

# MARKETING MIX FOR CONSUMER HIGH TECHNOLOGY PRODUCTS

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**Abstract:** *This paper includes an analysis upon the variables of marketing mix for high technology products used for individual consumption. There are exposed the essential aspects related to marketing policies and strategies used by high technology companies for providing consumers the best solutions tailored to their needs. A special attention is given to the necessity for inclusion in the marketing mix of the fifth element – the assistance and informational support for customers.*

**Key words:** *marketing mix, high-technology products, strategy.*

## 1. Introduction

A high-technology product is mainly a durable product, actually being a relatively complex product, consisting of parts and subassemblies, designed and built to have a medium period of usage and which can carry out repairs or maintenance activities [10]. A durable product is considered a high-technology product if its production involves a significant advanced technology.

The modern and complex markets such as high technology market changes to a much faster rate than the companies. Therefore, the best opportunities, strategies and performance are obtained anticipating changes in the external environment and acting earlier. An organization that sets the development direction must establish the market strategies correlated with the current state of products and its sources of competitive advantage.

The marketing mix for high-technology products includes in addition to the four traditional elements - product, price,

promotion and distribution – a fifth element: assistance and informational support for customers.

In the process of establishing the marketing mix a very important role was played by the results of a qualitative marketing research conducted in 2011 which involved eight managers from multinational companies selling high technology products. The theme of qualitative market research was "The managers' opinions regarding the particularities of marketing in innovation area and development of high technology products".

Next, it will be presented the marketing policies and strategies for high – technology products for individual consumption.

## 2. Policies and strategies regarding high – technology products

In the high tech industry, the decisions of the organizations on product policy organizations are related to the next

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aspects: the products included in the offer designed for consumers, the intention of developing existing products or creating new products and the life cycle of high technology products.

Following the completion of the qualitative marketing research among the managers of high technology companies operating in Romania, it was established that one of their main concerns is assimilation and launching new high-tech products with a smaller negative impact on the environment and which consume efficiently the energy.

To achieve this process, most companies make alliances and partnerships to create patents or to obtain intellectual property rights upon product concepts and product lines. The application of the open

innovation strategy by sharing ideas and resources help the companies to make better use of all resources and to gain market advantage. Thanks to this action, Panasonic has doubled the number of basic production models in one year. Also, many companies try to develop flexible business platforms, enabling development of new products and creating the markets for them.

An essential condition for high technology organizations to be competitive is to develop strategies of product innovation, taking into account a certain type of innovation: the radical or incremental innovation. The characteristics of these types of innovations [1] are included in the table below.

*Characteristics of radical innovation and incremental innovation*

Table 1

	<b>Radical innovation</b>	<b>Incremental innovation</b>
<b>Organization structure</b>	Based on centralization and technologically aggressive	Based on decentralization and existing technology
<b>Environment</b>	High level of uncertainty	Medium level of uncertainty
<b>Innovation reasons</b>	Market needs	Consumers needs
<b>Development process</b>	High level of complexity	Moderate level of complexity
<b>Technology</b>	New technology	Existent technology
<b>Period</b>	Long term	Short term
<b>Risk</b>	High level	Moderate level
<b>Financial resources</b>	High investments	Moderate investments

Source: Aleixo, G.G., Tenera, A.B. (2009), p.795.

Regarding the types of innovations that an organization decides to create, it can choose the following innovation product strategies: *offensive strategy, defensive strategy, imitative strategy, dependent strategy and opportunistic strategy* [2].

For the high – tech companies, a very important strategy is the strategy of developing new global products (such as Panasonic) and the strategy to create unique and differentiated products, with exceptional performance. Sony aims to create technically sophisticated products

with large utility for the society. For resisting on the market, the companies are focused on the strategy of product portfolio excellence.

Also, a specific issue for the high-tech industry is moving from the strategy of a single product development to the integrated solutions strategy. In this way there are offered to consumers packages of products that provide value to users. Such a package offered by the company Toshiba includes: TV, stereo system, DVD recorder and computer functionality.

The strategy of developing green products is adopted by a large number of companies.

Aiming to provide unique solutions and experiences to the customers, the companies apply, sometimes, strategies for product differentiation from the competition, such as: highly customized product strategies, strategies for design development and strategies for sustainable products.

In the high tech area, brand strategy is essential for a proper positioning against the competition. Small businesses with limited resources may use a combination strategy, finding a reseller to sell the products under its own brand. [6]

### **3. Pricing policies and strategies for high – technology products**

Fixing the price for a high-tech product is a complex process that requires the consideration of product cost, product quality and value, the position occupied in the market, the brand image, the competitive environment, the organization's objectives etc.

Pricing policy for the high – tech organization is determined by the organization's marketing objectives, the marketing mix strategy, the costs and organizational considerations.

Before setting a price, the firm should choose the strategy related to the target market and to the positioning for the product. Samsung has repositioned the products as top products with high demands, and therefore increased the products prices. The prices increase brought bigger brand credibility and led to increased business profitability.

For prestige goods such as high technology products, consumers find that a high price signals quality, and any price decrease leads to a reluctance of consumers in making purchasing decision.

The qualitative marketing research conducted among managers from high - tech companies revealed that many of them initially applied, during the launch, *a market skimming strategy*. Subsequently, the companies are turning to a strategy of using the market advantage (the case of Sony, Samsung and LG).

Other companies like Dell Computers, Panasonic and Nokia have adopted *a price penetration strategy*. Dell has used this strategy to enter the personal computer market and sell high quality products through direct channels at low cost. For successful implementation of this strategy, the market should be price sensitive.

Because the high-tech organizations diversify their products quickly in a very short period of time, it is essential that they adopt *a strategy regarding the price of product mix*. When the product is a part of a mix of products, the company seeks to establish prices to maximize the profit of total product. This task is difficult because it must consider the following aspects:

- The product line - Sony offers its customers several lines of televisions from portable TVs to 3D TV;
- Accessories or optional products – acquisition of a mobile phone with a memory card;
- The captive products – for a mobile phone, the captive products can be housing parts and protective covers.

After launching, companies can adopt a strategy of adjusting prices to targeted segments, determined by the types of customers, geographical area or market conditions, the value conferred by post-sales product (using training, maintenance, repair, etc.). Also, if products are marketed internationally, price levels should be adjusted.

Psychological pricing strategy is also often used by market leaders, based on the theory that consumers perceive higher

priced products as having higher quality.

#### 4. Communication policies and strategies for high – technology products

High technology companies include in their communication policy a promotional mix made of a variety of communication tools: advertising media, public relations, direct mail, exhibitions and seminars, catalogues and manuals, telemarketing and personal selling.

Public relations represent one of the most powerful tools for promoting the company global image. For example, LG pays special attention to press releases about the launching of new products, events or promotional campaigns start.

Participation in exhibitions and trade fairs is a tool used by almost all the high-tech companies, especially for the launch of completely new product, because their presentations to the public content relevant explanation offered by specialists. Such an event is the International Consumer Electronics Show (CES), held in January each year in Las Vegas. It is a springboard for new products and innovative technologies. Another way of presenting new high-tech products is through webinars (seminars held over the Internet).

The main communication channels in high-tech industry in the digital economy are the Internet and mobile phones.

In the virtual environment, a very important principle that guides the promotion activity is the *principle of consent-based promotion* [4]. The internet communication is based on two elements: online advertising and Web 2.0 technology that enables interactivity. The specific instruments used in this case are: social networking sites (Facebook, MySpace) [6], blogs, video sites (YouTube, Flickr or Picasa), virtual worlds (www.secondlife.com).

Regarding *promotions by mobile phone* (M-commerce), the experts expect that mobile marketing will be the wave of technology for the future advertising [3] referring to it as "the third screen" (television being considered the first screen and the computer monitor the second screen).

According to the results of the qualitative research among managers from high technology industry, the best communication strategies that companies apply and which can be considered specific to this industry are:

- the global image strategy.
- exclusive product promotion strategy (for a certain period of time). Apple had a campaign for Mac laptop called "Get a Mac" with a series of 24 spots "I'm a Mac, I'm a PC".

A promotion strategy specific only to the high tech industry with a huge impact on consumers is *the strategy to promote the new product before launch* (the strategy of announcement in advance). For the company is a way to deliberately transmit information to competition, consumers, shareholders, employees, distribution channel members, firms that produce complementary products, experts, analysts etc. Companies use this strategy for different reasons: to gain a pioneering advantage (to gain leadership in the market), to stimulate demand, to encourage consumers to delay buying decision for competitive products, to help consumers plan their shopping, to get feedback from them, to stimulate the development of complementary products, to gain access to distribution, etc.

For high-tech companies is also very important the brand promotion strategy, which helps build and strengthen the overall brand identity. Sony has used a global campaign for the brand launching "Sony. Make. Believe".

After the selection of target customer segments, high – tech companies prefer to apply *differentiated strategies* for each segment. Nikon has created different campaigns to promote different categories of cameras: cameras for amateurs, cameras for professionals from various areas.

### **5. Distribution policies and strategies for high – technology products**

For high-tech companies the distribution policy is not very flexible. Many companies control strictly the distribution of their products. They often use their own distribution network or certain types of distributors. For example, Philips collaborates with distribution companies from the countries where it sell products, but in some cases, it bought such companies for security and bigger control.

In Western European, the distribution policy of high-tech companies is oriented toward a direct relationship with consumers. They prefer to open their own stores for selling their products. In Eastern Europe, the companies choose to collaborate with specialized retailers or hypermarkets. Thus, for setting the distribution policy, each high – tech company takes into account the geographical area in which will distributes products, the product features, the law and forms of distribution on the targeted markets. The distribution policy also requires the companies to provide better support to retailers and authorized dealers.

Today, many companies, including high tech ones, offer consumers multiple channels to purchase the products. So, they can buy directly from the company website or indirectly from a retailer or an e-tailer (online resellers). With increasing Internet access in some high-tech industries, the physical distribution and delivery of digital products (music, movies, etc.) was completely removed, because of the possibility of download. A problem occurs

in developing countries because businesses are still affected by the lack of Internet infrastructure.

High tech companies usually use three direct distribution channels: *direct sales, website sales and sales in own stores* [5].

The direct sales are the indicated solution mostly when the high – tech products have to cross the chasm.

Many companies resisted on the market by adding to the regular distribution an internet-based sales channel. The effect of this change has been reflected in the "cannibalization" of sales from other channels, because the customers stopped buying products from intermediaries. For example, Toshiba strongly encourages consumers to buy products directly from the site [www.toshibadirect.com](http://www.toshibadirect.com).

The specific distribution channels [7] for high-tech companies are the *channels with one or two intermediaries*. This situation exists on Internet too, when the offers do not require configuration or material support. The main distribution forms may be:

*Value added resale* - the intermediary buys products from one or more high-tech producers, adds value through its' expertise, and then sells the solutions to the vertical market.

*Sale by systems integrators* - involves the distribution through institutions oriented on large and complex projects that includes hardware, software and services of different companies and taking responsibility for their implementation to the client.

When using an indirect channel, the company should determine the coverage of the territories and the intrabrand competition [6] (for the same brand). In this situation, decisions related to distribution intermediaries should not be delegated entirely.

The choice of distribution channels must be done by the organization considering

two strategic aspects: targeted market segments and differential advantage pursued by the supplier. First, it is important for the firm to choose a distribution channel that has experience and credibility for the target segments. Second, the distribution channel should be able to present and support the manufacturer's differential advantage. For an innovative and more complex product the skills required to the distribution channel members must be higher.

In the high tech industry there are two specific distribution strategies: *channel distribution strategy during the product life cycle*, and *the hybrid distribution channel strategy*.

Some high – tech consumers prefer to use multiple channels for the same purchase, using a multi-channel system [9]. They want to order and pay by Internet, but do not want to pay extra charges for shipping and handling. Others want to physically examine the product before buying or want the possibility to change or return the products if they are not appropriate. Experience has shown that multi-channel customers spend on average 30% more per year than single channel customers [8].

## **6. Policies and strategies regarding the assistance and informational support service for clients**

In deciding to buy a high-tech product, the consumers need a lot of support from the manufacturer and / or the merchant to understand why they need the product, what benefits brings and how it works. For the optimal solution for each case, the companies must develop consulting and support services. Their purpose is not only to increase sales, but also to develop a long term relationship with the client advising him from the initial stage of decision

making, throughout the act of purchasing, and after that.

The main types of assistance and information support services for clients are:

- the assistance and advice before purchasing a high – tech product by providing solutions based on customer needs.
- the services related strictly to the technical characteristics of the product.
- the after-sales services (installation, maintenance and repair service, warranty, etc.)

In formulating a strategy for customer support services, organizations need to take into account both the nature and complexity of the products and the type of services they can provide according to their resources.

By the method of delivering the services by employees, there are two types of strategies: internalized services strategy and externalized service strategy.

Depending on the complexity of products, high-tech organizations can use *the strategy of direct service delivery* (face-to-face) or *the strategy to provide services through call centers or Internet*.

Depending on the stage of the buying process, the company can establish three types of strategies: *the before-sale service strategy*, *during the sales service strategy* and *after-sales service strategy*.

Depending on customer needs the company can identify three types of strategies: basic services strategy, diversification strategy and complex services strategy.

Through the diversification strategy, the company helps the consumers to reduce their risks of the acquisition and use of a high-tech product. The complex service strategy implies a very large effort for the company to provide a whole range of additional services claimed by consumers.

In formulating the strategies for assistance and information support for clients is necessary for organizations to consider a more widespread phenomenon, thanks to the Internet: *the client – client support*. The members of online communities (forums, social networking, etc.) consult each other, exchange information and opinions about complex products. The consumers use more and more the Internet to look for references and information about any product or service.

This type of client - client communication could be replaced by an organization-client communication for solving various problems related to products and their use. By strengthening this relationship, the organization creates a strong image and gains the customers' confidence.

## 7. Conclusions

High - technology industry solves some complex problems of contemporary society emerged with the transition to digital era, allowing people to improve living standards and increasing business efficiency. Marketing of high-technology products is focused on keeping the promises made by the organizations to consumers and to reduce their risks.

High-tech companies started to realize that the advantages of advanced technical features and the high quality are no longer sufficient for their success on the market. Rapid diffusion of technological change makes difficult to maintain the competitive advantage achieved by technical specifications. Therefore, both consumers and producers are moving towards additional services as an element of differentiation. In these circumstances, companies have developed capabilities to provide assistance and information support

to customers. Relationship marketing philosophy is based on gaining competitive advantages for the organization that practice it, due to consumer retention for a longer time in the circle of loyal customers, by maintaining or increasing their satisfaction with the benefits provided. Therefore, with the development of relational marketing, the objectives related to improving customer relationship must be achieved through the adoption of the fifth element of the marketing mix: assistance and information support to customers.

Through an effective marketing mix, (containing four traditional components and a new one) are created, promoted and delivered innovative products and services that provide benefits to consumers, business partners and society.

So, high-technology companies have five components of the marketing mix, which properly combined, contributes to reach the most important objective of the organization: the launch of high technology products successfully adopted by consumers.

Given the specific features of current economic, social and technological context we consider that the marketing of high technology products represents the actual orientation of business activity, which brings benefits to the organization, to the individual or organizational consumers and to the society.

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