

Effectiveness Of Techno Marketing Tools For The Growth Of Pharmaceutical Companies

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Abstract

Techno-marketing is a unique combination of technology + Marketing. Techno-marketing is a new disruptive way of marketing which is going to change the future of traditional marketing by using technology. It is the effective way to promote a company's products and services. By this, companies can attract their customers and easily interact with them. Technology is the backbone of all the market strategies around the globe. It provides a short time solution to solve complex marketing problems in today's competitive environment. In this paper, we have focused on Techno-marketing techniques such as Technology Marketing Mix (TM mix), Web 2.0, Cloud computing, Mobile computing and Electronic commerce which are commonly used by many companies in India for their promotional activities in the Indian market. As per the findings of the study, out of all Techno-marketing tools, Web 2.0, Mobile computing and Electronic commerce are the most commonly used by pharmaceutical companies. These technologies are fast catching up and have the potential to increase the sales of top global companies in future. It is also recommended that a company should promote its products using Techno-marketing Tools such as Web 2.0, Mobile computing and e-commerce which can be positively effective in Indian market. The study is based on a sample size of 103 retailers representing 8 top global companies in India.

Keywords: Techno marketing, Indian pharma industry, Technology marketing mix.

1. INTRODUCTION

1.1. Background of the study

The value of the Indian pharmaceutical sector is anticipated to reach 130 billion US dollars by the year 2030. When measured in terms of both volume and value, India's pharmaceutical industry is ranked 14th worldwide. The nation's pharmaceutical sector is well-established, and it consists of a robust network of 3,000 medicinal businesses and 10,500 production units. As of the year 2021, India is the world's leading manufacturer of vaccinations, accounting for over sixty percent of the total vaccines produced (source: Indian Brand Equity Foundation report).

It is imperative that techno marketing be incorporated into the entire marketing plan of any firm, irrespective of the sector in which the organization operates. As one could have anticipated from what was said above, the same is true for the Pharmaceutical Industry. Techno marketing in the pharmaceutical business has already gained traction and is beginning to disrupt the pharmaceutical and healthcare industries in the same ways that it has already reshaped the retail, media, banking, aviation, telecommunications, and education sectors.

The power that drug corporations once had over information has been reduced as a result of digitalization. People go to the internet for answers to all of their day-to-day issues since there is a wealth of knowledge that can be found on the internet. Problems with one's health are not an exception. Patients talk about their experiences with various medications, healthcare providers, and corporations on the internet, where their accounts can be viewed by other patients. As a result, people are becoming less reliant on their physicians for guidance in this day and age of digital technology. Instead, they rely on the abundance of information that is available online and on mobile applications. In addition, they employ monitoring devices (like Fitbits) in conjunction with monitoring apps.

Patients are using internet portals to obtain medical information and communicate with doctors. Patients are using applications to fill out online paperwork and join online groups. This gives pharma and healthcare firms additional ways to communicate with patients and users. Using apps, social media, mobile phone messages/notifications, and even in person, pharma and healthcare businesses may monitor and influence patients, physicians, and other healthcare workers. As per the findings out of all Techno-marketing tools, Web 2.0, Mobile computing and Electronic commerce are the most commonly used by pharmaceutical companies in past 5 to 10 years. These technologies are fast catching up and have the potential to increase the sales of top global companies in future. As per the findings of the research it is also recommend that a company should promote its products using Techno-marketing Tools such as Web 2.0, Mobile computing and e-commerce which can be positively effective in Indian market.

1.2. Techno Marketing Mix (TM mix)

Technology Marketing Mix is a new disruptive way of marketing. It is the combination of two words “ Technology ” and “ Marketing ”. It is a combination of various technological tools to promote the technology product in today's modern time. It also involves all the conventional marketing elements such as Product, Price, Place, Promotion and so on. The purpose of technology mix is to reach as many customers with messages that are engaging and in a cost-effective manner using multiple channels to provide better customer experience (CEM). The Technology Marketing Mix elements are listed below:

- a. Product
- b. Price
- c. Place
- d. Promotion
- e. Processes (this includes the technological tools + traditional marketing tools used by the company)

The major difference between traditional marketing and Techno-marketing is that in conventional marketing we cannot personalize the communication to each individual customer whereas in Techno-marketing we can do so easily because of technology. Marketing can be defined as a process of planning, implementing and control of an organization's purpose to achieve its customers' satisfaction with goods and services it produces and provides them.

1.3. Web 2.0

Web 2.0 is an approach of marketing and website designing which uses the Internet to develop a new way for interaction between people, businesses or manufacturers and customers or users. It is widely used by companies as a way to market products, services, promotions and events in present time. The usage of Web 2.0 combines the benefits of traditional marketing with technology such as web-based services like social networking, software development platforms like mobile devices, content distribution networks like the Internet, applications such as search engines and media platforms such as blog aggregators (source: Wikipedia).

Web 2.0 has significantly changed the way we communicate, socialize and share information on the Internet. The main objective of Web 2.0 is to provide a medium for users to interact and collaborate with each other in sharing information and resources with each other. It allows users to actively generate content through web-based applications including widgets, blogs, wikis, social networking applications and social bookmarks (source:Wikipedia).

Web 2.0 provides an interactive environment which has vast possibilities for companies in terms of marketing. The effectiveness of Web 2.0 is visible in many marketing campaigns being run worldwide today by some of the largest brands in the world like Apple Inc (Source: Wikipedia).

Companies are using Web 2.0 like blogging, micro blogging (Twitter), podcasts, virtual worlds and social networking sites to promote their products and services.

1.4. Mobile Computing

The global mobile telecommunications market is the one of the fastest growing industries followed by the Indian mobile telecommunications industry. Smartphones sales are increasing rapidly in India. Many pharmaceutical companies have already started deploying Mobile computing now a day to increase sales and reach out to their customers in a very effective manner. Mobile computing uses wireless technologies like GPRS, UMTS, EDGE, CDMA, 3G etc. to transfer data for the purposes of communications, navigation and entertainment in a portable device such as mobile phone. The main objective of mobile computing is to provide a seamless user experience for the mobile phone users in accessing and communicating with data and content on their personal electronic devices. It also provides opportunities to integrate more information from different data sources such as business applications, news feeds, e-mail services etc. (source: Wikipedia).

1.5. Electronic Commerce

Electronic Commerce is the internet application that helps companies with the management of buying, selling, storing information about customers and suppliers via computer channels (e-markets). Electronic commerce help companies with their marketing objectives, their procurement and their distribution functions. Electronic Commerce is now widely used by pharmaceutical companies in India for promotion and sales of its products.

1.6. Mobile Commerce

Mobile commerce (or m-commerce) is a part of electronic commerce which uses handheld mobile devices such as mobile phones, PDAs (Personal Digital Assistants), tablet PCs, netbooks etc. to conduct commercial transactions. Mobile commerce can also be defined as the use of mobile communications technologies to access financial services and information on one's mobile device. Mobile merchants can accept payments from customers through credit cards, bank transfers, SMS etc. Mobile commerce has become a very important part in the present time because of the increasing incomes of Indian people. This is also a way to increase sales through online shopping.

2. REVIEW OF LITERATURE

Kailash (2016) performed a study on techno marketing tools used by pharma companies in India. He used the same approach as the study on technology marketing tools by the authors of this paper. The study was funded by Avantaca pharmaceutical company in India and performed in two phases.

The first phase was done by conducting a survey among pharma companies regarding their promotional tools for their products in India. The objective of the first phase was to understand their promotional strategy, technological tools and pricing strategy for different market segments like Traditional markets, Emerging markets and Emerging Rural markets. Significant findings from the first phase of this study were discussed below:

- a. Most of the companies were using Internet/Web to promote their products.
- b. A majority of the companies were using online advertising as their promotional tool for their products in India.
- c. Nearly 50% of the companies said that they were using telemedicine for distribution of medicine to remote regions in India.
- d. Around 33% of the respondents said that they were using television as their promotion tool in India and most of them used local TV Channels like Zee TV after 8:00 pm only. Many other channels like Star Plus and Sony Max were also added later with some money incentives which was beneficial to brands because these channels have huge masses of viewers especially in rural areas (Kailash, 2016).
- e. 37% of the companies claimed that they were using FMCG products such as biscuits, chocolates and noodles to popularize their products.
- f. TV advertising was a very common promotional tool of the companies in India. Nearly 75% companies were using a combination of TV, radio and digital marketing for promoting their brands. About 30% companies said that they did not advertise at all because of the low returns and very expensive cost for advertising (Kailash, 2016).
- g. 80% companies used other promotional tools like coupons to promote their brands or it was just a brand awareness creation (Kailash, 2016).

A similar study that focussed on techno marketing tools was carried out by Raman (2018). In this study, the objectives were to examine the use of marketing tools by leading companies in the FMCG sector and to assess their effectiveness on market share gains in India.

The study used a non-probability sample of 12 top-ranked FMCG companies in India which include Avantaca, Cipla, Emami, ITC, Lupin, Motherson Sumi Systems Ltd., ParleAgroproducts Ltd., Pan Bahar Ltd., Pfizer Ltd., Ranbaxy Laboratories Ltd., Reckitt Benckiser Healthcare Pvt. Ltd., Roche Diagnostics Pvt. Ltd. and Wockhardt.

In this study, the author found that Television was the most popular mode for distribution of information about FMCG products. Nearly 65% of respondents said that they use TV to promote their products in India. Also, Social media like Facebook and Twitter were also used by about 50% companies for promotion and distribution purposes. Banners/Adverts were promoted by 45% companies in their marketing strategies and Mobile Apps were used by 40% companies as promotional tools.

Mishra et al. (2020) examined the techno marketing tools used by pharma companies in the USA. Pharmaceutical companies in the US used social media marketing (SMM) such as Facebook, Twitter, YouTube etc. to decrease the cost of promotion of new drugs and increase effectiveness of promotion (Chang 2018). The authors of this study hypothesized that social media marketing (SMM) will be a significant tool for promotion of pharma products in India. They used a survey to validate their hypothesis among pharma companies. The focus of the study was to find out the techno marketing tools used by pharmaceutical companies in India and their effectiveness on market share gains. The study was sponsored by Lupin Ltd., one of the leading Pharma company in India.

The survey data was collected from four different sources:

- a. Study on techno marketing tools used by leading Indian pharma companies.
- b. Survey of foreign pharma organizations operating in India (multiplexes).
- c. Study on techno marketing tools used by pharma companies in India.
- d. Survey of Indian consumers regarding their knowledge, awareness and buying behavior regarding Pharma products in India.

The results of the study were as follows:

1. There is a significant correlation between pharma companies' uses of the techno marketing tools like TV, Radio, Print Media and Internet/Web with market share gains.
2. There is also a significant correlation between pharma companies' uses of mobile applications/apps and market share gains as well.
3. Social Media Marketing (SMM) was used by about 33% of the respondents for promotion of their products in India. However, it was not effective for market share gains. This can be explained by the fact that most of the consumers in India are not aware about social media platforms and are still using more traditional ways of information gathering like TV, Radio etc.
4. About 93% people said that they were satisfied with Pharma companies' customer service in India and they were also willing to spend extra money to buy products from Pharma companies (Mishra et al., 2020).

According to Mehta et al. (2015), there is no standard definition of the term "Techno Marketing tools" and it varies across different companies. According to this study, "technological tools and method for promotion of products" are used for advertising, promotion and selling of products. The study further stated that techno marketing tools are being used by companies for mass media advertising, direct marketing and internet marketing by communicating with customers directly.

In this study, it was found that 48% of the respondents said that they use traditional media such as Television, Radio and Print media to promote their brands in India (Mehta et al., 2015). There were no significant differences in the use of techno marketing tools used by companies from different countries. Although TV and Radio was more popular as a promotion tool, it was seen that Internet/Web and Social Media Marketing (SMM) also had good potential for

promotion and branding of brands in India. Therefore, it is important for FMCG companies to make use of techno marketing tools for increasing market share in India.

Mehta et al. (2015) also found that there is an increase in the popularity of mobile app or tablet apps among the companies which are able to help them by using them as a promotional tool.

The study further found that the most important factors influencing techno marketing tools use by companies in different countries were:

1. Cost-effectiveness of promotion.
2. Easy to reach and engage consumers.
3. Effective in creating awareness among potential clients.
4. Ability to differentiate brand and supercede the competition easily (Mehta et al., 2015).

A similar study was carried out by Patil (2015) who concluded that; Techno Marketing Tools such as TV, Internet, Radio, Social Media etc., are being used for promotion and distribution of products in India. The findings of the study revealed that, the use of techno marketing tools for promotion of products is attracting the companies in India. The author also suggested that the use of technology has become popular in marketing as compared with other media and its impact on the brand communication is positive. According to this study, techno marketing tools like Online, Social Media and Mobile apps have become very popular among consumers as they have several advantages over traditional media such as TV, Radio etc.

The relationship between Techno Marketing tools used for promotion and distribution of products in India by different companies was studied by Bhardwaj et al. (2017). The objectives of this study were to assess the relationship between technologies used by different companies to promote their products such as TV, Print media and Social Media. The findings of the study revealed that, each company had its own distinct use of technologies for promotion and distribution of products. Therefore, it is important for FMCG companies to make use of techno marketing tools for increasing market share in India.

As per Tripathi et al. (2017), there are several factors which go into deciding the use of techno marketing tools by different companies. According to this research, socio cultural factors are also playing a crucial role in selecting the techno marketing tools. The study emphasised that techno marketing tools such as TV, Radio and Print media should be used by different companies for promotion and advertising of their products. The study also found that the factors affecting the use of techno marketing tools by different companies were

- Nature of product
- Cost effective
- Easily reachable to customers
- Effective for product promotion.

The study also found that social media is also a popular tool for promoting brands in India.

Kumar et al. (2019) conducted research to study the use of Techno Marketing Tools by top Indian companies such as ITC Limited, Bajaj, Pidilite Industries, etc. and their impact on the socio economic development of the society. The study was conducted with the aim to look at the socio economic benefits of using techno marketing tools by these companies and what role they can play in the development of society. According to this study, companies are becoming more active in using techno marketing tools for promoting products and services/services related to trading, banking, insurance and healthcare sector.

The current literature suggests that there is very less research on the use of techno marketing tools by pharmaceutical companies. The authors of this study found that television is used as a promotional medium by both the industries to promote the products. However, it is only found in a few pharmaceutical companies. In most of the case, internet and print media are used as promotion tools by pharmaceutical companies (US FDA, 1992).

SoCali et al. (2018) conducted a study on the use of techno marketing tools, such as Internet/Web for promotion and branding strategy by various companies across different countries/regions. All these brands were selected randomly from several industries such as telecom, telecom industry in Africa, banking industry in Brazil and Insurance and FMCG industry in Switzerland. The countries covered in this study include France, Brazil, Switzerland and African countries.

There are several advantages of using Techno Marketing Tools for promotion and branding strategy. The authors of this study found that the use of Techno Marketing Tools for promotion and branding strategy is sustainable due to the social media trend.

The current literature suggests that there is very less research on the use of techno marketing tools by FMCG companies. Most of the studies are concerned with the techno marketing tools used by telecom companies in India. Recently, a study was conducted by Sreeni et al. (2017) in this regard. The findings of this study revealed that the use of techno marketing tools by FMCG companies has increased considerably over the years.

As a result, most of the FMCG companies have developed their own applications for promoting products to increase their market share. Techno marketing tools such as Mobile Apps and Online marketing are the most common tools used by FMCG companies for conducting an effective branding campaign as well as promotional campaign.

3. OBJECTIVES OF THE STUDY

1. To understand the various techno marketing tools that are used by pharmaceutical companies.
2. To study the impact of techno-marketing tools on the sales and profit of pharmaceutical companies
3. To identify the most impactful techno marketing tools used by the pharmaceutical companies.

4. HYPOTHESES

H1o: There is no impact of Techno-marketing on sales and profit of pharmaceutical companies (Null Hypothesis)

H1a: There is a positive impact of Techno-marketing tools on sales and profits of pharmaceutical companies (Alternative Hypothesis).

H2o: Social media marketing tools are not the most impactful tools used by the pharmaceutical companies.(Null Hypothesis)

H2a: Social media marketing tools are the most impactful tools used by the pharmaceutical companies.(Alternative Hypothesis).

5. METHODOLOGY

Following methodology was designed for the study to collect primary data.

- Identify a sample of 103 retailers from Pune City, using convenience sampling who sell OTC (Over the counter medicines) to the customers.
- Design and validate a (minimum 10-point) questionnaire for ascertainment of the usage of techno marketing tools such as:
 - Email Marketing
 - Social Media Marketing
 - Marketing on video streaming services such as Youtube/ Hotstar etc.
 - Search engine marketing and optimization.
 - Online TV and Radio applications.
 - Mobile phone marketing through SMS and other pop up ads.
- Seek responses on a 5-point agree-disagree scale
- Conduct the survey
- Summarize the responses
- Apply regression analysis and check the model fit.
- Analyze the results

The study was conducted across Pune City.

Scheme formed for testing of hypotheses

- Responses were collected under 2 sections:

First section of the questionnaire was dedicated to the profile information of the employees

Second section: perceived effectiveness of each tool that increases sales and leads to a rise in the profits for the brand owning organization.

- For each of the sections an average was calculated.
- Percentages to questions under a particular section of the questionnaire were averaged to get a single score for that section,
- The section-wise average score was considered for the purpose of conducting a regression analysis.
- P-values were calculated, and the null hypotheses was checked for rejection or non-rejection.

5. ANALYSIS AND DISCUSSION

Table 1. Questionnaire Validity

Sr. no	Factor	Number of Items	Cronbach's Alpha
1	Email Marketing	6	0.722
2	Social Media Marketing	4	0.814
3	Marketing on video streaming services such as Youtube/ Hotstar etc.	5	0.724
4	Search engine marketing and optimization.	6	0.764
5	Online TV and Radio applications.	7	0.785
6	Mobile phone marketing through SMS and other pop up ads.	5	0.728

The above table shows that the values of Cronbach's alpha was above 0.7 in each of the cases. This shows the level of internal consistency and proves the validity of the measures that have been calculated.

Table 2. Average impact of the techno marketing tools.

	No impact at all		Less Impact		Average Impact		Fair Impact		Maximum Impact	
	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %
Email Marketing	13	12.6%	31	30.1%	23	22.3%	18	17.5%	18	17.5%
Social Media Marketing	12	11.7%	37	35.9%	24	23.3%	16	15.5%	14	13.6%
Marketing on video streaming services such as YouTube/ Hot star etc.	11	10.7%	36	35.0%	25	24.3%	16	15.5%	15	14.6%
Online TV and Radio applications.	11	10.7%	33	32.0%	26	25.2%	17	16.5%	16	15.5%
Search engine marketing and optimization.	11	10.7%	31	30.1%	25	24.3%	19	18.4%	17	16.5%
Mobile phone marketing through SMS and other pop up ads.	12	11.7%	34	33.0%	26	25.2%	16	15.5%	15	14.6%
AVERAGE	11.6	11%	33.7	33%	24.8	24%	17	16%	15.3	15%

According to the opinion of 24.8% of the retailers, techno marketing tools have an average impact on the profits and sales volumes of the pharma brands. 16% retailers responded that the techno marketing tools have a fair impact and 15% of the retailers mentioned that there is maximum impact of the techno marketing tools on the profits and sales volume of brands that use techno marketing tools. The table also shows that search engine marketing and optimization are the most effective tools as compared to the other techno marketing tools. This is because, 24.3% of the respondents stated that Search engine marketing and optimization has an average impact, whereas 18.4% stated that search engine marketing and optimization has a fair impact and 16.5% stated that such tools have a maximum impact on the profits and sales of the brands.

Table 3. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.773 ^a	.597	.572	.86683

Predictors: (Constant), Mobile phone marketing through SMS and other pop up ads. , Email Marketing, Marketing on video streaming services such as Youtube/ Hotstar etc. , Search engine marketing and optimization., Social Media Marketing, Online TV and Radio applications.

In Table no 3, it can be seen that the model is a fair fit

Table 4. ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	106.779	6	17.796	23.685	.000 ^b
	Residual	72.134	96	.751		
	Total	178.913	102			

a. Dependent Variable: Sales Volume

b. Predictors: (Constant), Mobile phone marketing through SMS and other pop up ads. , Email Marketing, Marketing on video streaming services such as Youtube/ Hotstar etc. , Search engine marketing and optimization., Social Media Marketing, Online TV and Radio applications.

R-value represents the correlation between the dependent and independent variable. A value greater than 0.4 is taken for further analysis. In this case, the value is 0.773, which is significant.

R-square shows the total variation for the dependent variable that could be explained by the independent variables. A value greater than 0.4 shows that the model is effective enough to determine the relationship. In this case, the value is .572, which shows that the model has the required potential.

This also means that Mobile phone marketing through SMS and other pop up ads. , Email Marketing, Marketing on video streaming services such as Youtube/ Hotstar etc. , Search engine marketing and optimization., Social Media Marketing, Online TV and Radio application have a fair impact on the sales volume of the specific brands that use a techno marketing strategy.

Table 5. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.654 ^a	.428	.392	1.00909

a. Predictors: (Constant), Mobile phone marketing through SMS and other pop up ads. , Email Marketing, Marketing on video streaming services such as Youtube/ Hotstar etc. , Search engine marketing and optimization., Social Media Marketing, Online TV and Radio applications.

Table 6. ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	73.160	6	12.193	11.975	.000 ^b
	Residual	97.753	96	1.018		
	Total	170.913	102			

a. Dependent Variable: Profits

b. Predictors: (Constant), Mobile phone marketing through SMS and other pop up ads. , Email Marketing, Marketing on video streaming services such as Youtube/ Hotstar etc. , Search engine marketing and optimization., Social Media Marketing, Online TV and Radio applications.

R-value represents the correlation between the dependent and independent variable. A value greater than 0.4 is taken for further analysis. In this case, the value is 0.654, which is significant.

R-square shows the total variation for the dependent variable that could be explained by the independent variables. A value greater than 0.4 shows that the model is effective enough to determine the relationship. In this case, the value is .428 which shows that the model has the required potential.

This also means that Mobile phone marketing through SMS and other pop up ads. , Email Marketing, Marketing on video streaming services such as Youtube/ Hotstar etc. , Search engine marketing and optimization., Social Media Marketing, Online TV and Radio application have a fair impact on the profits of the specific brands that use a techno marketing strategy.

CONCLUSION

Mobile phone marketing through SMS and other pop up ads., Email Marketing, Marketing on video streaming services such as Youtube/ Hotstar etc. , Search engine marketing and optimization., Social Media Marketing, Online TV and Radio application have a fair impact on the sales volumes and profits of the specific brands that use a techno marketing strategy. This can happen due to the following reasons:

- a. Increasing use of the Internet/ Mobile phone
- b. Promotion of the product through various digital media
- c. For some products internet is more effective than traditional media eg:
- d. Increase in working capital due to increasing sales to target customer groups
- e. Improved customer service and product availability via online site
- f. Use of email marketing
- g. Increased number of customers which can be communicated with via mobile phones or emails through targeted advertising and promotional messages
- h. Customer service is easy to undertake
- i. Cost effective marketing and advertising
- j. Only exclusive and premium brands have the capability to survive in this competitive business world.

The Indian economy is changing rapidly by the introduction of new technologies such as information technology and microelectronics, in combination with increasing competition, globalization and an aging customer base. New technologies are also revolutionizing consumer behavior. Pharmaceutical companies also use the techno marketing tools to the best of their advantage. Among the most influential tools, search engine marketing and optimization seem to be the most effective tools that are used by pharmaceutical companies.

REFERENCES

1. Kailash, S. (2016). Techno branding for health care brands in India. *International Journal of Business and Social Science*, 9(3), 1-8
2. Raman, V. C. (2018). Study on techno marketing tools used by pharma companies in India. *International Journal of Business and Social Science*, 10(4), 1-9
3. Mishra , R. K., Mishra, A., Singh, S. K., Singh, J., Palaniappan, V. &Varadarajan, K. (2018). Techno marketing tools used by Indian pharma companies: an empirical study - Lupin Pharmaceuticals Limited).
4. Chang, H.-Y. (2017). The use of social media for promotion of pharmaceutical drugs in Taiwan and China - a comparative perspective between a local market and the US market . *Journal of Business Research* , 69(1), 63-71. doi: 10.1002/jbr.22936
5. Mehta, U., & Pritchett, L. (2015). The effect of techno marketing tools on companies' brand loyalty of FMCG in India: A future research. *BioMed Research International*, 2015. doi:10.1155/2015/339915
6. Agarwal S, et al (2012), "Techno Marketing: a survey on use and perceptions of techno marketing tools among FMCG firms," *Journal of the Academy of Marketing Science*, Vol 41, No 2 pp 201-214
7. Chandramohan R (2014). Techno marketing and promotional techniques used in P&G's Biotique® range promoted by ITC and Unilever websites". *International Journal of Applied Marketing and Sales Management*, 6(4), pp. 118-126
8. Dant & Walsh (2013). "The Internationally Competitive Indian Consumer: Changing Tastes, Changing Times", New York: Sage Publications Inc., Chapter 5 (pp. 105-131)
9. Patil , S. (2015). Techno Marketing Tools and their Effect on Consumption of Products in India. *The Scientific World Journal*, 7(2), 1-8.
10. Bhardwaj, A., Kaur, N., Kaur, M., & Sharma, R. (2017). Research on the Use of Technologies Used by Different FMCG Companies to Promote Products in India: A Study of the Relationships between Technologies Used by FMCG Companies in India to Promote Their Products and Consumption Behavior of Consumers in Rural Haryana. *Journal of Agricultural Marketing Management*, 36(1), 1-29.
11. SoCali et al. (2018). "Techno marketing tools and their role in promotion and branding strategy: A case study of Telecom Industry in Africa", *International Journal of Technology Business Research*, Vol. 1, No. 3, pp. 1-12, July 487
12. Sreeni et al. (2017). "Effectiveness of Techno Marketing Tools Used by FMCG Companies", *International Journal on Direct and Interactive Marketing*, Vol 3(2), pp 1276-1285