

Janusz Wielki

Opole University of Technology, Poland

E-SPACE DEVELOPMENT AND ITS CONSEQUENCES IN THE CONTEXT OF THE NON-MARKETING-MIX RELATED ELEMENTS OF THE MARKETING ACTIVITIES OF ORGANIZATIONS

Abstract: This paper is an attempt to present and analyze the impact of e-space on non-marketing-mix elements of marketing activities of organizations. Firstly, definitions of e-space and its basic components are provided i.e. non-Web related space, Web-space and m-space. Next, the attention is focused on each of four pre-marketing-mix elements of marketing activities. So the impact of e-space is analyzed in the context of research, segmentation, targeting and positioning processes. Finally, conclusions are offered.

1. Introduction

Marketing is undoubtedly one of the first areas of functioning of contemporary organizations where one could clearly see the impact of the on-line environment. The processes of Internet commercialization and its rapid growth, which became a fact in the middle of the 1990s, resulted in the first symptoms of organizations' interest in the utilization of this global network in marketing activities to emerge dynamically. At the same time at the end of that decade an important element of this progress was the development of next-generation mobile phones, which, together with the Internet, have formed an increasingly deeper, mutually interrelated, business platform of growing importance for contemporary organizations. This fact has necessitated the implementation of deep changes in their marketing strategies and day-to-day activities. Organizations have had to start considering the fact that key elements of their marketing activities are becoming more and more deeply interconnected with this new business platform and the e-space which has emerged around it, an e-space which is becoming more and more complex, extremely dynamic and unpredictable.

If one looks at the marketing activities of organizations, the impact of the on-line environment affects all the basic elements, including [Ries, Trout, 2001]: *research, segmentation, targeting, positioning* and *marketing-mix tools utilization* (i.e. *product, price, place* and *promotion*). Thus it can be summarized by the kind of “marketing formula” i.e. *RSTP + 4P*.

In the following part of this paper, attention will concentrate on the impact of e-space on the non-marketing-mix related elements of the marketing activity of organizations along with the consequences of their actions undertaken in this field. In most of the analysis relating to the influence of the on-line environment on an organization’s marketing processes, they are clearly underestimated comparing to marketing-mix tools elements, but in present-day market circumstances understanding consequences of shifts connected with them are extremely important.

2. E-space – definition and components

As it was mentioned earlier, around the Internet and mobile infrastructure there has emerged a dynamically developing *e-space* which can be decomposed into two basic elements: *Internet-space* (the core one) and *m-space*, which is its natural extension. Considering the former, it should be perceived as a non-physical terrain existing around the Internet (understood as a global computer network based on the TCP/IP protocols) in which, based on its technical infrastructure and the utilization of internet technology-based tools, various entities such as firms, institutions or private persons operate to accomplish their own goals. Within this terrain, two sub-spaces can be isolated:

- Web-space,
- non-Web related space.

The first one, *Web-space*, is the part of Internet-space where the functioning and utilization of its resources requires the usage of a Web browser. It is this space where all the elements (text, images, video, sounds), tools or services forming it (Weblogs, discussion forums, video on-line, on-line games, RSS, podcasts) are located on Web pages as a part of a particular Web site.

Contrary to the above mentioned space, the latter, *non-Web related space*, is a part of Internet-space where functioning does not require the usage of a Web browser, but instead it is based on the utilization of such applications as e-mail clients; instant messaging programs; VoIP programs, also including older elements such as Usenet, IRC, Gopher and WAIS. Both sub-spaces are deeply mutually interrelated.

As it was mentioned above, a natural extension of Internet-space is m-space. It can be defined as a non-physical terrain where functioning is based on the utilization of a specific standard for mobile phones (e.g. GSM or UMTS) and the usage of a mobile device such as a mobile phone or smartphone. The interrelation between both parts of Internet-space and m-space can be easily seen in the case of

such services as e-mail or instant messaging. In these cases, three versions of applications are available: non-Web based, Web-based and mobile. So various combinations of communication are possible, including:

- Web-space – non-Web related space,
- non-Web related space – m-space,
- Web-space – m-space.

3. The impact of e-space development on the non-marketing-mix related elements of the marketing activities of organizations

3.1. E-space and marketing research processes

E-space (especially Internet-space) is a very interesting place from the point of view of conducting marketing research. Although its utilization started to disseminate with the Web development in the middle of the 1990s, in actual fact a few years earlier electronic mail was utilized to conduct on-line surveys [Elliott et al. 2001]. Generally, the on-line environment is a precious source of primary and secondary data. In the case of the first type of data, the basic form of collection is undoubtedly surveys of various kinds. The questionnaires used for conducting them can be directly forwarded by e-mail to particular persons (discussion groups) or alternatively placed on Web pages (very often in the form of various types of pop-ups).

In fact there are numerous advantages connected with the utilization of e-space for conducting on-line surveys. The most important ones relate to such aspects as cost, convenience, time and a reduction of the number of errors [Wielki 2000].

In the case of on-line research one of the most important challenges is the problem of sampling in fact *convenience sampling*, often called *accidental sampling* because of the fact that elements of the sample happen to accidentally be in the place at the specific moment where the data is gathered [Churchill 2002]. Such a situation commonly takes place during the numerous research conducted by various portals or Web sites. The problem is undoubtedly the representativeness of such samples.

Another frequently used approach is *systematic sampling* where every visitor of a particular Web site is surveyed. This is, in fact, the probability sampling of the population visiting the site.

Generally the problem of the representativeness of the sample is relatively simple in the case of *closed populations* such as employees of the company, university or subscribers of the target magazine. There are significant challenges in the case of *general populations* such as residents of a particular country or state. In this case the whole issue is far more complicated because of the fact that a list of e-mail addresses necessary for proper sampling is inaccessible. In this situation one solution is to combine the off-line and on-line means (e.g. mail contact with a

respondent with the request to fill out a questionnaire placed on a particular Web site), but in the case of such an approach most of the advantages connected with conducting pure on-line research are eliminated.

One of the most common ways of conducting marketing research in e-space is the utilization of *prerecruited panels* which are groups of previously selected respondents who are the base for conducting on-line research concerning various issues [Elliott et al. 2001]. An example of an institution using this method is Knowledge Networks, which conducts on-line consumer surveys in the USA.

There is one more issue worth mentioning in the context of e-space utilization for conducting surveys aimed at general populations (e.g. residents of a particular country). In the current phase of Internet development the population of its users is still quite specific [8]. Additionally in many countries (or often in parts of them) there is still the important problem of access to a quite significant part of residents to the Internet.

On-line surveys, however, are not the only way of collecting primary data. Numerous Web sites require the completion of short form in order to download various files (articles, reports etc.), thereby gathering in this way some demographic information.

Another source of primary data are *log files* (files from Web servers) which provide quite limited but very often useful information about the visitors to a particular Web site, including: their numbers, time and duration of visits, technical data (types of Web browsers, language etc.) geolocalization information (city, country, region etc.), the pages visited on the Web site, downloaded files etc.

At the same time e-space is also a rich source for collecting secondary data. A lot of types of information concerning particular markets, consumer behavior or trends in specific sectors are available as free reports (such a situation takes place in the case of reports prepared by the Pew Internet & American Life Project) or free summaries (as in case of eMarketer).

Also discussion groups or forums and Weblogs can prove to be interesting sources for gathering secondary data. It is especially the dynamic development of the latter and the fact that they have been created and are used not only by private individuals but also by a growing number of diverse organizations (see [Baker, Green 2005, pp. 57-67]) which means that they should be perceived as an important element of marketing research.

3.2. E-space and segmentation processes

As in the case of marketing research, e-space development and growth clearly influences all the activities connected with segmentation processes. It relates to a few aspects of this marketing element. The most important issue is segmentation criteria. It can be hypothesized that new criteria of segmentation should be taken into consideration by organizations. The first one is the access of customers to the

Internet or mobile phone. This criterion becomes important when selling intangible products such as mp3 files, movies, games, programmes, digital pictures, e-books, e-articles, e-tickets, video clips, ring tones or wallpapers. It is also significant in the case of some sectors such as tourism or banking.

In some cases an important criterion is also the simultaneous access for customers to the Internet and a mobile phone. It matters in situations when a payment is made by SMS and a product (e.g a video clip) is downloaded from a Web site.

Internet access also becomes an important criterion in the on-line sale of tangible products. It relates not only, of course, to *dot.coms*, but also to companies which operate both in the real-world and in e-space (*brick-and-click companies*), selling their products on-line [Wielki 2004, pp. 239-246].

At the same time when considering Internet access an important sub-criterion is the type of Internet connection (bandwidth) available to customers (i.e. high-speed or low-speed connection). It is an important issue when big files are downloaded or when a streaming video solution is used. Such situations occur during the digital distribution of entire movies or episodes of television serials, both in DVD format (download) and when they can be only watched on-line (streaming video). This is also an important issue in the case of numerous on-line video games (see [Siklos 2006, p. 1]). Since on-line games, such as *Second Life*, are becoming an increasingly more important element of the marketing activities of a growing number of companies (see [Hemp 2006, pp. 48-57], [Siklos 2006, p. 1]) it can be hypothesized that soon a sub-criteria of segmentation of on-line customers will be their involvement in these games (user/non-user, subscriber/non-paying member etc.). The segmentation of avatars, as potential customers, can be expected too (see [Hemp 2006, pp. 48-57]).

If customers already functioning in e-space are considered then an important criterion of segmentation is the type of their on-line behaviour. McKinsey Consulting divides Internet users into six basic segments [Bell et al. 2004]:

- **Simplifiers** – experienced customers who do not spend much time on-line, but who have a significant share in all transactions (they account for about half) and for whom convenience is an important aspect.
- **Surfers** – a small segment of customers who spend quite a lot of time on-line, who enjoy a novel approach and control over the whole transaction process.
- **Bargainers** – customers who are typical price shoppers and for whom both rational and emotional elements of the Web site are important.
- **Connectors** – new users of the Internet for whom the most important aspect is connecting with others.
- **Routiners** – people who typically visit only a few Web sites, but who spend a considerable amount of time at each.
- **Sportsters** – people who spend a little time on-line, visiting Web sites connected with sports and entertainment.

Clearly, in the case of the segmentation process of customers operating in e-space important traditional variables also remain such as age, education or income. They are of particular importance at the current stage of the e-space development where the most active utilization of the on-line environment is by people who are relatively young, well educated and living in households with relatively high income [Pew Internet 2006]. Other important traditional segmentation criteria are sex and language.

The next important aspect related to the segmentation process, in the context of e-space development, is *segments of one*. This aspect is directly connected with the *mass customization* approach which emerged with the progress in the information technology field. In practice it means the personalization of products and services at the prize level similar to these offered in the case of mass-scale goods. Pioneers of this approach were in the 1990s such companies as Dell, Levi's or Mattel. The dissemination of the Internet has caused companies in other sectors to start offering their customers such buying opportunities as the purchase of eyeglasses, diamond rings or even vitamins (see [Kotler 2003]). Print on demand (books, stamps etc.) are becoming increasingly important and there are practically unlimited possibilities emerging in the case of intangible products such as music (see [Wielki 2003, pp. 43-51]) or services (e.g. banking – see [Wielki 2005, pp. 129-142]).

3.3. E-space and targeting processes

The next step following the identification of market segments is choosing those which will be target ones and on which, as a result, further attention as well as activities will concentrate. The starting point should be the precise understanding of the needs the particular product or service satisfies [Komenar 1997]. In the case of the utilization of e-space in marketing activities in the context of target segments selection, numerous issues are important. One of them is the question of whether an organization wants to concentrate its business activity mostly on the marketplace, while the utilization of the Internet and mobile phones will be only an additional element of their marketing strategy or rather whether it will focus on the on-line marketplace (also called marketpace [Rayport, Sviokla 1994, pp. 141-150]). This issue is closely connected with the question of where potential customers of the product or service offered by an organization are "located". Do they function solely in one marketplace or perhaps in both of them? This leads to the next point. If, because of the specificity of the product or service which is offered, an organization tries to reach their customers mainly (or even solely) on-line another issue emerges: which particular segment of this marketplace is interesting for the organization, where customers (or potential customers) can be found and how they can be reached. Very often, despite the tangible character of a product an interesting segment of customers can be found mainly on-line, gathered around specialist Web sites, discussion forums, blogs or on-line video games.

There is another issue which should be considered in the context of targeting processes. It relates to the decisions concerning the type of marketing activities which an organization intends to implement on-line. Will it be a mass marketing approach with a “traditional” utilization of new communication tools in order to reach “loosely” defined market segments or perhaps it will attempt to fully utilize the opportunities offered by new marketing tools and concentrate on carefully selected market segments or niches, “steering” to the personalization and dialog with customers.

In the context of targeting it is important to mention *peripheral customers*. They are a group of customers on whom the basic attention of a company is not focused, but in certain circumstances they can become as important as a target group [Komenar 1997]. This type of situation can be expected with on-line markets, for example in the case of various kinds of intangible products.

Generally there are many issues which emerge in the context of the targeting processes of organizations in the context of on-line marketplaces and each of them has to approach this problem in an individual way, taking into consideration their goals and business model.

3.4. E-space and positioning processes

The last element of the pre-marketing-mix related to the marketing activities of an organization is product or service positioning. It is an action aimed at the mind of a potential customer in order to make him/her perceive an organization in a particular way. [Ries, Trout 2001]. Positioning is directly connected with the processes of communication of an organization with its target customers and also, in this aspect of marketing activities, the influence of e-space and new communication tools (see [Wielki 2006, pp. 181-195]) can clearly be seen. The issues connected with the communication of an organization with the marketplace and the utilization of new marketing tools are out of scope of this paper, but it is worth focusing on a few of the issues connected directly with positioning activities.

The first one is the possibility of the easy monitoring of the ways products and services offered by competitors have been positioned. It can be done by observation and analysis of their Web sites, forums and discussion groups or thematic blogs. Very interesting and rich material concerning reactions of the marketplace to the positioning of products by already existing competitors as well as newcomers with new offers can be found there. At the same time the same types of places in e-space and the people gathered there are very precious sources of feedback connected with their reactions to the positioning-related actions undertaken by an organization. It provides the chance for a quick reaction to their own missed decisions relating to the positioning of their own product as well as to activities undertaken by competitors and to repositioning.

4. Conclusions

On-line environment development continuously, increasingly and deeply influences all elements of an organization's functioning. In fact, marketing activities are those to which it relates to a very large extent. Despite the fact that the most spectacular issues connected with this sphere of an organization's functioning concern the impact of e-space on marketing-mix tools (particularly promotion) it is extremely important to analyze it in order to take into consideration the strategies of the on-line environment utilization of non-marketing-mix related elements of marketing activities. Issues such as marketing research, customer segmentation, selection of the target markets and positioning activities are no less important than the following of activities relating to marketing-mix tools usage.

Permanent changes connected with the evolution of e-space, in which organizations have been functioning, requires the continuous revision of the marketing strategies of organizations. In this context the development of the phenomenon described as Web 2.0, which spectacular manifestations include the development of services such as YouTube and the attracting of millions of people to on-line video games, is extremely important. Particularly the latter causes the necessity for revision of many assumptions connected with marketing activities, not only for marketing-mix activities but also for those preceding them. Following all these shifts of the emerging permanent and flexible features of e-space and adjusting all aspects of marketing activity to new situations is definitely a highly significant issue for all types of organizations.

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