EFFECTIVE SOLUTIONS FOR PROMOTING HIGH – TECHNOLOGY PRODUCTS

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Abstract.
In the marketing mix, the communication policy occupies a very important place because through its instruments attracts the consumers to want to know better the promoted products and even buy them and use them. The importance of this marketing mix variable increases more in the high-technology industry because the products enhance some unique features. In this industry are effective only certain specific communication tools and channels. In this paper are presented a series of strategic communication options used successfully by companies from high technology industries, based on the results of a qualitative marketing research.

Keywords: marketing mix, communication policy, high-technology products, strategy

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1. Introduction
The main objective of this paper is to highlight the specific of the communication policy practiced by companies from high technology industries. Based on the characteristics of high-tech products and the results of

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a qualitative marketing research will be presented the most effective communication tools that a manufacturer or a merchant can use to promote this kind of products.

Communication policy requires a continuous and complex interaction with the market achieved through continuous information of the employees, partners, customers and potential customers through a variety of promotional activities aimed to influence behaviour.

The objectives aimed by the companies through the communication and promotion policy are:

- influence the demand for promoted product, action that may lead to increased consumption and reduced negative attitudes that the consumers could feel;
- inform and persuade the potential customers;
- inform distributors for encouraging them to seek more clients;
- improve the organization's image in front of consumers and competitors.

These objectives related to both the informative issue (drawing attention to the offer, brand and product knowledge, presentation of product benefits) and the affective issue (capture the interest for the organization’s offer, improve the image of the product/organization, gain a better position in the consumers’ hierarchy) have as ultimate aim achieving the economic objectives: increased turnover, increased market share, profitability etc.

Promotion is an activity that includes methods and communication techniques performed in order to present to the potential customers the company and its products, to communicate the key product attributes, to facilitate the sale and to contribute to long-term profit maximization.

The main communication tools used by the organization to stimulate the consumer desire to buy a product and to develop and strengthen a positive image on the market compose the. This one, viewed from various companies perspective is structured and sized differently promotional mix, depending on the nature, importance and diversity of each promotional component (Lefter, C., 2006, p.537). The differences in the promotional mix composition are determined, generally, by the nature of products and services, the companies profile, the characteristics and trends of the markets, the specific purchase and consumption behaviours (Florescu, C., 1992, p. 415).
2. The specific features for high-technology products

High-tech products have defining characteristics that distinguish them from ordinary final consumer goods. They require high technology in their manufacturing process and then in their use process. They are perceived as risky because of their novelty level and they generate uncertainty about the benefits they can offer to the customers. High-technology products require a good understanding of their distinct features and their influences upon the market. The Ordinance no.21/1992 regarding the consumer protection, published in the Official Monitor no. 212/1992 stipulates that the high-technology product is "essentially a durable product, being actually a relatively complex product made by parts and assemblies, designed and built to be used on medium term and over which could be performed repairs or maintenance activities."

The high-technology products can be defined by five main features they enhance simultaneously (Sahadev, 2004, pg.121-149):

- Short product lifecycle - such products cross the lifecycle phases more quickly than ordinary products. The advanced technology evolution happens very quickly and this leads to a much shorter product lifecycle and to the necessity of making decisions on the moment (Bridges, 1991).
- High level of risk in the users’ behaviour changing - using high technology products can generate radical changes in consumption behaviour of users; sometimes, such changes can be destructive meaning the failure of product adoption by consumers.
- Indispensability of infrastructure - a high technology product cannot exist in isolation; the organization should create a real services network to support the product and become an important component of its marketing mix. The infrastructure includes complementary products required for the high-tech product functionality, installation services, repairs and proper maintenance.
- Lack of clearly defined industry standards - a key feature of high technology products is the fact that they are constantly evolving. As a result of this constant evolution the products
which satisfy the same needs to align to specific but different standards.

- Uncertainty on product functionality - sometimes consumers find difficult to align their needs to the benefits that high technology products can offer.

The complexity of high-tech products cause an increased risk of being perceived in the wrong way by consumers. Therefore, the communication policy has the difficult role to shape the consumer perceptions so that they defeat their reluctance and correctly understand the usefulness of high-tech products and the benefits they can provide.

For the construction of an effective communication policy the specialists must know as much as possible the consumer behaviour and especially the elements that lead them to make the purchasing decisions. If the message is sent correctly, the consumers will be willing to test the new high-tech products and even buy them.

The communication policy and strategies proposed in this paper are based on the results of a qualitative marketing research. The qualitative research theme is "Managers’ opinions about the particularities of marketing assertion in the area of innovation and development of high technology products." The qualitative marketing research was based on the in-depth interview method. The sample consisted of seven managers from international companies that produce and market high-tech products and operates in Romania, too. The interviews were conducted during January-February 2011 and were based on a list of themes and sub-themes.

To obtain relevant results, the seven subjects who participated to interviews were selected based on a set of predetermined criteria:

- The companies were the subjects work, manufacture and sell high-tech products for final consumption;
- The subjects have been fulfilling management positions inside the company for at least 6 months;
- The subjects can give information about sales and marketing activities, as general manager, regional sales manager or marketing director.

One of the themes of the qualitative marketing research targeted the issue of promotional mix used by the analysed companies and revealed some innovative solutions, very practical and successful. Below are listed the specific elements of communication policy, based on the qualitative research results.
3. Communication tools for high-technology products

The communication tools generally used by high-tech organizations are: advertising media, public relations, direct mail, trade shows and seminars, catalogues and manuals, and personal selling (Ames, B.C., Hlavacek, J.D., 1984, p.25). Some of these instruments have wider audience coverage and a lower cost per contact (advertising, public relations and direct mail) and others have limited coverage and a higher cost per contact, as personal selling. Therefore, it is necessary that the organizations use an effective combination of these tools.

The results of the qualitative marketing research conducted among the managers from high-tech companies in Romania shows that their communication policy includes a promotional mix made of all these tools which are proving very effective together.

For all the analysed companies, a very important promotional tool is public relations used to promote the global company image and the company’s brands. Public relations include the activities developed by the company for a better communication with customers and the community, the shareholders and business partners. These activities may include sponsorships of sport events or charity events, partnerships with non-profit organizations, corporate advertising on firm position towards certain critical issues and business philosophy. The company also may be referred in the written press, because of its products or actions without requiring it explicitly, and so it can get positive reviews in newspapers and blogs. In the same way, the company can make press releases on paper or on the internet. LG pays special attention to press releases about the launch of new products, events or promotional campaigns launch. Also, other international companies are involved in sponsorship activities in sports area as Olympic Games, World Championships or Regional Championships.

Participation in exhibitions and trade shows is a tool used by all the large companies in high technology industries. This tool plays a very important role in the product launch phase in case of absolute new products because their presentation to the public is accompanied by a credible explanation offered by specialists.
Trade shows, seminars and trainings means high cost, but it has been shown that the product exposure to such events accelerates the purchasing process (Smith, T.M., Gopalakrishna, S., Smith, P.M., 2004). International Consumer Electronics Show (CES) which is held in January every year in Las Vegas is the launch pad for new products and innovative technologies. To this event the products can be tested and compared. The problem with these major events is that the large companies sometimes monopolize the space, blurring the smaller firms’ presentations. So, the small high-technology firms must struggle to be seen in this context.

The European version of such a trade show is IFA Berlin. This is the meeting place of the digital world. In 2012, from 31 August to 5 September 1,439 exhibitors presented their numerous product debuts on a display area occupying 142,200 sqm. With business concluded exceeding 3.8 billion euros (+3 %) and attendance reaching 240,000 (+1%), the world’s leading trade show for Consumer Electronics and Home Appliances in Berlin achieved record results. With business concluded higher than last year and with the number of innovations on display IFA has laid the foundations for continuing market expansion. With more than 6,000 journalists at the event, 2,200 of whom were from abroad, IFA was once again a global media event. In addition to numerous German broadcasters, TV networks from around the world were represented with their news pools at IFA and reported from the Global Broadcasting Center in Hall 6.3. They included television channels from all over the world like Al Jazeera (Qatar), CCTV Channel 2 (China), Jiangsu TV (China), Servus TV (Austria), France Info (France), La chaîne Techno I Web TV (France), Dubai TV (Dubai), NHK (Japan), Polsat News (Poland), CNN Turkey (Turkey), EBU (Switzerland), ENEX (Luxembourg), AP (UK), Reuters (UK), Bloomberg (http://b2b.ifab.berlin.com/).

Despite the costs and risks involved, these trade shows are effective for marketing of high technology products because the face to face interaction helps reduce uncertainties related to technology, market and competition.

Also in the online environment there are organised such trade shows and exhibitions named webinars (seminars held on the Internet). A virtual exhibition or a virtual event is created in the online space and contains information about exhibitors’ products and services. Usually they are related to the real events and they are active much longer periods, even 1-2 months after the ending of the actual event. In this period the Internet organizers,
exhibitors, promoters, potential visitors can exchange information at any hour no matter their geographical location (Stoica, E., Rosu, V.). The most obvious benefits derived from participating in a virtual market are: removal of the constraints of time and space that can cause discomfort for the involved parts.

Another promotion tool, the personal selling, allows each salesperson to approach one potential customer at a time. But these people can not be reached unless before the meeting the company’s message is sent through another promotional tool (a promotional campaign by mail). In these meetings, could be involved not only the salespeople but also technical staff or executives. This approach demonstrates a culture of customer-oriented company.

4. Communication channels for high-technology products
The main communication channels in the high technology industry in the digital economy are the Internet and mobile telephony. The companies increasingly use the internet to promote their image and products. Online banners, search engines, online affiliations, Web 2.0 tools are effective as costs. In addition, they successfully complete the traditional promotion techniques.

Nielsen Global Online Consumer Survey conducted a survey in 2009 among 25,000 internet users in 50 countries about the confidence degree in various advertising methods. The survey shows that 70% of respondents trust the consumer opinions posted online and also 70% of respondents trust the brands’ presentation websites. More than half of respondents trust the personalized emails (which were previously registered) and 41% of the subjects expressed their confidence in advertising messages resulting from the use of search engines on the Internet.

In the online environment, a very important principle which guides the promotional actions is the permission-based promotion (Godin, S., 1999). This concept implies that potential customers are asked in advance if they wish to receive messages according to their interests. Permission-based marketing is in contrast to traditional methods of promotion which are usually persuasive and persistent.

Internet communication is based on two elements: online advertising and Web 2.0 technology. Online advertising increases the
purchase probability for existing customers, acting as a reminder. When accessed, it sends the user to the promoted page. The online advertising is used more for strengthening the brand image on long term than to increase the sales on short-term. The effectiveness of these ads increases with an appropriate consumer segmentation based on behaviour and/or demography. The companies can identify aspects related to users’ interests, noting the accessed commercials. The ads posted on websites with a large number of visitors’ increases the chances of company’s visibility.

So, if a company analyse a person’s profile on a social network, it will know if this person is a part of the target group and it will send promotional messages. If Web 1.0 technology made possible for users to access information only, Web 2.0 technology enables interactivity. The specific tools used for a better online promotion are:

- **Social networking sites** - These networks allow creating and viewing members’ profiles and setting social connections between these members. The newest networks focus on specific niches or areas of interest, such as travel, art, sports, pet owners, or cosmetic surgery (Mohr, J., Sengupta, S., Slater, S., 2010, p.385). Facebook had in March 2012 about 835 million active users, an increase of 25% over the same period of 2011 (http://www.internetworldstats.com/). On June 30, 2012 there were 955 million monthly active users (MAUs), daily active users (DAUs) were 552 and mobile MAUs were 543 million (http://news.cnet.com/).

- **Blogs** (short for Web Log) - are online journals on various topics (from technology to politics) that reflects the author’s personality and opinions. Some of the most popular blogs on technology issues are Engadget (www.engaged.com) and Slashdot (http://slashdot.org). There are also audio versions of blogs, called podcasting.

- **Video Sites** - offer users the ability to upload personal movies (YouTube) and photos (Flickr or Picassa). YouTube in May 2010 had 2 billion views daily (http://www.it4fans.ro/).

- **Virtual worlds** - are virtual economies where companies can buy real estate, they can expose their own brands to the potential consumers’ avatars. One such site is
The virtual world of Second Life's was launched in 2003 (http://ro.wikipedia.org/) and it was created by the American company Linden Lab. Second Life has its own economy and even its own currency - Linden dollar (L $), which in turn is valuable in real life - 1 USD is approximately 250 L $. It can convert real money into virtual money, or vice versa, linden dollars in real cash. In early 2010 there were 750,000 monthly active users in this virtual world and their number rose to 1.25 million at the end of the year. (http://nwn.blogs.com/).

Many companies have begun to explore the possibilities of marketing in virtual worlds. They can hold meetings in the online environment with suppliers, customers or business partners. Although is not a mass tool, this way of performing marketing activities aims a niche, that of the members of the virtual world (including software developers and IT managers).

All sites using Web 2.0 technologies have a very wide audience and have the ability to host online ads. Global spending on this promotion method on social networks were $ 3.3 billion in 2010, representing a growth of 31% than in 2009. For 2011, these costs were expected to amount to $4.3 billion (http://techcrunch.com/).

Mobile advertising is also known as M-commerce and consists of sending messages on the mobile phone or sending e-mail messages that the user can access from the mobile phone. For a customer to receive this kind of messages directly to his mobile phone, he must register in advance and provide the phone number to receive messages. If the customers also provide demographic information or information about their areas of interest, the messages will contain more useful information for them (Mohr, J., Sengupta, S., Slater, S., 2010, p 388).

A study conducted among consumers in October 2010 in the UK, Germany and France revealed that 45% of consumers (especially young people) have paid attention to mobile ads and 29% of them have answered to these messages (http://mmaglobal.com/).

Gartner created in 2012 a top 10 of the most used mobile applications taking into account the following factors: the impact on consumers, revenue, loyalty, consumer value and estimated market.
penetration degree (http://www.gartner.com/). In this ranking, the 8th place is occupied by mobile advertising. This is primarily due to the increasing number of smartphone users and wireless internet users. Mobile advertising opportunities will extend thanks to GPS (Global Positioning System). For example, if a consumer pass in a shop area, it might receive a message with the special offers in the shop at that time (Mohr, J., Sengupta, S., Slater, S., 2010).

The industry experts expect that mobile marketing will be the next technological wave for the advertising of the future (Enright, A., 2007) referring to it as being "the third screen" (TV is considered the first screen and the computer is the second screen). Unlike televisions and computers, mobile phones are worn almost anywhere by their owners.

However this industry is also facing a number of barriers: privacy issues, problems with advertising revenue shared between the parties (advertisers, network operators, other intermediaries) etc.

The high-tech companies have begun to combine the two communication channels - Internet and mobile communication - to cover a wider audience. The current technology allows a mobile phone user to film an event and at the same time to send it to an Internet user to view the video in real-time. The major advantage of this technique is that it can stimulate the spread of messages between users by e-mail, mobile messages and Web 2.0 tools simultaneously.

5. Communication strategies for high-technology products

Strategies are approaches that ensure the achievement of objectives related to promotion policy. In the literature were highlighted many types of advertising strategies, structured on different criteria. Conducting the qualitative marketing research among managers from high technology industry were identified some communication strategies that the analysed companies apply and can be considered specific to this industry.

The first strategy mentioned by high-tech companies’ managers is the company’s global image promotion. With this strategy they are strengthening the image of multinational companies, which are powerful and known. The image investments are large but they are considered essential to create a positive company image in the consumer’s mind. This is a permanent strategy.
Since in the high technology industry are launched many innovations, the companies usually adopt the strategy of exclusive product promotion for a certain period of time. All the company's efforts are oriented to promote the new product using promotional tools and specific communication channels. Apple held a campaign for a Mac laptop, called "Get a Mac" including a series of 24 commercials "I'm a Mac, I'm a PC". The exclusive promotion of a product has an intermittent character, being held to the product launch, and after that, when the product is included in some promotion programs.

A marketing strategy specific for the high tech industry with a tremendous impact on consumers is the strategy of the new product promotion before launching – or pre-announcement strategy. This strategy refers to a deliberate communication before the company develops particular marketing actions. It is a way to submit information to the competition, consumers, shareholders, employees, distribution channel members, companies that manufacture complementary products, area experts, analysts etc.

In high tech industry, this strategy is used by more and more companies but many of them have difficulties with launching the product to the established date. Apple announced the date for iPad launch all over the world for March 2010, but it was delayed by one month (April 3) and the new mentioned date referred only to the U.S. market. No explanation was given for this delay. According to some analysts, there was a production problem.

The high-tech companies use these pre-announcements for various reasons: to obtain a pioneering advantage (to gain leadership in the market), to stimulate demand, to encourage consumers to delay purchasing decisions of competing products, to help consumers planning their shopping, to get feedback from them, to stimulate the development of complementary products, to gain access to distribution etc.

There are some risks assumed by the company using the pre-announcements: the innovative ideas delivered for free to the competition, jeopardizing the reputation in case of product launch delay, the cannibalization of company’s existing products, creating confusion among consumers, creating internal conflicts etc.

In making decisions about pre-announcements, there are some tactical considerations to be taken into account. These are reflected in Figure 1.
The company must decide the appropriate time to launch the new product. Also, an important decision is related to the launch area (a city, national or international level). The time planning (synchronization) consider a number of factors such as: the pros and cons for a pre-announcement regarding the complexity and innovativeness of the new product, the costs nature, the duration of buying process etc. The information delivered by the pre-announcement is chosen carefully. This can be related to the new product attributes, its functionality, the comparisons with the existing products, pricing information and delivery conditions or press conferences. If the company manages to maintain its promises regarding pre-announcement, this will have an overwhelming impact on consumers on short-term.

The companies from high technology industry pay special attention to the brand strategy. This strategy helps build and strengthen the global brand identity. Sony has created a campaign to launch the brand itself "Sony. Make. Believe" worldwide.

For high-tech companies there are situations when the promotional activity has an offensive character. There are cases where companies attack each other, especially when their positions are similar on the market and they fight for the leader position. Motorola has released a commercial for the Xoom tablet in which it attack Apple the same style Apple attacked IBM in 1984 with a famous advertisement for the first Macintosh computer. The commercial has the same theme as the original Apple ad: a world dominated by a single company’s products (http://life.hotnews.ro/).

Also, after the selection process of the targeted customer segments, the high-tech companies prefer the segments differentiated strategies. Nikon created promotional campaigns for its cameras shaped for each customer segment: campaigns for amateur cameras or for professional
cameras. The campaigns for professionals are created for various types of activities.

If the high-tech products have a lower complexity and they addresses to all kind of public, such as mobiles or IT products, the companies choose to implement undifferentiated strategies for all consumer segments.

Usually, the communication activity for the analysed companies is set by specialized institutions – publicity agencies. Toshiba asked West Hollywood's Goodness Mfg agency to promote its products (laptops, televisions and electronics).

3. Conclusions

Regarding the promotion of high technology products, the companies often used as communication tools public relations and participation in trade shows and exhibitions. Despite the costs and risks involved, the trade shows are effective because the direct producer-consumer interactions help reduce the potential customers uncertainty about the technology.

Identifying appropriate tools and channels options is only half of the way in the communication area. The company must also decide on an effective message that catches the customers ’attention. Also, high-tech firms should not ignore the value that comes from maintaining a positive public image – and maintaining good relations with the media is the key. They should think strategically about their PR efforts. Despite the costs and risks involved, trade shows are effective in high-tech industry because face-to-face interactions help to reduce the market uncertainty. The brochures and other collateral materials should be present in a high-tech company communication activity to provide customers with additional information.

The main communication channels in the high technology industry are the internet and mobile telephony, or a combination of both. The companies use multiple communication strategies selected according to the products, customer segments and communication channels that will be used. The specific communication strategy for the high tech field with a tremendous impact on consumers is the strategy to promote the new product before launching (pre-announcement strategy). This is a method to deliver information to the competition, consumers, shareholders, employees, distribution channel members, companies that produce complementary products, domain experts, and analysts.
The timing of new product announcements can be vitally important in the high-tech industry. More and more high-tech companies began to pre-announce new products. But they should pay attention to this action because there were some cases when companies encountered problems in delivering the product on the promised date.

Above all, high-tech companies must ensure that their investments in marketing communication tools and channels are part of a well-planned strategy.

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