

## **TYPES OF SEGMENTATION OF CONSUMERS AND ITS DEVELOPMENT IN ELECTRONIC MARKET**

### **Abstract**

The article is about consumer segmentation, meaning division into groups according to particular characteristic features. At present there are two major markets – traditional and electronic market that functions in cyber space, which essentially is comprehensive as it has no geographic boundaries. The participants of electronic market, including consumers, are not physically present on e-market, i.e., contrary to traditional market it can be said that in e-market there is no physical contact. Thus in order for organizations to work on this market there is a necessity to divide consumers into several groups. Segmentation used in classical marketing is no longer effective enough in e-marketing because the need of consumers in e-marketing differs from those of the traditional market. The author of the article analyses new possibilities of segmentation in e-environment offers new ways and criteria for customer segmentation in e-market. E-environment is a favorable environment for micro and medium size enterprises that do not have enough financial resources for marketing promotions and advertising. Electronic environment requires special knowledge and skills as navigation in it demands ability to work on computer using internet as well as other digital tools and instruments. E-environment calls for creative thinking and action. The entrepreneurs must be flexible and able to react to changes in e-market knowing that essentially e-environment is dynamic and interactive. Increasingly important is the education of entrepreneurs and their ability to manage electronic tools. This issue should be looked at both at entrepreneurial and state level. The employees have to receive corresponding training using different level training programs in order to raise competitiveness of the country on the global market.

**Key words:** *internet, cyberspace, segmentation, electronic market, e-market segmentation, electronic environment, audience, click.*

### **Introduction**

We live in the time of high and fast-moving changes related with market enlargement and globalization, new technological advance and improved techniques, restructurization of economical processes and recession in the traditional market models. A new model of advanced society is being developed now, also called as information society. Internet is being considered as the main infrastructure for the information society. The electronic market proceeds in the internet medium and is the greatest of all the existing markets.

**Research problem, novelty, relevance:** an essential e-market difference from the traditional market is that the cyberspace does not have its geographical location. This fact changes the market participators conception and wherewith their mutual interaction instruments, principles and models. The participators become as untouchable as electronic environment where they proceed. In order to achieve successful business, companies have to segment the e-market participators. For e-market participators segmentation only innovative and various criteria and methods should be used that are different from the classical market segmentation.

**Research object:** electronic market participants.

**Research aim:** to explore and describe methods of electronic market's participants' segmentation.

**Research tasks:** examine the segmenting concepts and definitions in the classical market, recognize the electronic market potentials, study the existing e-market segmenting methods and values, and offer new e-market segmenting methods and its values.

**Research methods:** dates analyze, analyze of scientific sources, observing.

### **Segmentation content, definitions**

Offering goods and services at any kind of market - consumption, industrial or electronic, the company should realize that even with enough amount of resource it can not satisfy all the customers because of their various motives and reasons for buying goods or services.

Therefore it is better to apportion consumers following their motives or other indications, and after that to offer goods and services, that are made especially after these criteria (Kaparkalēja, 2003).

The segmentation is separation of market into consumers groups, depending on their needs, proceeding and attitude towards marketing activities (Randall, 1996).

A segment of market is a part of consumers with similar needs and attitude towards marketing activities (Praude, 2004).

Market niche is a small segment of costumers who's needs are not fully satisfied and the competition level is low (Praude, 2005).

The term „market segmentation” was first used by V. Smith (USA) XX century in fifties, when businessmen started to relate their business strategy in market with modifying quality of goods according the needs of different groups of prospective consumers. It is recommended to do the clientele segmentation as long as the company finds the group, whose interests were not consulted before or who's wants would be economically attractive for a company to meet (Nidrītis, 2005).

During the process of segmentation the company needs to clarify:

- what is the target market (segment) – what and how is the target consumer?
- is the market (segment) capacious enough and is there an economical perspective for the company?
- is the company planning to proceed only in one or several segments and niches, or in the market overall (Kotlers, 2006)?

### **The Electronic market – ocean of possibilities**

The participators of the electronic market can be divided into two big groups – the physical persons (private persons) and the legal persons (business and government sector). The division shows nine models of proceeding in the electronic market (Table 1).

Table 1

### Participants matrix of the electronic market

Receiver → supplier ↓	Government	Business	Customer
Government	G2G	B2G	G2C
Business	G2B	B2B	B2C
Customer	C2G	C2B	C2C

In C2B systems (customer to business) the services are provided by clients. For example, client comments, information about competitors prices

G2G (government to government) systems show the mutual relation of government (and self-government), where the best sample is co-ordination and provision of mutual services.

G2B (government to business) shows relation between government and business, who's sample is the provision of government information accessibility for business.

Very similar is the use of system G2C (government to customer), but receiver of service is an individual.

B2G (business to government) systems best sample is supply of government (and self-government) orders, for example, the electronic biddings.

C2G (customer to government) systems best sample is satisfaction of tax undertakings.

B2B (business to business) is business relations between two companies, who use the e-commerce information systems for their mutual projects.

B2C (business to customer) systems are for the final customers, they are analogical to traditional shops, orders by catalogues and telemarketing, but via internet.

C2C (customer to customer) systems provide the direct sale among people; usually these are bedding systems, for example, [www.perc.lv](http://www.perc.lv).

In systems C2B (customer to business) the services for companies are provided by clients. For example, client comments, information of competitors prices (Gaile-Sarkane, 2005).

The matrix shows that electronic market covers practically all kind of public segments as well as the major part of citizens.

In twenty seven European Union countries internet is used by more than half of its citizens (see Table 2) (Eurostat, 2009).

Table 2

### Internet Users in European Union Countries (EU-27)

Year	2006	2007	2008
EU-27 Population (mill. of people)	493	495	498
EU-27 Number of residents, often using internet (mill. of people)	261.3	267.3	298.8
EU-27 Number of residents, often using internet (%)	49	54	60

According to the data, the number of internet users in EU is more than half of its population. The significant annual increase of internet user's number is being observed. It means the electronic market is the greatest of all the existing markets. In order to digest the market and to get it right what, whom, where and how to sell, it is vitally necessary to segment the consumers considering features of the market, *videlicet*, market without geographical borders and without palpability of customers.

The author gives conclusion, that the main various features of electronic market mentioned above prepare all the companies, that proceed in the electronic market or is planning to proceed there, to search and to develop new methods and actions in segmenting the customers. By choosing the right methods of e-market segmenting and by sorting the consumers accordingly the qualities of goods and services, the companies can successfully sell the goods or services to the selected segment or niche in the global market. The advantage of e-market is related to different possibilities provided by internet. For example, there already exists such internet links, where the internet users with similar interests are already divided into groups – such like social portals, different websites and blogs of business associations and alliances and so on. It is important to notice that several methods of segmentation in internet do not require for great financial investments, thereby it is available for wide range of companies including both micro and the small companies.

### **Segmenting in the electronic market**

The basics of marketing remain significant and it is vitally important to recognize the target audience. It is substantially to understand, how much people are affected by social media. It is not the right way to use as many internet homepages as possible in order to reach large inaccurate demographical groups.

In author's opinion the electronic market segmentation content is grouping, that is similarly to traditional market segmentation content – goods or services, consumer who proceeds in the electronic medium. E-market is based on internet, wherewith there are its specific aspects, which should be considered during segmentation. Internet has its own workings and rules as well as another format – all the processes go on fast regime and online and also the interactive mutual communication goes on there. Communication source on e-medium consists of both company and consumer.

E-market segmentation means that goods and services, customers and consumers or companies operating on e-medium are divided into special groups by specific criteria, where special marketing methods can be related with (Gaile-Sarkane, 2005).

Segmenting consumers in the electronic environment by geographical, national or culture indications is possible in special cases for example if a company is planning to export its production to the specific selected countries.

A closer watch should be kept to consumer's segmentation by their interests and needs. Actually in the internet there is a range of portals and vortals, which are integrating users with different interests. Exactly such internet sites help companies in segmenting consumers as there are concentrating consumers with similar interests.

After combining the information from different sources, the author concludes that consumers in e-medium can be segmented by the following indications by:

- consumers type: private persons , legal persons;
- domain: .lv, .com, .gov, .org, etc.;
- frequency of using system: use system only once (for example, makes only one purchase on e-shop); periodic users, regular users;
- character of using system (offering services and buying services);
- goods and services (objects): production ways and means and goods; utility; service and additional utility.

Furthermore, segmentation of companies' means grouping the companies by special criteria, that meets the needs of specific consumers, by offering goods and services in the market.

E-market companies` segmentation, additionally the common segmentation, should be done following the different characteristics and criteria, for example, by:

- model of e-business: e-shop, e-bedding, e-supply, e-shopping centre, virtual alliance and so on;
- type of business: retail, wholesale, commerce agent, electronic commerce, and so on;
- field of business: news and information agencies, mass media, market and social research, patenting and intellectual property defense, education, state institution, medicine, finance and bank sector, commerce, and so on;
- business radius: local, regional, international, continental, global, and so on;
- business language: Latvian, Russian, English, German, multinational, and so on;
- other way of classification: by production characterization, by business mechanism in the market etc. (Gaile-Sarkane, 2005).

Currently there are several segmentation tools available on the internet. One of them is on the world's most popular internet portal Google ([www.google.lv](http://www.google.lv)) the analytical link [www.google.lv/analytistics](http://www.google.lv/analytistics). By using this link the companies can segment the visitors of their website into both groups – existing clients and potential clients. The companies should take the opportunity as it does not cost anything and it has large potentiality (Google.lv, 2009). For example,

one of the possibilities is cookies or a small part of text that is saved by browser of the computer's user. Cookies consists of little information about the data user was looking for, his purchases, internet sites he has visited, preferences and so on. A portal may segment all the homepage visitors from language, location on network, locality. Portal analysis gives the opportunity to see homepage visitors` statistics of different periods of time.

In the second group for segmenting the clients on internet there are different technical aspects, depended on settings and resources of user's computers, for example, on the browsers that visitors use. The most popular world's browsers currently are on Internet Explorer, Firefox, Safari and Opera. Homepage visitors can be segmented by operation systems they use, for example, Windows, Macintosh and Linux. All the segments can be indicated on geographical map for better foresee ability.

Using and analyzing all the data in a right way, a company can give conclusion on goods and services and specify whom to offer them, as well as make a new approbation of goods and services. Internet offers very large opportunity for consumers` segmentation. A company may establish different segmentation schemes accordingly the wants and targets of the company.

In author's opinion cyberspace is very appreciative medium, because it can provide very quick and precise information about consumers, as well as group and analyze them. During segmentation and setting the target auditory on e-medium it is important to experiment and be creative, because a company may establish different segmentation schemes itself.

Segmentation starts with both, the audience which is a consumer of goods and services or a potential consumer and the company which offers goods or services.

One more segmentation opportunity of e-market consumers is inserting information about company or its goods and services on larger internet portals and the analysis of the further attendance. It gives possibility for such companies with a minimal budget to show their advertisements, for example, on Google, Yahoo and other sites and its advertisements networks. A company makes advertisements and chooses keywords which are related with its business. The fee for showing the advertisement is being calculated only after the users have clicked on the advertisement. When visitors are searching information by using any of the keywords, the advertisements probably will appear next to the search results. In such a way a company will advertise itself to its target audience as well as the visitors` segmentation will be achieved together (Härts, 2007). It is possible to fix the interaction of homepages or advertisements on internet with total number of visitors in order to determine the visitors` behavior and the minimal number of visitors before it is selected for a segment. In the course of time the interaction frequency has become similar to the behavior segment. Every inconstant value may change depending on the originated segment. It is quite easy to choose the best interaction for a company, but the specialty is

hidden under the level of definite standard so that each visitor would be adequate for the selected segment. In case if the visitors' frequency number was set too high, the segment would be too small to have some sense. As longer the company is fixed, as homogenized and smooth becomes the segment (Batels, 2007).

### **Meaning of „click” in segmentation**

The „click” on internet has high importance, which is as valuable as existing or potential clients. Through the actions we perform in the digital world, we leave the imprint of our purpose and as more there are actions altogether of imprints as more accurately the searching program can set our purpose relation to any specific query. Many services have started to tail our imprints. The imprints are not just a potential reading for others; it can be also as objects towards which the searching program sends its spider in order to get absolutely new information about that what people are worming out. Overall these streams of „clicks” may give a lot of information about that, how people use the internet. (Batels, 2007).

The idea of „clicks” is searchable in the far 1945. Venevar Bush in his essay „How could we think”, published on The Atlantics, told about the calculating machine “Memex”, which created an equivalent of clicks` streamers in the area of scientific research. Bush described the “Memex” functions, catching the imprints of researcher's discovery through the knowledge base and saving the imprints as information, so that the next researcher could learn from it and build the next layer on it. (Batels, 2007).

Currently we are using the imprints widely – and that is nothing else but the known cookies which we meet every day when using internet.

### **Segmentation bases of e-environment – the opposite segmentation**

Internet gives an opportunity for consumers to inform companies about their needs, taste and individual requirements by filling in the companies` forms and questionnaires. The companies use these data for the consumers' segmentation that are offered the goods and services.

In the opposite marketing we should pay attention to four factors „4C” whose main characteristic is concentration on client: *customer value enlargement, convenience, costs reduction and improvement of communication.*

In the opposite segmentation „clicks” make big sense, as it was mentioned before. By analyzing clicks and imprints or cookies, companies can manage segmentation of the users. The main advantage of such segmentation is the information that companies get about the users` interests for the goods and services and that is a good signal of purchase.

Trying to set the target audience in a flexible way, companies can avoid a risk and has more chances to win in the competition.

The author advises to classify the e-environment companies by their business type:

- company's business sphere: commerce, information services, bank sector, insurance services, show-business, tourism, state services and so on;
- geographical location: local, regional, international, global business and so on;
- type form: individual business, commerce society level, state level (e-government);
- life circle stage: new business, development of existing business, reorganization of existing business.

The author believes that information is one of the most important and valued of all the existing resource. The best quantity of information is focused just on internet. In Barclays` (University of California) research it was reported, that in 2002 (that is the last year mentioned) the humanity has created data in size of five Exabyte – such amount on paper is equivalent to 500 000 new USA Congress Libraries creation every year. With term „data store” Barclay's scientists mean the printed media, films and the optical hard disks (Batels, 2007).

According to opinion of the many leading computer scientists and theoreticians, the portal Google is very close to become the next great computing platform – successor of Microsoft Window, that does not belong to anybody but is used by everybody. And the net is close to be made on-line for everything – for desktop computer, mobile phone, GPS navigator, palmtop computer, portable computer, refrigerator, automobile or for any production equipment. The second theoretical presentment is such: companies that are ready to provide a wide range of services in the net platform has more chances to come out on the top (Batels, 2007).

The author believes that next perspectives in the development of the global net depend on world `information adjustment.

The main tendency is to make it available for everybody, to provide almost all the possible services for companies and users, which could be located on the top of computing platform, starting from ordinary programs, for example, text processing programs and electronic tables till the more futuristic services like videos on request, personal medium saving or study on-line. Many experts believe that in the near future we will save on the safe global net almost everything what is possible to digitalize (our music, photos, documents, video and mails).

It follows thence, that the significant items whereupon can segment the consumers, also called as searchers in the context of internet, are:

- which hardware do they use;
- where do they keep the personal information – in computer, on CD, on the server, on the internet public portals, or do they use several of these;

- how many IP addresses do they have;
- what kind of information sources do they use on internet;
- how frequently do they use internet (different kinds of social portals, searchers and so on) in order to sell and inform about themselves – it refers to both the companies and the consumers.

One more criteria whereupon can segment the e-market participators is the level of their digital knowledge, because in order to take bearings fluently, to know where to search the information, and to put the one's own information on internet, the both acquirement and digital experience is required. This criteria becomes more significant, because the consumers' ability to make purchase and to appraise the goods and services depends just on this criteria. It affects directly the quantity of sale.

Apart from the mentioned principles above, there is a range of different indicators that are used for consumers and companies segmentation on e-medium, but in the same time every year there are new findings and relevant changes in the area of segmentation. Where with segmentation is one of the areas which are under continuous dynamic growth.

In author's opinion each company can supplement and combine electronic market segmentation by choosing new grouping features and items.

## **Conclusion**

According to the author opinion, the segmentation on e-market is cardinally different from the classical e-market segmentation. On the e- environment there are different rules and conditions. Internet has changed relations between consumer and company. Previously companies were looking for consumers – now the consumers are searching themselves. The consumer informs the company about his special requirements, offers the price he is ready to pay, sets delivery type and chooses whether he will receive the new information about the company in the future. On the e-environment companies should forget the classical segmentation and should use the segmentation's indicators and features that are operating in the e-market.

Thanks to digital revolution, consumers may have new possibilities now: consumer's significance promotion.

Thanks to „click”, in few seconds consumers have possibility to compare different goods in the wide assortment of goods and services. Consumer's active participation while creating goods or services, the term „consumer” is more and more often replaced with a term „prosumer”. This term is a combination of two words „consumer” and „producer”. This term was created by Alvin Toffler in his book „The Third Wave”.

For example, Amazon is the greatest book shop in the world, and for the time being none of the world's traditional book shop could compete with it.

A great advantage provided by internet – those people living in countries with limited offering of goods and services can also gainfully buy the necessary things on internet, for example, in Latvia.

A lot of information practically is about everything. Nowadays consumers have access to encyclopedias, dictionaries, rates and statistics, database and other information sources. Customers may place the orders or make a purchase, directly from home or office for twenty four hours per day and seven days per week; communication with other customers, mutual exchange of their thinking and opinions.

Also companies get its benefits from the internet: companies have one more information source, as well as communication channel with the wide geography. Unlimited amount of important information is provided by internet. Every company may modify its homepage as sale channel as well as adjust the channel for providing and transferring the information.

Companies may simplify the bilateral communication with their existing and potential clients and hasten the business process. Companies may use extranets for their suppliers in order to simplify process of payments and communication as well as to make foreseeable location of the orders. Companies can adjust the goods and services for the customers' individual needs. That contributes the analysis of homepage visiting (visitors, visiting frequency, required information and so on); companies have resource for optimizing the shopping process, personnel selection as well as the external and internal communication.

For e-market segmentation may be used one of the several parameters and may be chosen different criteria: interests, language and product description and so on. A segmentation criterion depends on company's targets and qualities of goods or services which are being carried out on e-market.

The essential of e-market participators segmentation is grouping of all these participators by special criteria and using certain marketing tools and methods.

It is very easy to group the e-market participators by their interests and needs. Such segmentation can be successfully done owing the internet portals which are created for users with different interests (for example, portals that unites people with similar interest for cars, flowers, design, art and IT and other things).

Large possibilities for segmentation are on local and global social portals (for example, [www.draugiem.lv](http://www.draugiem.lv), [www.facebook.com](http://www.facebook.com) and others), which actually are on the top of popularity. For example, in 25th August 2009 in the social portal there are 2523440 users registered.

Owing the large internet possibilities, companies can segment their consumers with small financial costs. Companies should be creative when segmenting their consumers and should find the most adequate criteria, parameters and segmentation models.

From the first segmentation results the companies have to analyze data of the consumers, their attitude towards goods or services. In case if the data do not indicate the correct segmentation, then thanks to the high internet speed, company may choose any other segmentation manner, features or methods and continue to experiment.

In the new economics the businessmen believe, that it is not required to be an owner of several actives from the very beginning but it's better to achieve them when it is really necessary (subscription, participation, rent or other costs).

Companies and their managers must be aware that the e-medium is interactive, dynamic and all the processes there become very quick, because the internet speed is so high.

E-environment market – the future market, and doubtless, knowledge and experience is required for operating in the electronic world as well as the thinking must be flexible. Constantly more popular becomes the creative thinking, helps the managers and their employees to develop creative approach for business.

In order to raise an education level about operation on e-medium and the related possibilities, regular seminars and training courses are required as well as other activities in different levels would be required, for example, in schools` level with special adjusted programs and subjects and in corporative level, for example, in companies.

The micro and small companies require support from the government in order to raise their potency to compete in the global market.

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