

New Technologies in Marketing as Competitive Advantage

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Abstract

The goal of this paper is to outline the effect of new technologies in marketing on competitive advantage of the company. Sophisticated technology is drastically changing the society including consumer behaviour and their purchasing patterns. Many companies are already actively combining IoT technology, mobile applications, smart home appliances and other consumer electronics devices in multiple marketing communication channels. Marketing Managers are increasingly starting to direct company's communication towards modern marketing channels such as mobile and online with traditional channels slowly being replaced. New technologies in retail marketing, such as NFC and Bluetooth LE, offer a wide range of opportunities for reaching consumers in various creative ways. Soon, integrated multi-channel marketing strategies will include a seamless flow of personalized brand's messages through a number of inter-connected channels. Methodology used in this paper includes study of scientific articles and literature on marketing, YouTube videos and secondary online research. The conclusion of the paper is that mobile marketing is able to provide consumers unique brand experience, greater real-time interaction, greater brand recognition which will result in higher customer loyalty. By recognizing the value of new technologies in marketing and by implementing them, companies can achieve strong competitive advantage and a greater return on investment.

Keywords: technology, multi-channel marketing, omni-channel marketing, MarTech, competitive advantage, consumer behaviour, shopping experience, brand experience, brand recognition, brand perception

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Introduction

The purpose of this paper is to outline possible positive effects which new technologies in marketing can have on competitive advantage of a company. Technology today is developing so rapidly that its continual improvements are getting increasingly difficult to keep the pace with. Companies which own sophisticated technology are setting a new standard of doing business for the whole industry. At the moment, digital transformation of society is taking place so performing marketing activities through new technologies can be a strong competitive advantage for the company. We can expect that future technological trends will make buyer behaviour incomparable to what it is today. Integrated multi-channel marketing communications of the future will include a seamless flow of company's communications through various inter-connected channels. In a decade from now, revolutionary marketing innovations combined with technologies that are yet to be developed, will have a significant effect on society behaviour and the consumer lifestyle. Today mobile technology has immense influence on marketing communication and purchase decisions. Mobile channel is becoming the leading

communication channel because it enables a direct two-way communication between companies and consumers in real time. Apart from interaction with the brand they are interested in, consumers look for unique brand experience. Companies which know how to provide a memorable user experience, via any marketing channel, without a doubt will gain top positions in consumers' perception. With so many brands out there fighting for consumers' attention, it is essential that companies ensure solid brand recognition. To do that, they need to be different and better in all aspects of business, especially in their approach to consumers.

The objective of the paper is to attract attention of managers to strong competitive advantage possibilities which can be achieved by combining new technologies with marketing know-how. In practice, the main reason why many companies perform with average financial results and lower market share can often be found in low enthusiasm to keep up with the newest technological trends. Lack of financial funds to invest in modern IT equipment and software is another justification from management side, who forget to take into account that solid back-office IT infrastructure is crucial for marketing operations. Many books provide general theoretical insight into possible sources of competitive advantage. However, practical suggestions and implications on how to use new technologies to improve specific dimensions and metrics of marketing can seldom be found. Marketing Managers of the last century didn't have at disposal modern technologies, so they had to base their decision-making on their own judgement or intuition, and even using "trial and error" method to discover what consumers want, need and like. Without technology which would help them obtain essential data about the market, companies were often misled and their marketing campaigns had weaker chances of success. Market research would take too long and management would receive research results too late to be able to react in due time because fast changes on the market require constant monitoring, flexibility and immediate actions in order to remain "in the game". Companies had no easy way of finding if customers' satisfaction with company's products and services is beyond their expectations or below them nor to determine exact reasons of weak sales results and low market share. Today companies have an abundance of modern technologies at hand. However, many companies still haven't adapted their business to 21st century market ways of doing business. It seems as if implementation of new technologies is something which they like to postpone.

Today it is possible to do entire market segmentation process by using only data from existing databases, without having to do market research and environment analysis from scratch. Companies have been systematically collecting and keeping data on their customers for the past 15-20 years, mostly through loyalty program cards. Collected data includes consumers' personal data, purchasing patterns, details of purchasing transactions, favourite sales channels, products bought, list of complaints etc. Demographic, economic, psychographic and behaviouristic characteristics serve the companies to predict future purchases of each consumer segment and to plan production, orders, procurement, sales volume, forecast revenues and profit. Marketing Managers need to know how to use the huge potential of big data and information technologies in order to collect data which is important for the company (Da Gama, 2012, p. 219) including data on consumers' attitudes and perceptions of the brand, perceived quality of service, appropriateness of prices, distribution channels, brand position compared to competition, brand awareness, etc.

In service industry, each *moment of truth* counts (Ozretić Došen, 2010, p. 45) and official website is the consumers' first contact with the service provider. Website load

time can play a major role in the eyes of a new consumer. Too long waiting for the web page to load can be the one and only reason why a consumer gave up and went on to search online for another service provider. Explanation is simple: consumers prefer brands which they can trust and which are dependable (SAS Software, 2014) and if the website seems unstable and unreliable, customer will instantly perceive the company as such. Service characteristics and moments of truth perceived by every client will sum up to define a complete "product" of a service provider, as perceived through the eyes of the clients. If customers perceive higher quality than expected, their experience with the service will be more positive and their satisfaction higher. Marketing Manager's combination of communication channels will affect company's ability to stand out from competitors and its competitive advantage. Implementation of new technologies will surely contribute to better marketing performance and better business results.

According to Ferrell et al. (2008, p. 131), most common sources of competitive advantage are specific advantages related to elements of marketing mix as well as relationship advantages with consumers, employees, vendors, distributors and supply chain partners. For an example, by low production costs or economy of scales, companies will be able to achieve price advantage compared to prices of the competitors. While brand equity and brand name will serve as an advantage of company's product; company image and rich marketing experience will result in promotion advantage. As a result of competitive advantages, companies can enjoy various benefits, such as higher barriers to entry for new entrants into the market, lower expenses and higher earnings - which subsequently lead to increased profitability and larger market share.

According to DMA research (Digital Marketing Institute, 2016), an average consumer uses five different technological devices each day, including: smartphone, desktop computer or laptop at work, personal laptop, tablet and Smart TV. Companies need to understand the significant role which technology plays in lives of today's consumers, and try to design user experience and relevant personalized content which will attract target consumers. The idea is not about just seizing this opportunity and reaching out to prospects directly through all channels available (companies doing so are often perceived as intrusive and are therefore ignored by the consumer). On the contrary, communication should be personalized and adjusted to a particular phase of consumers' buying process. The fact is that consumers perceive the same message differently at different phases of their decision journey.

Methodology

Methodology used in this paper includes study of scientific articles and literature on marketing, YouTube videos and secondary online research. Many books provide general theoretical insight into possible sources of competitive advantage. However, practical suggestions and implications on how to use new technologies to improve specific dimensions and metrics of marketing can seldom be found. In all the researched sources, a strong connection between marketing and new technologies can be found and correlation with competitive advantage is evident. In order to additionally prove this, on-field testing should be done on a sample of companies, whose business success should be monitored through a period of time in relation to newly implemented technologies in marketing which competition doesn't have. Individual research results should be made publicly available.

Results

Companies which own sophisticated technology are setting a new standard of doing business for the whole industry. Performing marketing activities through new technologies can be a strong competitive advantage for the company. By recognizing the value of new technologies in marketing and by implementing them together with established marketing know-how, a greater return on investment can be achieved. A successful business model intended for operating at 21st century market has to include new technologies in marketing. Companies which keep postponing implementation of new technologies, lose the opportunity to connect with their consumers in the most suitable way. In practice, the main reason why many companies perform with average financial results and lower market share can often be found in low enthusiasm to keep up with the newest technological trends. Lack of financial funds to invest in new technologies, modern IT equipment and software is just a justification from management side, who forget to take into account that solid technological infrastructure is crucial for marketing operations.

Mobile channel is becoming a leading channel because unlike other channels, here companies are able to get through to consumers directly, providing benefits to consumers such as unique brand experience and greater real-time interaction. Chances are that all of the above will result in greater brand recognition and higher brand loyalty on customer side. According to Digital Marketing Institute (2016), 77% of world population owns a mobile phone and it is a habit for most of the users to check their mobile phone in average 150 times a day. It is a fact that 74% of shoppers make a purchase based on a mobile phone search, yet 79% of top advertisers don't have a mobile optimized site (Prismaxel, 2017). Social media is also becoming a hugely important part of company's marketing communications so retailers which invest in their social media strategies are likely to perform better than the competition (Vend, 2018). In 2014, 30% of consumers were communicating with brands through their social media profiles (Digital Marketing Institute, 2016) and 65% of consumers had a digital experience affect a change in their opinion about the brand (Conversation, LLC, 2012). In digital environment marketing mix consists of five elements (so called 5 P) - besides product, price, place and promotion, people are an immensely important factor which drives digital marketing strategy. That is why it is essential for companies to take into account everything related to their existing or potential consumers. Specifically, average consumers in Croatia have weaker purchasing power than consumers in most other European Union countries so many companies in Croatia tend to lower their prices in order to appeal to them. Croatian consumers place a high value on rebates, promotional prices, actions, sales, holiday discounts, product bundles, free of charge items, prize-game awards, including web shop promo codes and collecting loyalty points. Even though gift-vouchers, coupons, product samples and free products will always be welcomed, retail stores should not conduct solely sales promotion activities as primary option of attracting customers. Consumers are ready for next level technologies so retail stores which start using newest and more interesting technologies will be perceived by consumers as more attractive. Many companies around the world are already recognizing this and are in a rush to seize this opportunity and gain competitive advantage. Still, in case of many companies in Croatia, low or average level of technology infrastructure can be encountered. Small or medium-size companies in Croatia still haven't implemented some (if any) of the valuable technological tools, mostly due to the lack of funds or relevant know-how. Modern business is rapidly moving towards e-business, which will soon be based mostly on computers, software and applications. Considering that technology is continuously moving forward,

companies which invest effort and financial resources in technological solutions, are bound to stay ahead of their competitors who are not as quick to adapt. Eventually, they too will have to embrace new technologies if they want to remain in business, mostly because their consumers expect them to.

Discussion

Depending on the industry, the aspect of new technologies in marketing will have a stronger or weaker role in creating competitive advantage and perceived better position. After conducting market segmentation and detailed analysis of customer segments, a company will find out which segments recognize and use technology more and which technologies in marketing they value most. Marketing Managers are increasingly starting to direct company's communication towards modern channels such as mobile and online. At the same time, traditional channels a.k.a. mainstream media are slowly being put in second place, mostly because digital channels are relatively cost-effective compared to traditional ones (SAS Software, 2014) which are often too expensive and too complicated for an average (small or medium-size) company. Exhibitions, fairs and events generate lower ROI than expected and word of mouth "channel" tends to be pretty slow. On the other side, new marketing campaign methods in mobile market are more effective than traditional ones, even though competition is intensifying day by day. With advanced technology allowing mass usage of smart communication devices, a change in traditional consumer purchasing behaviour is changing the society beyond recognition. Over 6 billion people are using mobile phones daily therefore mobile devices are affecting a change in purchasing patterns and buyer behaviour which existed over the last century. With Internet having become the first point of contact between companies and consumers, companies are now given a chance to affect consumers' beliefs about the brand or the product solely on online user experience. It is recommended that companies continuously learn on infinite possibilities which online, mobile and virtual space offer. Understanding and using new technologies will help companies improve consumer experience in all marketing communication channels. If companies combine IoT (Internet of Things) technology, mobile applications, positioning systems and smart consumer electronic technology, then their marketing messages will be consistent and seamlessly delivered to consumers.

Retail stores are another excellent channel where efficiency of new technologies in marketing can be proved in real time. Technologies such as Indoor positioning systems based on Bluetooth Low Energy beacon devices and Near-Field Communication offer a wide range of opportunities for reaching consumers in various creative ways via their smartphones. It is a fact that 70% of consumers use smartphones while in the store and 79% of consumers use smartphones to help them with shopping (Prismaxel, 2017). Companies have a chance to provide relevant offers directly into consumers' smartphones while they are in the store (Digital Marketing Institute, 2016). It is essential for the retailer to provide in-store Wi-Fi to consumers - it has become as basic as having video walls and digital displays in the store. Many companies have already implemented digital payment solutions through mobile applications such as *m-wallet* or *e-wallet*. Other companies are sending electronic invoices to retail customers' by email instead of traditional invoice printing on the counter. By doing so companies don't only improve consumer shopping experience but also consciously contribute to environmental protection.

Consumers are ready to embrace next level newsletters, as main direct marketing tool, and would like newsletters to be high-tech, more useful than they currently are and not so generic as well. It is a fact that 44% of emails actually never get opened

(Xtendly, 2015). Let me illustrate the idea at the example of an average beauty salon in Croatia. Beauty salons would have to upgrade their technology to the point where their clients will receive monthly newsletters which will not only inform them on new products, but which will also be helpful and useful. Salon's treatment booking system contains a database in which all customer data are kept, together with all product or service purchasing dynamics, personal preferences of specific products and the list of treatments which consumer enjoys the most. Beauty salon has all the necessary information but often lacks marketing personnel to come up with ideas involving new technologies, analyse the data from the database and use them to the advantage of the salon. Additionally, small beauty salons often lack sufficient funds needed for financing technological betterment of their working systems and IT infrastructure. Beauty salon customers wish to feel added value to the basic service which they regularly receive. Many regular customers would surely appreciate if a salon contacted them on a monthly basis by phone or email to remind them of a particular treatment which they should have (massage, hair care, facial treatment, manicure, etc.) The same way newsletters are connected to company's web shop, so should the treatment booking system be. In that way, receiving newsletter from a beauty salon will allow customers to book a date and time for their favourite beauty treatment and also customize their own experience. Apart from being able to purchase products regularly in online store, customers should be able to also choose in advance specific products which they wish that service provider uses during a particular treatment (body lotions, etheric oils, hand creams, nail polish, facial cosmetics, shampoo, etc.) Such technological improvements of reservation system and traditional procedures would form a unique and memorable experience, which started as just another newsletter.

Marketing technology a.k.a. MarTech represents a mix of marketing automation and technology solutions in various digital marketing channels. New technologies are here to help companies help customers with finding a solution to their problems and dilemmas. New technologies in marketing can be sorted into two groups:

- Must-have technologies: technologies which companies have to implement in order to maintain their existence on the market, most of the competitors have them and most of the consumers expect to find them.
- Optional technologies: technologies which can aid everyday business and boost financial results, but are mostly used by large companies which can afford them.

In context of new marketing channels, mainly these new technologies in marketing are implied:

- Online / digital marketing channel: desktop website, live chat, web shop, social media marketing, search engine optimization, Pay-Per-Click advertising, Google display advertising, blogging platforms (CMS or WordPress).
- Mobile marketing channel: mobile website and web shop, mobile device applications, QR codes, social media marketing for mobile devices.
- Retail marketing channel: in-store Wi-Fi, video walls, (interactive) in-store displays, NFC and Bluetooth LE technology linked to mobile application on consumers' smartphones.
- Outdoor a.k.a. *Out-of-Home* (interactive) digital displays and signages.
- Direct marketing channel direct mailings (email questionnaires on consumer satisfaction, newsletters linked to web shop).

Also, predictive text or auto-complete in search box on company's website is very useful and practical because it helps consumers find what they are looking for faster, which also increases their experience (Stokes et al., 2013, p. 106). Furthermore,

technology needed for back-office marketing activities has become very important. In order to perform better on the market, companies need to provide Marketing Managers with efficient in-house IT and technological support. IT support in the form of databases and marketing decision support systems, can result with long-term positive effects to marketing function and business in general. Knowing the market is crucial for Marketing Managers to make best possible decisions which will ensure adequate brand positioning and company positioning. Marketing decision support systems allow synthesis and analysis of most valuable market data – that is marketing data and customer data (Prismaxel, 2017) and creation of comprehensive reports on market trends. Without them, operating and coordinating marketing activities would be much more difficult. Applications and software which would be highly useful to Marketing Managers in their daily job include:

- SAP ERP – Marketing Fund Management module
- Marketing Decision Support System
- Customer Relationship Marketing (CRM) database
- Supplier Relationship Management (SRM) database

Table 1 presents selected new technologies in marketing with estimated effect on competitive advantage of a company. It is well-known that all marketing activities should not be focused in one channel and that the same message should be systematically driven through several channels. Similarly, it is important to implement new technologies in more marketing channels and not focus only on some of them, e.g. just online. When allocating financial funds to marketing activities, companies give priority to channels which are most used for communication, direct contact and interaction with consumers. In case companies lack resources to implement omni-channel marketing strategy, a multi-channel marketing strategy can also provide the company with desired results. Whichever combination of channels a company decides on, it is important to have consumers in mind, to pay attention to where they are, how they feel, what they are doing and who they are with at a certain moment, in order to be most receptive to a certain marketing communication received at that moment (SAS Software, 2014).

Table 1

Effects of New Technologies in Marketing on Competitive Advantage

New technologies in marketing	Marketing channel	Competitive advantage effect
Must-have technologies		
Website and web shop (desktop optimized)	Online	***
Website and web shop (mobile optimized)	Mobile	****
In-store Wi-Fi	Retail / Mobile	***
Video walls, digital displays	Retail	***
Newsletter	Direct	***
Pay-Per-Click (PPC) advertising	Online / Mobile	***
Marketing decision support system	In-house	****
CRM database	In-house	***
Optional technologies		
OOH interactive displays / signages	Outdoor	***
Google display network (GDN) advertising	Online / Mobile	**
Brand's application on mobile devices	Mobile	***
NFC and Bluetooth technology linked to mobile app on consumers' smartphones	Retail / Mobile	****
Blogging platforms (CMS or WordPress)	Online / Mobile	**
SRM database	In-house	***

Source: Authors' work

Conclusion

In this paper new technologies in a modern-day marketing are discussed, together with positive effects on competitive advantage they are able to provide if a company chooses to implement them. Official website, in-store Wi-Fi and digital displays are must-have technologies because almost every company today has them. Other technologies are optional but can prove to be a source of differentiation from competition. In order to successfully reach consumers, companies have to update their outdated technologies and adjust integrated marketing communication through all marketing channels accordingly.

In practice, one of the main reasons why some companies perform with average financial results and lower market share can be found in low enthusiasm to keep up with technological trends or low investment in new technologies. Today, businesses have an abundance of modern technologies at hand. However, many small and medium-sized companies still haven't adapted their business to 21st century business conditions and new ways of interacting with consumers. Surprisingly, it seems that implementation of new technologies is something which they like to postpone. Except for following new trends in marketing communication, medium-sized and large companies should make sure that marketing department has up-to-date IT equipment and software at hand in the office because they are essential for quality marketing operations.

Paper limitations include a lack of books and scientific articles on the subject of new technologies in marketing and their impact on company's competitive advantage. Further research should be made on customers' virtual shopping experience (web shop, mobile applications) compared to physical shopping experience (in a retail store). It is also recommended to investigate the effects of new mobile technologies in retail stores on redirecting customers' decision journey if they are reached through their mobile phones at a specific moment of the cognitive process i.e. purchase decision-making process. It would be interesting to find out if purchase decisions which begin online are actually finalized via smartphone and to determine the impact of a tech-savvy retail store design on customer purchase decision. Further research should be directed at identifying successful marketing and business models with small and medium-sized companies in Croatia, considering specific local consumer and management mentality.

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