 1. Revenue and number of the courier operators (2006-2016)

Source: Annual Reports of Communications Regulation Commission

For the period 2006 - 2016, the number of registered courier operators in Bulgaria continues to grow, from 67 registered operators in 2006 to 151 in 2016 (which is more than 125% growth).

The results show that revenue over the period 2006-2008 increased dynamically by over 25% per year. During this period, there is also a dynamic increase in investments with technological importance in the courier services sector, the market remains effective and characterized by low to medium competition.

In 2009, a decrease in the consumption of courier services was reported, while accepted, carried and delivered courier items decreased by 10% compared to the previous year. This also leads to a decrease in the revenue from courier services.

In 2010, the total number of processed courier items was 19.5 million, up 13% compared to the previous year. Sales revenue rose by over 8%. In 2011, the number of courier items grew by 20%, the revenue from courier services declined by over 1%. This is mainly due to re-orienting customers towards more cost-effective services and lowering the prices of some of the services offered on the market. There are also a number of other factors affecting the revenue from courier services, such as: Greece's financial crisis, which had had an impact on Bulgarian economy; rising fuel prices, which for courier companies meant higher costs etc.

In 2012, the revenues from courier services amounted to 161 million BGN, and in a one-year period they increased by 10%. In 2013 there was an increase in the revenue of courier services of 6%. In the same year, the total number of accepted, carried and delivered courier items amounted to 24 million, an increase of about 12% over the previous reporting period.

In 2014, the revenues from courier services amount to 208 million BGN, compared to the previous year, this is an increase of 22% and the total number of received, carried and delivered courier items is 29 million, which is 21% more than in 2013.

In 2015 revenue from courier services increased by 4%. In 2016, the revenue from courier services amounted to 282 million BGN. For one year, they have increased by 31% and the total number of accepted, carried and delivered courier items amounted to 48 million, which also represents an increase by 27% as compared to 2015.

In 2016, revenue from domestic courier services accounts 74% of the total revenue from courier services (*Figure 2*). In the long run, there is a relatively constant ratio between the revenues from both types of services.

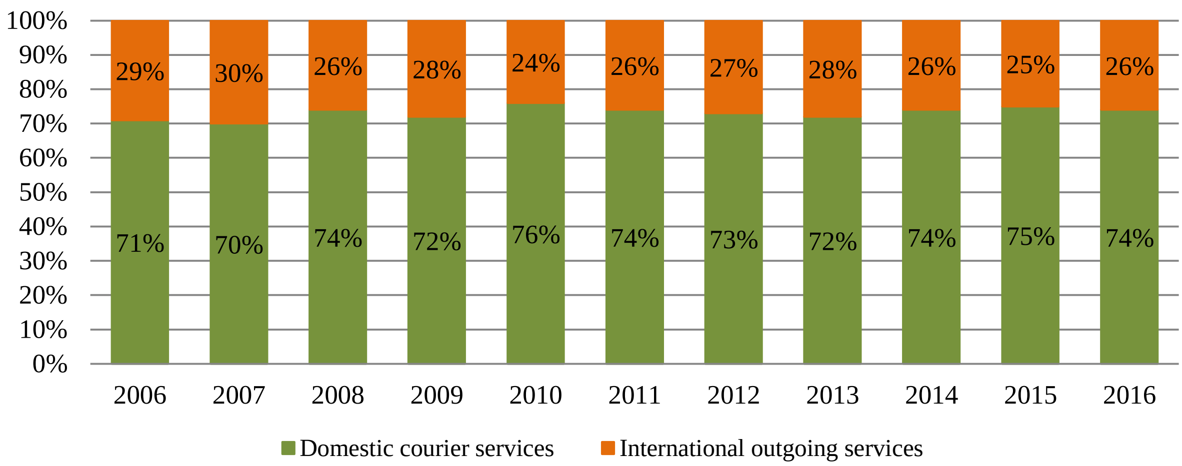

Fig. 2. Courier services revenue structure

Source: Annual Reports of Communications Regulation Commission

The largest customer of courier services in Bulgaria is the business as a whole (*Figure 3*). There is a predominance of business customers over individual customers. According to Annual Reports of Communications Regulation Commission in Bulgaria most of them are in the manufacturing sector, followed by trade and services. A significant number of leading courier companies offer special solutions for individual industries. Operators rely on reducing logistics and inventory costs, using state-of-the-art supply chain optimization technologies, delivering the fastest and most reliable route from suppliers to end-users.

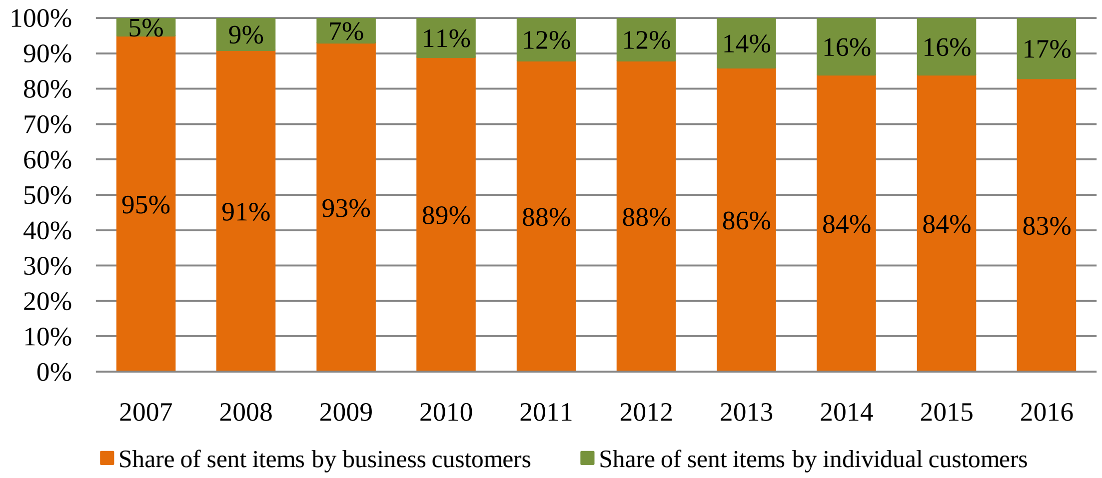

Fig. 3. Structure of the consumption of courier services by types of customers

Source: Annual Reports of Communications Regulation Commission

During the period 2006-2016 there was a significant increase in the number of items sent by individual consumers (from 5% in 2006 to 17% in 2016). Over the years, there has been strong customer interest in e-commerce, leading to an increase in the proportion of courier shipments sent by businesses to individual consumers. The increase in the number of individual addressees puts the courier companies in the challenge of looking for a variety of ways to notify and deliver shipments. In this regard, some of the leading operators have indicated that they offered new services during the past year, such as: delivery to a specific hour, respectively delivery of one-hour and two-hour delivery etc.

COMPETITION AND CONCENTRATION ON THE COURIER SERVICES MARKET IN BULGARIA

Dynamically growing market attracts new players so that competition is generally increasing. According to the principle of Competition Law the degree of competition and concentration is assessed by Hirschman-Herfindahl Index (HHI) and Concentration ratio (CR). HHI is calculated based on the sum of squared market share of courier operators, while the CR value shows the shares of the largest operators (CR3, CR4 or CR5). According to the value of both indicators the market is determined as: market with excellent conditions for competition, market with effective competition and low concentration, market with medium level of concentration, market with high concentration and extremely concentrate market (*Table 1*).

Table 1. The interpretation of courier services market concentration ratios (Pilinkienė et al., 2017)

Market concentration ratio	Interpretation of market concentration ratio
Concentration ratio	• a value closed to 0% means perfect competition, excellent conditions for competition; • a value below 40% mean effective competition and low concentration in the market; • a value below 70% means medium concentration; • a value above 70% means high concentration; • 100% means extremely concentrate market.
Hirschman-Herfindahl Index	• HHI<1000 indicates an concentrated market; • HHI between 1000 and 2000 – moderate concentration; • HHI above 2000 – high concentration.

Table 2 summarizes the data for the courier operators with the largest market share, the aggregate market share they form in the courier services market, HHI and CR.

Table 2. Competition and concentration on the courier services market in Bulgaria

	Courier operators with the largest market share	Cumulative market share	HHI	CR
2007	"Blu Express Mail", "Bulgarian Posts", "DHL Bulgaria", "Econt Express", "In Time", "Interlogistics Courier", "MIBM Express", "Polypost – Post and Logistic", "Leo Express", "Sprider Courier", "Sity Express", "Speedy", "Tip Top Courier", „TNT Bulgaria", "Flying Cargo Bulgaria"	80%	1000	50
2008	"Bulgarian Posts", "DHL Bulgaria", "Evropat-2000", "Econt Express", "In Time", "Interlogistics Courier", "MIBM Express", "Polypost – Post and Logistic", "Leo Express", "Sity Express", "Sprider Courier", "Speedy", "Tip Top Courier", „TNT Bulgaria", "Flying Cargo Bulgaria"	80%	1011	55
2009	"Bulgarian Posts", "D§D Express", "DHL Bulgaria", "Econt Express", "In Time", "Interlogistics Courier", "MIBM Express", "Polypost – Post and Logistic", "Leo Express", "Sity Express", "Star Post", "Speedy", "Tip Top Courier", „TNT Bulgaria", "Flying Cargo Bulgaria"	93%	1063	59%

2010	"Bulgarian Posts", "D§D Express", "DHL Bulgaria", "Evropat-2000", "Econt Express", "In Time", "Interlogistics Courier", "MIBM Express", "Leo Express", "Sity Express", "Star Post", "Speedy", "Tip Top Courier", „TNT Bulgaria“, "Flying Cargo Bulgaria"	93%	1074	66%
2011	„DHL Bulgaria”, „Econt Express”, „In Time”, „TNT Bulgaria“, „Speedy”	66%	1136	66%
2012	„DHL Bulgaria”, „Econt Express”, „In Time”, „TNT Bulgaria“, „Speedy”	67%	1128	67%
2013	„DHL Bulgaria”, „Econt Express”, „In Time”, „TNT Bulgaria“, „Speedy”	65%	1098	65%
2014	„DHL Bulgaria”, „Econt Express”, „In Time”, „TNT Bulgaria“, „Speedy”	69%	1566	69%
2015	„Bulgarian Posts“, „D§D Express“, „DHL Bulgaria”, “Econt Express”, „In Time”, „Leo Express“, „MIBM Express”, „Rapido Expres and Logistics“, „Speedy”, „TNT Bulgaria“	85%	1408	69%
2016	„Bulgarian Posts“, „D§D Express“, „DHL Bulgaria”, “Econt Express”, „In Time”, „Leo Express“, „MIBM Express”, „Rapido Expres and Logistics“, „Speedy”, „TNT Bulgaria“	88%	1324	71,5%

From the data in *Table 2* it can be concluded that courier services market in Bulgaria is characterized as a relatively competitive market with medium to moderate level of concentration.

There is also a reallocation of operators' market shares. Nevertheless, the operators such as “DHL”, “Econt Express”, “In Time”, “TNT Bulgaria” and “Speedy” can be distinguished as undisputed leaders in the market. These are operators that fall into the list of companies with the highest market share over past ten years.

The main competitors of the domestic market are “Econt Express” and “Speedy”. Both companies have different development strategies. “Speedy” is targeted at corporate customers and complex and large shipments, while “Econt Express” focuses on small shipments for individual customers and small and medium-sized businesses. The company, therefore, has a larger network of more than 500 offices in the country and continues to expand its points by adding automatic post offices.

Undisputed leaders in the international courier services market are “TNT Bulgaria” and “DHL”. “DHL” is focused on the market for documents and parcels, and "TNT Bulgaria" is focused on the market for heavy shipments.

All major multinational courier providers already have representatives in Bulgaria - some of them through local sub-contractors, others have built their own networks.

Private courier companies invest considerable resources in developing their networks and optimizing their services. They operate with their own fleet of cars of all categories, which provide full coverage on the territory of the country, observing the parameters of the offered services.

So far, Bulgarian courier providers have had the advantage of lower domestic prices and their better network on the territory of the country compared to foreigners. At present, most of them have a sufficiently well-developed branch network in the country, as well as a large number of cars to ensure shorter delivery times and lower costs for their services. With these advantages they compete very well with international courier providers.

In recent years, this has changed, foreign companies have begun to pay more attention to the internal market, reducing service prices and shortening delivery times.

A significant factor for this is the geographical location of the country and the possibility of establishing a distribution center for the region. Many of the big companies in the market are thinking about such projects and are therefore betting on the development of their business in Bulgaria.

FACTORS FOR COURIER PROVIDER SELECTION

The sample population of individual customers comprised of 57% females and 43% males. Majority of the respondents are in the age group 25-35 (57%). In terms of income 65% of the respondents have income up to 1000 BGN and 92% of all respondents had a higher education level.

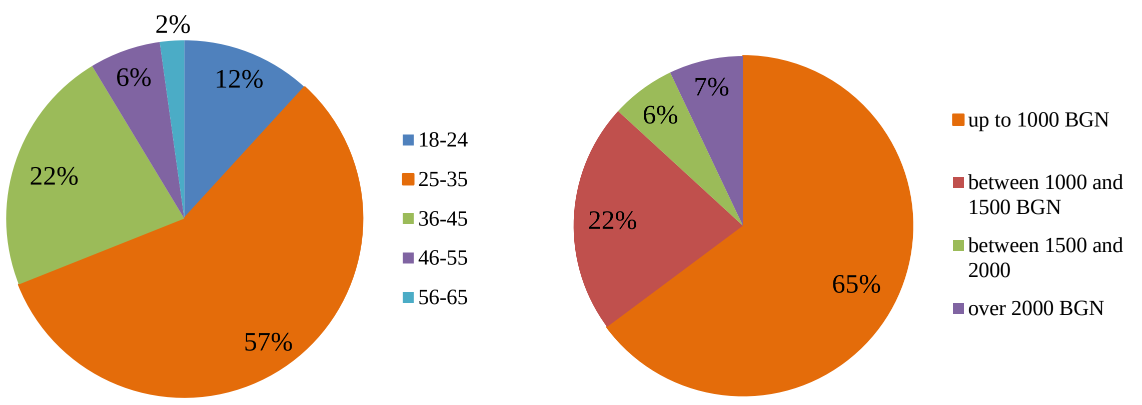

Fig. 4. Demographic profile of individual customers of courier services in Bulgaria

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According to "*Classification of economic activities 2008*" business respondents are divided in groups as shown in *Figure 5*.

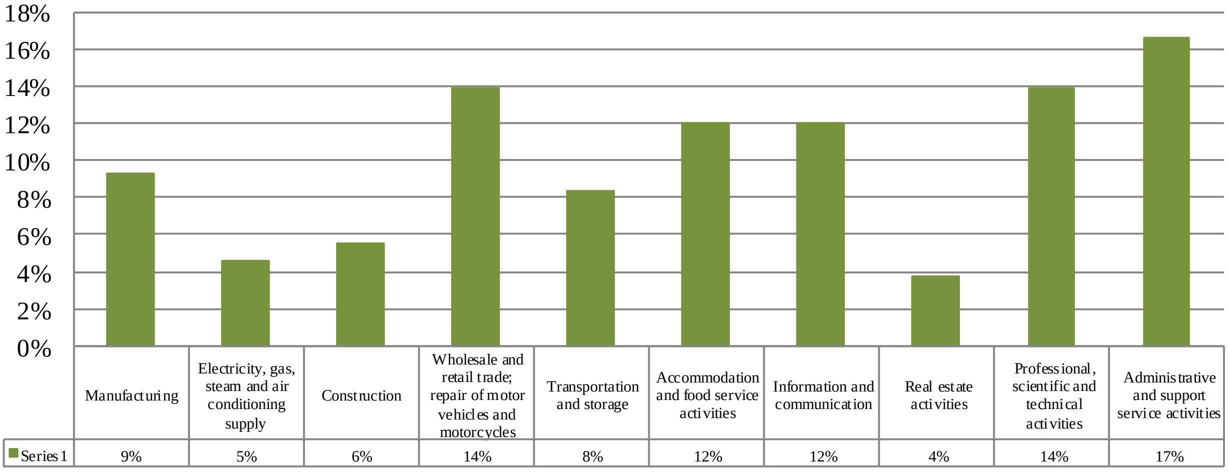

Fig. 5. Profile of business users of courier services base on classification of economic activities

Based on criterion "*number of persons employed*" the distribution of business respondents is as follows (*Figure 6*):

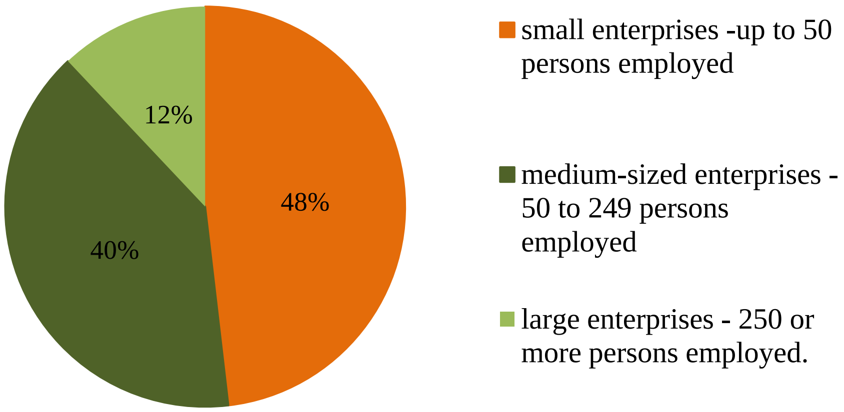

Fig. 6. Distribution of business user by size

Based on criterion "*frequency of use of courier services*" individual users can be devided in two main groups: users who use the courier services if necessary - 65% and users who use courier services at least once a month - 35%. Almost all of business customers use courier services every week. Half of the respondents sent up to 50 parcels monthly and 27% between 100 and 200 parcels.

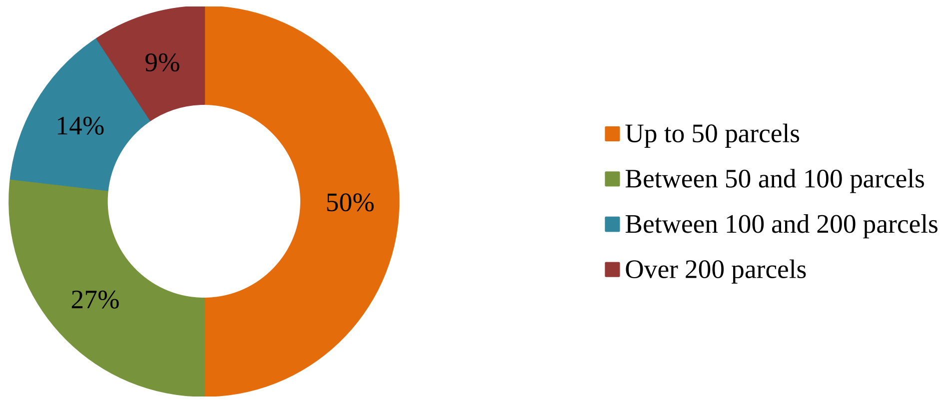

Fig. 7. Business customers' monthly shipments

Individual customers usually sent documents and parcels up to 2 kg., while business customers sent documents and parcels with weight of over 20 kg.

Individual customers mainly used domestic courier services (87,5%), followed by international services (10,3%) and finally are urban courier services (2,2%). Business customers used all type of services.

Identifying the factors that influence the choice of a particular courier operator and the relative degree of importance may serve courier operators as guidance on where to focus their efforts and investments.

The analysis of the results of the survey shows that the key factors for courier operator selection are: ensuring the security of shipments, timeliness, service quality, quality of information, personnel contact quality, ability to change the service according to individual requirements and customer needs and service prices.

The Borda Count Method was used to rank out the factors of importance. The results are presented in *Table 3*.

Table 3. The most important factors when choosing courier provider

The most important criteria for choosing courier provider by individual customers		The most important criteria for choosing courier provider by business customers	
Factor	**Points**	**Factor**	**Points**
Price	2390	Timeliness	390
Service Quality	2920	Service Quality	360
Ability to Change the Service According to Individual Requirements and Customer Needs	2220	Ensuring the Security of Shipment	358
Ensuring the Security of Ship-	2137	Quality of Information	348

ments			
Quality of Information	2106	Personnel Contact Quality	340
Timeliness	2103	Ability to Change the Service According to Individual Require-ments and Customer Needs	330
Personnel Contact Quality	1791	Price	306

The research found that the most important factors for individual customers when choosing courier operator are service price, service quality and the ability to change the service according to individual requirements and customer needs. For business customers, timeliness is a key factor in selecting a particular operator. By contrast, individual users are much "*more sensitive*" to the price of a service. They place the factor "*service price*" first in importance when choosing an operator, while it is ranked last by business customers. *Service quality* is of major importance for both individual and business customers (*Figure 8*).

Fig. 8. Factors for courier operator selection by business customers (made by the authors)

The result of the study shows that for the business customers timeliness is of crucial importance when choosing courier operators. Courier providers should make a strong commitment to collect and deliver every single shipment, on time.

For individual customer courier operators should to implement flexible pricing, as price is the factor that determines their choice.

Quality of services was also found to have a strong influence on courier provider selection.

Base on empirical research it was found that courier service quality has a positive and significant direct effect on customer loyalty. Providing quality service is a critical for customers to stay with a brand or a courier provider (Otsetova, 2017).

Courier providers strive to differentiate themselves by highlighting their firm's relative strengths and by offering new, value-added services to their customers. In the following period survival and success at the courier market will depend on flexibility and effectiveness in all aspects of activities, including superiority over global competition at technology application to reduce expenses and dramatic improvement of service quality (Otsetova, 2016).

The results imply the need to develop different strategies for individual and business customers, as well as the application of a differentiated approach to different customers groups.

In the context of intensive and increasing competition in the courier services market, the goal of each courier provider is to identify and satisfy the specific needs of its customers by offering the widest and most economically justified range of services.

CONCLUSION

Based on this study following conclusions can be formulated:

1. Courier services industry in Bulgaria had a stellar performance in the past ten years. For the period 2006 - 2016, the number of registered courier operators in Bulgaria increased by more than 125%, at the same time there is more than 200% increase in the revenues from courier services;
2. Courier services market in Bulgaria is characterized as a relatively competitive market with medium to moderate level of concentration. There is a reallocation of operators' market shares;
3. The main factors determine the courier services provider selection are: ensuring the security of shipments, timeliness, service quality, quality of information, personnel contact quality, ability to change the service according to individual requirements and customer needs and service prices;
4. By applying Borda Count Method, it was found that the most important factors for individual customers when choosing courier operator are service price, service quality and the ability to change the service according to individual requirements

and customer needs. For business customers, timeliness is a key factor in selecting a particular operator;

5. Service quality is of major importance for both individual and business customers;
6. The knowledge about factors determining the courier provider selection allows adjusting courier proposals to customer needs and to gain a competitive advantage in the global market.

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