Assessment Of Target Segments Of Enterprises In The Regional Market In Terms Of Attractiveness

Oleksii Kudenko, Yurii Makhortov, Mykola Tiukhtii, Ganna Kashina, Olena Aablova

Abstract—The importance of market segmentation in marketing for modern businesses is the need to enhance the competitiveness of enterprises by increasing their sales based on the precise definition of key parameters and characteristics of the target market. In the face of fierce competition, it becomes more and more difficult for businesses to win new customers and retain existing ones. Increasingly, they feel the need to move from the concept of mass marketing to the implementation of a targeted marketing strategy focused on a specific group of consumers with similar queries and characteristics. Therefore, in today's business and global competition, market segmentation is one of the most important and indispensable components of an enterprise's marketing activities. At the present stage of development of marketing theory and practice in Ukraine, the issues of deepening of scientific bases and the development of applied directions of development of marketing strategies according to the level of market segmentation become especially relevant. The article builds a breakdown of the market segments for computer devices, which allows you to determine the priorities and requirements of consumer groups in the intersection of market segments, as it clearly demonstrates the problem of consumer choice. The segments of the market in which consumers with common needs and generalized motives for buying are compactly grouped are separated. Using the benefit segmentation method, we can identify the major consumer categories that are determined by the intersection zones of market segments occupied by devices with related features.

Index Terms—Marketing strategy, diversification strategy, segmentation, market share, Boston Consulting Group Matrix.

1 INTRODUCTION

Here are four main ways of planning a marketing strategy in the current economic literature: M. Porter's overall competitive strategies, the Boston Advisory Group matrix, I. Ansoff's Market Opportunity Matrix, and the PIMS. In addition to the above, they often mention commodity strategy, product overlap strategy, design strategy, standard commodity strategy with modifications [1, 2, 3, 10]. Note that the diversification strategy is aimed at creating a product or service according to the needs identified in the process of market segmentation and provision such an offer to the consumer that he cannot refuse, because that is exactly what he needs [7].

The diversification strategy is very relevant for the device market segment through which the consumer gains access to the Internet. Obviously, manufacturers of such devices have recently created a very large number of network access devices, actively using a diversification strategy [7]. Such devices have the main function - Internet access, but differ significantly in functionality, appearance and form factor. There are understandable categories of consumers who need access to the network but have different goals within the Internet itself [4]. For example, the consumer category that uses the network to watch movies or videos is the segment for which a tablet computer was developed through diversification. In explaining the concept of conglomerate diversification, it should be noted that some authors have in mind the concept of entering an enterprise into new, not characteristic markets for it [9]. It should be noted that, in contrast to undifferentiated marketing, a differentiated marketing strategy is to create separate offers for different market segments [5, 6]. This obviously leads to higher costs for developing and implementing marketing activities, but justifies itself in the medium term due to the greater penetration into selected segments. The advantages of a differentiated marketing strategy are a more stable position of the company in the market due to less sensitivity to individual market changes and problems in certain segments of the market and the possibility of strategic maneuver. Segmentation and focus strategy, in which the authors mean targeting a narrowly defined segment of the market, in which artificially restricted from other market segments, the company concentrates its efforts, thus achieving leading position in the segment [7, 8]. In [11-14], the authors use market segmentation approaches in various economic fields, such as economic security of entrepreneurship and in innovative marketing approaches are fine and satisfactory. Author (s) can make rectification in the final paper but after the final submission to the journal, rectification is not possible.

2 METHODOLOGY

The methodological basis of the research is the general provisions of scientific knowledge and general scientific and special methods of research: - methods of terminological analysis and theoretical generalization to substantiate theoretical and methodological foundations, main factors and criteria of effective marketing segmentation; - analytical-logical method, method of analysis and synthesis to distinguish modern marketing strategies according to the level of market segmentation and their role in the strategic marketing process. The information base of the research is collected and summarized data on the activity of domestic enterprises - manufacturers of computer devices, the current legislative and regulatory documents governing their activity in Ukraine;
scientific works of domestic and foreign scientists on marketing segmentation of the market, as well as publications in periodicals and electronic resources.

3 Results

The market segments for Internet access devices and devices with similar (adjacent) features, as well as the segments of devices that have been pushed out of the market above, can be shown diagrammatically in Fig. 1. Figure 1 clearly shows the boundaries of device competition and the absorption of market segments by new devices with Internet access. Thus, we can observe that smartphones occupy much of the segment previously occupied by mobile phones (Zone A) and compete for consumers with tablets (Zone C). While tablets have taken away some of the market segment previously occupied by dextops, laptops and netbooks (Zone B). As you can see from the chart, smart watches do not actually have areas of competition with classic devices such as desktop PCs, laptops and mobile phones, which is explained by other functionality than PCs and a price significantly higher than the price of mobile phones without Internet access.

At the same time, SmartWatch is currently not significantly competing with tablets and smartphones, which is explained by the use of smart watches as the second or even third device to access the Internet. This means that the consumer, when planning to buy a second or third-party device, already has a smartphone or tablet and, given the price of a SmartWatch, is faced with a choice between the clock and the designated devices on the other side. The developed diagram (Fig.1) allows to determine the priorities and requirements of consumer groups located in the intersection zones of market segments, as it clearly demonstrates the problem of consumer choice. The consumer, in turn, operates within a limited budget, which is extremely relevant for the Ukrainian market, and tries to maximize his need for Internet access and try to minimize the power of laptops, desktops and tablets for them equaled. This means that consumer choice in this segment (that is, between device types) is not based on power but on the convenience of using PC power. In most cases, using a PC for work or special applications without a full keyboard is not possible. It even eliminates the use of a single and mainframe tablet PC that is difficult to navigate on the operating system without a keyboard (this issue has already been partially resolved by Windows 10). In particular, it is not about a device designed primarily to go to the Internet, but rather one that is more broad-minded. This clarification is important given that the consumer group that selects the All-In-One is in Zone 2, which is the segment of consumers that fluctuate between buying a laptop or tablet. And while global tablet sales are falling overall, sales of hybrid tablet PCs with a full-fledged keyboard, and the ability to detach and use the device as a regular tablet, show an increase in the share of total tablet volume, incl. in Ukraine. A portrait of a buyer in a designated segment actually completely reproduces the consumer of Zone A. This is explained by the similarity of the problems that consumers of both groups are trying to solve - buying a device with related features that will allow you to use one device rather than buy two. Zone 1 is represented by a smartphone that replaces the mobile and tablet sector. Zone B is represented by a tablet (mostly a hybrid) that replaces the PC sector for work and PCs
for entertainment. Zone C identifies consumers that make up the segment of internally competing devices (based on the topic of the study). Both the smartphone and the tablet are mobile devices designed primarily to go online. Therefore, using the benefit segmentation method, we can determine that there are consumers in Zone 3 who do not fully understand the difference between a smartphone and a tablet (for the first time buying a device). It also does not matter whether the gift is being purchased, whether the buyer chooses a device for himself or her already having a mobile phone, but without the experience of using a mobile device to go online. Note that consumers who buy a second device are usually more knowledgeable and know exactly what kind of device they need, so they are located in the green or blue areas of the chart, respectively, and are undecided buyers. Zone D identifies a group of advanced users who purchase a second device to access the Internet. Because, in this segment, the choice is, as noted above, at the SmartWatch or smartphone level, or SmartWatch or tablet, the key to choosing is the mobility of the device. Given the small number of consumers who are now addressing such a specific issue and their attributes that we can identify with the VALS2 methodology, namely Actuators, high resource and high level awareness. At the moment, this segment is not very interesting for the mass producer due to the small number of consumers and difficult predictability of their choice. Considering the global segment segment of the smartwatch market, which shows a 55% drop in sales from the segment leader and a slight increase or fixation at the 2018 level of other players, we can conclude that the segment is not yet defined and the main consumer is not the buyer, with a clear understanding of the operation and functions of the device, but rather an enthusiast exploring new opportunities. In addition, given the usually high resource, consumers in this group have the opportunity to purchase a third device, which will eventually fall into the segments indicated in the chart in green or blue.

The above studies are confirmed by Table 1.

### TABLE 1
**THE MARKET PARTS**

<table>
<thead>
<tr>
<th>The market part</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smart watches</td>
<td>8.2</td>
<td>10.1</td>
<td>3</td>
<td>1.23</td>
</tr>
<tr>
<td>Mobile phones</td>
<td>9.5</td>
<td>11.2</td>
<td>5</td>
<td>1.17</td>
</tr>
<tr>
<td>Smart phones</td>
<td>11.7</td>
<td>12.5</td>
<td>7</td>
<td>1.06</td>
</tr>
<tr>
<td>Personal computer (tablet, including hybrid)</td>
<td>13.9</td>
<td>13.2</td>
<td>13</td>
<td>0.94</td>
</tr>
<tr>
<td>Personal computer (desktop, laptops, netbooks)</td>
<td>19.3</td>
<td>16.4</td>
<td>16</td>
<td>0.85</td>
</tr>
</tbody>
</table>

Currently, mass marketing is mainly characteristic of product groups in which the application of another type of marketing policy is simply inappropriate. It is justified to promote such a large product group as mobile devices with the function of access to the Internet. For the first time buying a device. It should be noted that using the term "mass marketing", we only focus on certain features of the companies in the non-segmented market, which are most characteristic of the generalized understanding of the term. Because there are authors who detail its meaning, reducing it to only one manifestation of mass marketing, namely the use of the same means of promotion, advertising and sales of one product for different consumer groups. Similarly, a separate manifestation of mass marketing is the promotion of products in the same price category. Particular attention is paid to these narrow statements, because in literature, cases of presenting such individual cases as generalizations are very common, which can lead to confusion in concepts and definitions. It is for this reason that we use the term "lowest level of segmentation" to define that segmentation has occurred, but on the elementary, obvious feature of the product group, namely mobile devices with Internet access. This product group is aimed at a wide segment (group) of consumers, while it is characterized by a large price disparity among the devices (included in the designated group) and a very diverse functionality. However, it is worth noting that there are two main features in this product group, namely mobility and Internet access. It should be noted that marketing programs in this segment are mainly aimed at promoting the lifestyle of communication through the Internet anywhere, anytime, as well as the promotion of individual brands that have a full range of devices with these features, as shown above. A good example of mass marketing is demonstrated by mobile operators who promote and promote their telecommunication services in the first place, but create a very good media background for mobile manufacturers and sellers with Internet access. This is why advertisements appearing periodically between the mobile carrier and the maker of the designated devices. It should be noted that the entertainment and media function involves the use of a larger screen and, usually, a more powerful CPU. This level of segmentation is found in the literature called "segmented marketing". Note that usually authors who use this term unanimously use the same approach to define consumer groups and use examples of clearly segmenting the consumer's needs, unlike the vague positions we found in authors writing about mass marketing. For both named consumer groups, manufacturers and retailers use similar product promotion and promotion techniques to access the Internet from a mobile device. An interesting feature is that although both groups of devices are substitutes for traditional solutions (meaning mobile phones and home PCs), advertising campaigns often do not represent this option to consumers. In our opinion, this is due to the use of mass marketing tools, although consumer segments are somewhat separated. The third level of segmentation divides the devices of the above groups into highly specialized categories. This level of segmentation of the Ukrainian mobile device market with Internet access is closest to the category that most researchers define as "niche marketing." According to some other authors, this is a sales method that involves such arrangement of market segments, which requires the use of maximum strategies customer orientation. But in contrast to the generally accepted attitude to niche segmentation as to the field of work of small businesses and highly specialized goods. In our case, we see the rapid development of the segment and its entry from the beginning of powerful technological international companies. The feature we have identified applies to the tablet segment, not smartphones. Let's build a model for determining the market share of computer devices manufacturers market based on the occurrence of compatible, independent in the aggregate, events (Fig.2)
Fig. 2. Determining market share based on the impact of marketing components of computer devices with network connectivity.

To determine the market share of the company, a marketing quantitative study was conducted, which allows to determine the level of influence of each component on the overall market share. It should be emphasized that criteria such as segment capacity, profitability and direct compatibility determine not only the level of profitability, but also the actual existence of the enterprise within the selected segment.

Figure 3 shows the dynamics of total sales Liana enterprise and Lenovo Ukraine enterprise for 2013-2018 years (thousands UAH). We will consider the relative market share of the enterprise as the ratio of the market share of the largest competitor to the market share of the enterprise.

Figure 4 presents the Boston Consulting Group Matrix for the PC market (desktop, laptop, netbook) for the businesses we surveyed for 2018, as an illustration of Table 2 data.

Table 2 presents the calculations of the average values of the market share of the enterprise, respectively the market share of the largest competitor, as well as the growth of the sales market for personal computers (desktop, laptops, netbooks) for segment 1 for 2018. Note that by the term segment with respect to a device group, we mean a group of consumers who are the purchasers of that device group.

Table 3 presents the calculations of the average values of the market share of the enterprise according to the market share of its largest competitor, as well as the growth of the PC market (tablet, including hybrid) for segment 2 for 2018.
TABLE 3
KEY ENTERPRISE MARKET INDICATORS 2018 IN THE PC MARKET (TABLET, INCLUDING HYBRID)

<table>
<thead>
<tr>
<th>Enterprise</th>
<th>Market share of the enterprise, %</th>
<th>Market share of the largest competitor, %</th>
<th>Market growth, %</th>
<th>The relative market share of the enterprise</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Liana</td>
<td>8,1</td>
<td>11,5</td>
<td>3</td>
<td>1,41</td>
</tr>
<tr>
<td>Lenovo Ukraine</td>
<td>9,2</td>
<td>11,8</td>
<td>5</td>
<td>1,28</td>
</tr>
</tbody>
</table>

Figure 5 presents the Matrix (BCG) in the PC market (tablet, including hybrid) for enterprises for 2018 as an illustration of Table 3 data.

Table IV presents the calculations of the average values of the market share of the enterprise according to the market for the sale of smart watches in 2018.

TABLE 4
KEY ENTERPRISE MARKET INDICATORS 2018 IN THE SMART WATCHES IN 2018

<table>
<thead>
<tr>
<th>Enterprise</th>
<th>Market share of the enterprise, %</th>
<th>Market share of the largest competitor, %</th>
<th>Market growth, %</th>
<th>The relative market share of the enterprise</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Liana</td>
<td>7,2</td>
<td>10,4</td>
<td>3</td>
<td>1,444</td>
</tr>
<tr>
<td>Lenovo Ukraine</td>
<td>8,5</td>
<td>10,7</td>
<td>5</td>
<td>1,258</td>
</tr>
</tbody>
</table>

Figure 8 presents the Matrix (BCG) in the smart watches market for businesses.

Therefore, there is currently no greater segmentation in the Ukrainian mobile market with the Internet access feature, although increasing the level of population security and the emergence of new technological developments or rethinking existing technologies may lead to the formation of new niches or levels of segmentation of the designated group of devices. Therefore, at the moment, we distinguish three identified levels of segmentation of the mobile market with the function of Internet access.
4 Discussion

A mass segment of the PC and mobile phone market that identifies mobile devices with Internet connectivity and, consequently, the category of consumers searching for the same device and identifying other features as minor, from the total number of computer devices and communications. Mass marketing is the most effective at this level. The middle segment of the mobile market with Internet connectivity, which contains two product group categories separated by an additional parameter of functionality, namely the voice mobile communication function for one category and the media-gaming device function for the other, is being replaced or supplemented by a home PC. As shown, there are two categories of consumers in this segment that address, respectively, the issue of the communications or entertainment center, but with the mandatory availability of Internet access features and preservation of its mobility. Mass marketing is also the most effective marketing tool at this level. The niche segment of the mobile market segmentation with Internet access includes, on the one hand, the product group of smartphones with specific features, and on the other, the tablet product group, the most pronounced and the most dynamic hybrid product group. Tablet PC. Consumers in this segment are looking for this product, so it is logical that the most effective marketing tools are targeted advertising, as well as niche and individual marketing.

5 Conclusions

The levels of segmentation of the Ukrainian market of computer devices with the function of network connection were investigated, which made it possible to schematically depict the segments of the market of devices for Internet access and devices with similar (related) functions, as well as segments of devices that were suppressed from the market above. to distinguish three identified levels of segmentation of a given market. In our opinion, this leads to the formation of new niches or levels of segmentation of the designated group of devices and is a significant difference of the Ukrainian market from the global market of computer devices with the function of network connection. In view of the above, we can conclude that the number of mobile users with Internet access is increasing, and in general the audience of these users is growing. The most used devices are the smartphone and the tablet. The number of these devices is growing in total mobile and PC sales. Tablet PCs are primarily due to netbooks and laptops; smartphones - at the expense of mobile phones without Internet access. There is little competition between the isolated devices.

References


