

Analysis Of Medical Representatives Attitude Towards Digital Marketing Strategies Employed By Indian Pharmaceutical Companies And Its Relation To The Technology Acceptance Model

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Abstract

Pharmaceutical marketing is specialized field when compared to other industries. Highly trained and educated sales force (Medical Representatives) which deals with highly educated and well informed customers (Physicians). In the case of pharmaceutical marketing customer and consumer are two different individuals and majority of marketing activities revolves around customer i.e. physicians. As physicians (customer) prescribes prescription and patient (consumer) who purchase it from pharmacy and consumes it. So pharmaceutical companies are bound to concentrate their marketing efforts to ensure physician should prescribe their drug. Medical representatives try to influence prescription pattern of physicians in favor of their brands. The major source of information to the physician is one-to-one interaction with medical representatives. Medical representatives help physician to get latest and vital information on the drugs. Apart from medical representatives, to promote drugs, pharmaceutical companies are majorly depending on CME conferences, journals and Direct to Consumer Advertising.

With the advent and growth of Internet, along with rise of social-networking sites like Facebook, MySpace, YouTube and Twitter WhatsApp has completely changed how people interact with each other. Physicians and patients are fast in adapting to this new channel of communication. Penetration of internet as result of communication revolution has changed Indian scenario pharmaceutical industry as well. Physicians are no longer dependent on medical representatives on for latest update in field of medicine. Pharmaceutical companies are trying to keep pace with digital revolution and fast in adapting. It is observed that pharmaceutical companies cannot replace traditional model of marketing. Medical representative is responsible for successfully implementing company strategies in given geographical territory. Physician sees medical representative as pharmaceutical company itself. Medical representative hold key in ensuring success of marketing strategies employed pharmaceutical companies. So attitude of medical representative towards new digital marketing strategies is of prime importance Researcher try to analyze medical representative's attitude towards digital marketing strategies in relation to Technology Acceptance model (TAM). Researchers use the technology acceptance model (TAM) to understand behavior in the information systems field. In this study

Key Words: Physician, Medical Representative, Digital marketing strategies, Technology Acceptance model (TAM).

1.0 Introduction

Marketing of pharmaceutical products can be described as providing the right drug at the right price, at the right place, with the right information, to the right market. Pharmaceutical marketing is the business of advertising or otherwise promoting the sale of pharmaceuticals or drugs. Marketing plays a key role influencing or directing activities from the manufacturer to the patient. It is the demand from the consumer that determines which goods will be produced. Any pharmaceutical company that wants to serve its market has to endeavor in direct marketing activities so that the right product is sold in the right quantity in the right place at the right time.

1.1 Pharmaceutical Marketing Process

The Entire Pharmaceutical marketing revolves around Medical Representative; pharmaceutical companies appoint medical representatives and assign them defined territories. Medical representatives visit doctors, chemists and stockiest as per company guidelines. Medical representatives try to influence physicians for prescribing particular brand of medication and follow up that physician continue to prescribe particular pharmaceutical brand. Hence the marketing strategies are mainly focused in consideration of customers' i.e. prescribing physicians, retail chemists and purchasing consumer i.e. patients. Not only these three but even the internal customers of the company that is the sales promotion employees of the company are taken into consideration before designing marketing strategies. Unlike other industry, pharmaceutical products are the specialized products, where sales promotions are based on scientific knowledge sharing, within restricted norms and that too with those individuals (physicians), who are having better knowledge than those, who are promoting (MR's).

As numbers of people working in the field are increasingly consistently a crowd is gathering near the cabins and hospitals of doctors for meeting the doctors for 1 minute's sales call. After meeting the doctors, MR's and their managers also have to meet to the nearest retail chemists to inform about the brands promoted to doctors and also to ensure the availability of the brands

in his shop. Every company appointing a MR or other sales supporting team provides effective product, sales and soft skills training program, with which the MR's can influence the prescription behavior of the doctors, so as to generate the sales. Not only the training but the communication, promotional inputs, knowledge sharing, other sales related activities, gifts, sponsorships, disease detection camps, brands, CME's, visiting frequency, free drug samples, new product launches, availability of products, etc. are the strategic decisions taken up by the company to ensure consistent improvement in sales and profitability for the organizations. Every company does the same, but something which is competitive and different taken up by the company and by the sales promoting teams, makes all the differences. Depending upon the profile of the doctors, different factors influences his prescription decision and company has to work on different aspects, so as not to lose any chance of converting the doctors as well losing their market share to their competitors. Typically company spends around 15-20% of their total revenue of sales on such promotional campaigning.

1.2 Buying stages of Healthcare professionals:

According to Marketing Planning for the Pharmaceutical Industry by John Lidstoneⁱ the aim is to change from a non-usage of a product to usage or repeated usage. There are different buying stages of healthcare professionals in which the pharmaceutical companies have to make their product known they are *Awareness to Interest, Interest to Evaluation, Evaluation to Trial, Trial to Usage, Usage to Repeat Usage*.

Pharmaceutical marketing is a specialized field where medical representatives form the backbone of entire marketing effort. Pharmaceutical companies appoint medical representatives and assign them defined territories. Medical representatives meet doctors, chemists and stockiest as per company norms. Medical representatives try to influence prescription pattern of doctors in favor of their brands. Similar to other industries, pharmaceutical marketing decisions are taken to maximize profitability of the organization, by satisfying the needs and wants of the customers. It is little easy in non pharma industries as the customer can make a decision to what product and in what specification it should be purchased. In pharmaceutical marketing, the customer and the

consumers are two different peoples. Even though the products are being purchased by the patients for curing the diseased condition, the decision of what brand that patient should purchase is taken by the physician. Hence the marketing strategies are mainly focused in consideration of customers' (prescribing physicians), retail chemists and purchasing consumer (patients). Not only these three but even the internal customers of the company that is the sales promotion employees of the company are taken into consideration before or along with formulation of marketing strategies. Unlike other industry, pharmaceutical products are the specialized products, where sales promotions are based on scientific knowledge sharing, within restricted norms and that too with those people (Physicians), who are having better knowledge than those, who are promoting (Medical representatives).

1.3 Digital Marketing Strategies of Pharmaceutical Industry

Review of research work on digital marketing employed by pharmaceutical industry indicates that pharmaceutical industry is acknowledging the changes taking place in communication technology. Physicians and patient are fast in adopting new medium of communication and it is vital for pharmaceutical companies to adapt the new medium in effective way in order to survive and grow in dynamic pharma market. Pharmaceutical companies are keen in using social networking sites to reach-out physicians along with establishing meaningful dialog with physician communities that exist on these social networks.

Pharmaceutical companies are using digital marketing tools to effectively market their products to customers. Effective utilization of these digital communication tools is helping pharmaceutical companies improve overall organizational performance along with effective utilization of resources available.

Bryan A Liang and Timothy K Mackeyⁱⁱ surveyed the predominance of direct-to-consumer advertising of driving pharmaceutical organization nearness and medication item marketing in online intuitive web-based social networking advancements. The review found that all pharmaceutical organizations explored have nearness in online intuitive web-based social networking advancements on Facebook, Twitter/Friendster, supported sites, and truly basic

syndication nourishes. Also, larger part have devoted YouTube channels, and created medicinal services correspondence related portable applications.

Facebook and Twitter, the biggest online networking Web sites, have more than 350 million clients overall swing initially to the Internet when looking for wellbeing related information. It is consequently astonishing that the pharmaceutical and therapeutic gadget ventures have been ease back to build up a web-based social networking nearness. The medication business apportioned fewer than 4% of the more than \$4 billion it spent on direct-to-customer promoting to Internet outlets in 2008, and just a minor division of that was for informal communication sites. In the following year, in any case, as per Jeremy A. Greene and Aaron S. Kesselheimⁱⁱⁱ, the extent may change significantly.

Masood I, Ibrahim Mim, Hassali Ma and Ahmed M^{iv} examined the development of marketing procedures utilized by pharmaceutical businesses keeping in mind the end goal to stay focused in this much directed item. With the innovative improvement, many existing techniques and practices has been either supplanted or changed in mix with mechanically created strategies. Electronic detailing (e-itemizing) is one of the strategies for tranquilize advancement presented couple of years back as mechanically create apparatus. In pharmaceutical industry it has been presented as another correspondence channel for the advancement of medications among the doctors.

The expanding ubiquity of Web 2.0 devices, for example, online journals, wikis, and virtual universes, is essentially changing how purchasers utilize the Web. The fundamental center of Web 2.0, those clients can create and share their own substance, frequently with respect to organization brands and items, gives both potential esteem and difficulties to marketing professionals. Alongside leading optional research, Salvatore Parise and Patricia J. Guinan^v talked with 30 marketing officials and senior directors at organizations at the bleeding edge of utilizing this innovation. We found that there were four standards which guided administrators' marketing activities: 1) encourage clients in producing content, 2) concentrate on building a

group, 3) guarantee realness of the message, and 4) search for marketing openings through experimentation.

In the arranged world, firms perceive the energy of the Internet as a stage for co-making an incentive with clients. Mohanbir Sawhney, Gianmario Verona and Emanuela Prandelli^{vi} concentrate on how the Internet has affected the procedure of synergistic innovation; a enter handle in esteem co-creation. Creators diagram the unmistakable abilities of the Internet as a stage for client engagement, including intuitiveness, improved achieve, diligence, speed, and adaptability, and recommend that organizations can utilize these capacities to draw in clients in community item development through an assortment of Internet-based systems. Creators present contextual investigations to delineate the coordinated and precise use of Internet-based community oriented development instruments from Eli Lilly from the pharmaceutical business. They infer suggestions for administrative practice and scholastic research on communitarian development.

As stated by Leonard Lerer and Mike Piper^{vii}, in less than a decade, it has been possible to witness digital technology in the pharmaceutical industry traverse almost a full circle from the first tentative steps with sophisticated computing, websites and portals, the fear of competition and powerful intermediaries, the dotcom hype and technology such as e-R&D, e-detailing and customer relationship management. The astute observer will see many parallels between the pharmaceutical industry's relationships with digital technologies and its approach to biotechnologies.

Recent work by the author, Leonard Lerer^{viii}, with Cap Gemini Ernst & Young has incorporated a worldwide review of customer relationship management (CRM) in the pharmaceutical business. One intriguing finding was the developing enthusiasm for the utilization of computerized innovation in the entire zone of CRM. The inquiry confronted by associations is the manner by which to market to people, to doctors or to littler fragments. It is in this setting this paper takes a gander at the development of computerized methodology.

Confronted with an inexorably troublesome working condition, pharmaceutical organizations are looking for approaches to build up close and feasible associations with clients. Market division is the apparatus of decision for recognizing and impacting target gatherings and Leonard Lerer^{ix} investigates the ramifications of the Internet for division. Lerer highlights the advantages of little gathering or small scale division as a way to deal with individualized marketing and inspect its application in creating further client understanding.

2.0 Objectives of the Study

1. To Study the attitude of medical representatives from Satara towards digital marketing strategies employed by Indian pharmaceutical companies
2. To Study the attitude of medical representatives from Satara towards digital marketing strategies employed by Indian pharmaceutical companies in relation to Technology Acceptance model (TAM).
3. To study the comparative efficacy of new digital marketing model against traditional sales promotion model used by pharmaceutical companies

4.0 Research Design:

The researcher has embraced descriptive research design for the present research reason. Descriptive research depicts the present status of individuals, demeanors, and advance. Descriptive research design takes a "what is" approach. It includes gathering quantitative data, portrays classifications of subjective data, includes gathering information that portrays occasions and afterward composes, arranges, delineates, and depicts the information. Descriptive research design utilizes portrayal as an instrument to compose information into designs that rise amid investigation and frequently utilizes visual guides, for example, diagrams and outlines to help the peruses.

4.1 Type of Data Sources: The researcher has used both primary data sources and secondary data sources to collect the information.

- **Primary data:** Aimed at primary data, the researcher has developed and used 'structured, un-disguised questionnaire' as data collection instrument. The contemporary

questionnaire is containing of dichotomous, multiple choice and likert-type scale questions. This questionnaire includes nominal, ordinal, interval and ratio scale.

- **Secondary Data:** Researcher has collected the secondary data through print-media like books, magazines, research Articles internet websites, related company literatures and online reports of various research organizations.

4.2 Sampling Design: It is a definite plan for obtaining a sample from a given population. The researcher has adopted numerous techniques and procedures in selecting the items for the samples.

- **Population:** As the present study is based on the perception of Marketing representatives from Satara District towards digital marketing strategies of pharmaceutical companies, thus all medical representatives from the region becomes potential respondents for the existing research questionnaire and is a part of the population. There is no readily list available which denotes the size of the population. Thus, it is to say that population is finite, but unknown.
- **Sampling Unit:** Out of all potential respondents, the researcher has chosen marketing representatives with designations as Medical representative Sales Officer, Business Development Executive, Area Manager or Marketing Manager.
- **Sampling Method:** The researcher has adopted convenience sampling technique for selection of sample from population. To reduce the sampling error, the researcher has personally visited medical representatives of different pharmaceutical companies.
- **Sample Size:** It refers to the number of items to be selected from the population to constitute a sample. Researcher has selected 172 marketing representatives.

4.3 Limitations of the Study

For the present study, the researcher has used both primary and secondary methods of collection of various data and naturally, the data collected is likely to be affected directly or indirectly.

Researcher is fully aware of these possibilities and has tried to undertake due care to see that the results would be representative of the universe. The researcher is aware of the following limitations of his work. The researcher had chosen Satara District from Maharashtra state of India as a geographical spread for the study. By the limited resources available with the researcher, the geographical area was limited.

5.0 Data Analysis:

Table 5.1: Reliability Statistics

<i>Cronbach's Alpha</i>	<i>N of Items</i>
.790	31

Table 5.2: Demographic Profile of Respondents

		<i>Frequency</i>	<i>Percent</i>	<i>Cumulative %</i>
Age	Up to 30	80	46.5	46.5
	31 to 40	47	27.3	73.8
	41 to 50	29	16.9	90.7
	51 and above	16	9.3	100.0
Gender	Male	163	94.8	94.8
	Female	9	5.2	100.0
Total work experience	Up to 10	106	61.6	61.6
	11 to 20	51	29.7	91.3
	More than 20	15	8.7	100.0
Association with the present organization	Up to 5	57	33.1	33.1
	6 to 10	82	47.7	80.8
	More than 10	33	19.2	100.0
Designation	Head Marketing	12	7.0	7.0
	Area Manager	67	39.0	45.9
	Marketing Manager	93	54.1	100.0

Table No. 5.2 explains the age-wise, gender-wise profile of the respondents. It also clarifies the total work experience the respondents carry besides their association with the existing organization and the positions they worked on.

- The age group of the respondents varies from minimum 30 years and above. The majority of the respondents belonged to the age of nearing 30. This was 46.5 per cent of the total respondents. About 27 per cent respondents belonged to the age group of 31 to 40 years. Nearing 17 per cent were from the group between 41 and 50 whereas about 9.5 per cent had reached the age of more than 51 years.
- The respondents comprised more number of male members i.e. to the tune of nearing 95 per cent. Women respondents were meager in number i.e. up to 5 per cent.
- While looking at their work experience, it was noted that majority of the respondents i.e. around 61.4 per cent were having less than or equal to 10 years of experience each. Nearing 29.7 per cent of the total respondents were having work experience in the slab of 11 to 20 years. About 6.5 per cent respondents were having more than 20 years' experience each in their career.
- The association of the respondents with their present organization was considered to be one of the critical aspects of choosing them for the study. Nearing 48 per cent of the respondents remained with their existing organizations for previous minimum 6 to 10 years. 33 per cent respondents were in the service of the existing organizations since last 1 to 5 years; whereas about 19 per cent respondents were in the service of their existing organization for more than 10 years.
- The respondents in this study were handling various types of responsibilities through their present designations. 54 per cent of them were holding the position of Marketing Managers. 39 per cent were Area Managers of the designated areas; whereas 7 per cent were handling the job of Marketing Head.

Table 5.3: Best Description of Marketing Resources and Budget

	<i>Frequency</i>	<i>Percent</i>	<i>Cumulative Percent</i>
Larger than the category average	60	34.9	34.9
Average for the category average	86	50.0	84.9
Smaller than the category average	26	15.1	100.0
Total	172	100.0	

Interpretation:

The data exhibited in the **Table No. 5.3** belongs to perception of the respondents in terms of the marketing resources and budget allocations done by their respective organizations in their businesses. 34.9 per cent respondents believed that their organizations have resources and budget allocations to the larger extent than any average category organizations. 50 per cent organizations agreed that their organizations stood in the category of average organizations in terms of the marketing resources they used to own and the budgets that were allocated for the business. 15.1 per cent respondents accepted that their organizations were not having any advanced steps in this direction. They considered their organization having smaller marketing resources and budgets as compared to the average organizations.

Table 5.4: Marketing Focus on Different Platforms

	<i>Mean</i>	<i>Std. Deviation</i>	<i>Ranking</i>
Company website	4.09	0.92	2
Email marketing	4.03	0.92	4
Web banners	3.80	1.01	6
Web conferencing	3.69	1.18	8
Mobile marketing	3.74	1.12	7
Social media marketing	4.05	1.00	3
Online newsletters	4.22	0.81	1
e-tools for sales representatives	3.95	1.01	5
Apps	3.24	1.25	9

Interpretation:

Table 5.4 shows the organizations with digital presence in the market as perceived by their marketing representatives. Out of the above 9 areas in digital field, the marketing representatives rated as each of them as under:

Almost all the marketing representatives agreed that their organizations were having online newsletters for promotional purpose. This was ranked at number one by all the respondents. Similarly, most of the marketing representatives also admitted that their organizations have developed their own websites that manifested digital presence. On third rating, the Marketing Representatives revealed that their organizations were actively involved in social media marketing. Email marketing was rated at fourth level in terms of digital presence. The concerned respondents also rated e-tools that the companies have provided them and rated this aspect on 5th ranking. Web banners, mobile marketing web conferring and various apps were ranked at 6th, 7th, 8th and 9th place in hierarchy.

Table 5.5: Significance of Digital Marketing

	<i>Mean</i>	<i>S.D.</i>	<i>Ranking</i>
Effective tool to create brand awareness	3.36	1.07	6
Revolutionized marketing practices of organization awareness	4.57	0.73	1
Need of an era awareness	4.23	0.81	2
Achieves competitive advantage awareness	4.06	0.92	5
Develop community platforms	4.12	0.97	3
Novel engagement format	4.10	1.11	4

Interpretation:

Table No. 5.5 represents the data relating to the respondents' perceived level of awareness in terms of diverse effects of digital marketing efforts.

- It was unanimously agreed upon by all the respondents that digital marketing helped in revolutionizing the marketing practices of their organizations, as this criterion was given 1st rank in the scale.
- The majority of the respondents perceived that digital marketing has become the need of the hour and must be adopted for development of the organizations. This view was ranked at 2nd number.
- Third rank was given to the perception that digital marketing helps in developing the community platform which is also one of the prior need for business development.
- Entering into digital marketing is perceived as the novel engagement and this thought has been ranked at fourth number by the respondents.
- Digital marketing concept helps in creating competitive advantage and it could be considered as the effective tool for creating brand awareness were ranked at number 5 and 6 respectively.

Table 5.6: Efficacy of Digital Marketing

	<i>Mean</i>	<i>S.D.</i>	<i>Ranking</i>
Develop synergy with doctors	4.55	0.74	1
Great tool to connect with doctors awareness	4.10	1.00	4
Attracts doctors awareness	4.30	0.88	3
Increase scientific collaboration	4.41	0.83	2
Facilitates e-training	3.78	0.90	5

Interpretation:

Table 5.6 indicates the data that revealed certain facts about the digital marketing efficacies. The data indicated that use of digital marketing developed synergy with doctors. This perception was

ranked at number one. All the respondents were convinced that digital marketing can be used to create synergy with doctors.

It was also perceived by the respondents that digital marketing helps in increasing scientific collaborations. This was ranked at second number in the scale. Most of the respondents agreed that use of digital tools attracted the doctors and this fact was ranked at number 3. However, digital marketing was great tool to connect doctors and also that digitalization facilitates e-training was ranked at number 4 and 5 respectively. This means many of the respondents had different views in these regards.

Table 5.7: Obstacle to the Implementation of a Digital Strategy

	<i>Frequency</i>	<i>Percent</i>
Regulations	40	23.26
Traditional communication methods/culture	87	50.58
Lack of visibility into the "risk of not doing"	64	37.21
Cost of operations	78	45.35
No obstacles at all	35	20.35

Interpretation:

Table 5.7 gives the statistics of various obstacles in implementing digitalization strategy in respective organizations. Of course, this was the perception of the marketing representatives, i.e. the respondents. Almost 50 per cent of the respondents perceived that traditional culture and traditional methods of communication were main hurdles in implementation of digital strategy in most of the organizations. About 45 per cent believed that cost of operating digitalization strategy was major hurdle in their organizations. About 37 per cent respondents perceived that their organizations were not able to implement digital strategy on account of lack of visibility into the risk of 'not doing' it. They were unable to visualize the effects of not implementing the strategy in their firms. 23.26 per cent of the respondents thought that their organizations were not able to implement digitalization strategy on account of the rigid regulations. 20.35 per

respondents informed that there was no obstacle of any sort in their organization for implanting the digitalization strategies in their organizations.

Table 5.8: Effectiveness Parameter of Digital Marketing Tools against Subsequent Parameters

	<i>Mean</i>	<i>Std. Deviation</i>	<i>Ranking</i>
Sales Representative	3.80	0.86	6
Sponsorship	3.88	0.96	4
Free Samples	4.14	0.98	2
Brochures	3.97	0.87	3
Journal Articles	3.85	0.86	5
Drug Coupons	4.30	0.94	1
Peer Influence	3.40	1.31	7
Conferences	3.85	1.09	5

Interpretation:

Table 5.8 describes the digital marketing tools parameters with conventional marketing practices on varied parameters. The researcher has attempted to compare the parameters of digital marketing tools against all other conventional tools that were being implemented till now in most of the organizations. As perceived by the respondents, offering drug coupons has been ranked at number one being highly effective when compared to digital marketing tools. Free samples has been ranked second effective tool when compared with digital marketing. Printed brochures were ranked at number 3 and sponsorship was ranked at number 4 by the respondents. According to them these were highly effective conventional tools while comparing modern digital marketing tools. Journal articles, sales representatives, and peer influence rated at the lower side of the ranking and were at 5th, 6th and 7th respectively.

5.1 The following inferences have been drawn on the basis of the data collected and analyzed.

- The respondents in this study have expressed their views and confirmed certain facts based on their experiences. The researcher has interacted with 172 marketing representatives who were working with reputed pharmaceutical companies. These marketing personnel were having designations such as Marketing Managers, Area Managers and Marketing Heads. They were found eligible to opine on various issues involves in the study through a structured questionnaire framed for the purpose. Majority of the marketing personnel were male members and a very few of them were female members. They belonged to the age group from 30 years onwards. They were all having minimum experience of 1 year to more than 20 years in a stretch. In short, these marketing personnel were engaged in day to day activities of selling pharmaceutical products of various reputed organizations and they were using conventional as well as modem digital marketing tools for the purpose of business growth. **[Ref: Table No.Table 5.2]**
- For any up-gradation of the technology or bringing in certain technical changes in the system, companies need definite amount of provisions through allocation of resources and budgets. It is also observed that all the companies are involved in this process of resource allocation and budgets. However, certain companies can have a good amount of flexibility in assigning the funds for such purpose. However, other may not provide sufficient funds for the purpose for varied reasons. It is found that pharmaceutical companies have been providing average to more than average funds for enhancing the technical support for marketing purpose. Accepting the ‘digitalization strategy’ attracts a good amount of funds for which company should reflect its intention of adopting this by means of budget provisions. Most of the pharmaceutical organizations have expressed their desire to go for the digitalization process. . **[Ref: Table No.Table5.3]**
- There are various tools used in digital marketing process. The researcher has considered the following tools prevalent in marketing of pharmaceutical products: i) Company websites ii)

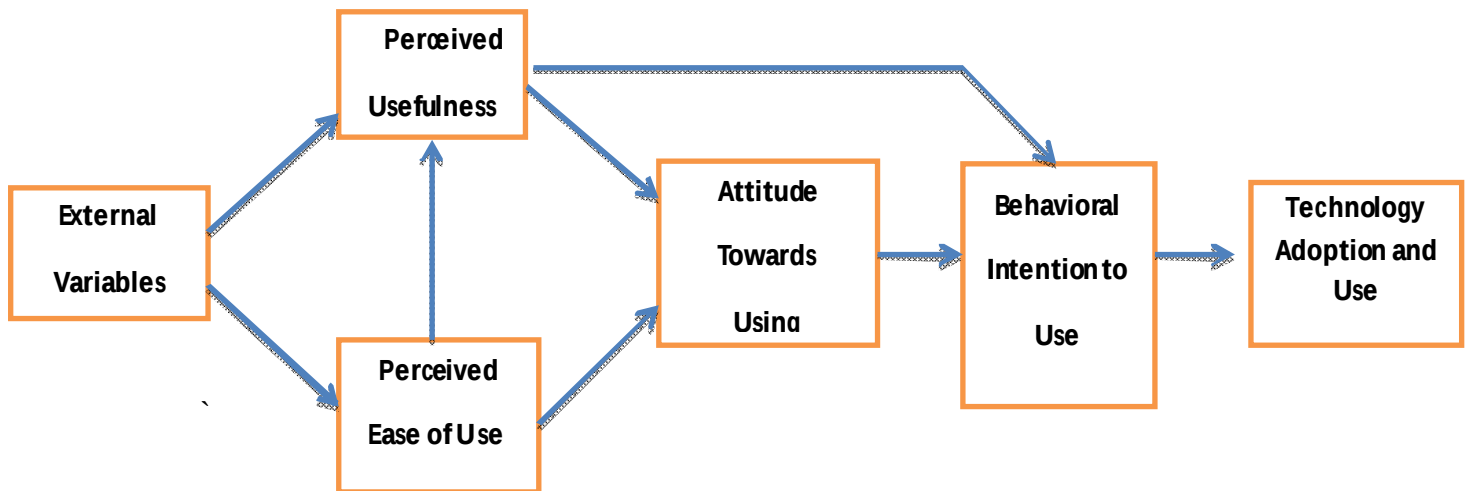
Use of E-mails for Marketing iii) Banners appearing on various websites iv) Web conferencing method adopted by the companies to communicate to the respective stakeholders v) Mobile marketing vi) Marketing through Social Media like Facebook, Twitter among others vii) Marketing through Online Newsletters viii) Providing various e-tools to Sales Representatives and ix) Use of various Apps. It was observed that all companies are involved in using all the digital marketing tools to full to moderate to low extent as per their policies. However, online newsletters are most preferred tool of the marketing representatives. Company websites are also one of the powerful digital media being rated by the marketing representatives. Social media marketing e-mail marketing and e-tools for sales representatives are some other popular tools that are welcomed by the marketing personnel. Web banners, web conferencing, mobile marketing and use of apps are not so popular amongst the marketing representatives as they consider them to be less effective tools as per their perception. . **[Ref: Table No.Table 5.4]**

- The marketing representatives have specifically mentioned the effects of digital marketing as they have come across the benefits of such tools. Overall, it is recorded by the respondents that digital marketing has revolutionized marketing practices of their organizations. They have gone through the never-before effects while using digital media for marketing of pharmaceutical products. They also affirmed that use of digital media for marketing purpose was the need of the present era as it helps to simplify the process. According to these personnel, digital marketing tools can help in developing community platforms, which eventually would result in achieving their targets. Digital marketing being a new idea, they enjoy being engaged in using it. However, they are less confident on whether digital marketing can create competitive advantage for the organizations. They also do not accept at ease that digital marketing can help in building brands. Overall, the respondents do believe that digital marketing can be helpful for them and their organizations on a large scale. . **[Ref: Table No.Table 5.5]**
- It was found that the use of digital marketing was instrumental in creating synergy with doctors. Further, it was also concluded according to the marketing representatives that digital

marketing helped in increasing scientific collaborations. It was also found that many doctors were happy with companies' use of digital marketing strategy. Doctors were getting attracted to digital marketing adopted by pharmaceutical organizations. However, digital marketing was not considered to be the great tool to connect with doctors. It is also found that marketing representatives did not consider digital marketing as the effective tool for e-training.[Ref: Table No.Table 5.6]

- As interpreted by the marketing representatives, it was noted that there were certain obstacle in implementing the full-fledged strategy of digitalization in their respective organizations. The major hurdle according to them was the traditional communication methods and culture. Companies and the employees were used to it and change to adopt digital marketing strategy was not easily acceptable to them. Pharmaceutical organizations were reluctant to implement full-fledged digital marketing strategy on account of its cost of operation. They found it a costlier business that kept them away from fully accepting the concept. As per opinions of some of the respondents, companies were not able to visualize the exact impact of overlooking or avoiding acceptance of digital marketing strategy. [Ref: Table No.Table 5.7]
- It was specifically noted that offering drug coupons was considered to be highly effective when compared to digital marketing tools. Issuing free samples was the second better option when compared with digital marketing. Printed brochures considered effective after above referred both tools.[Ref: Table No.Table 5.8]

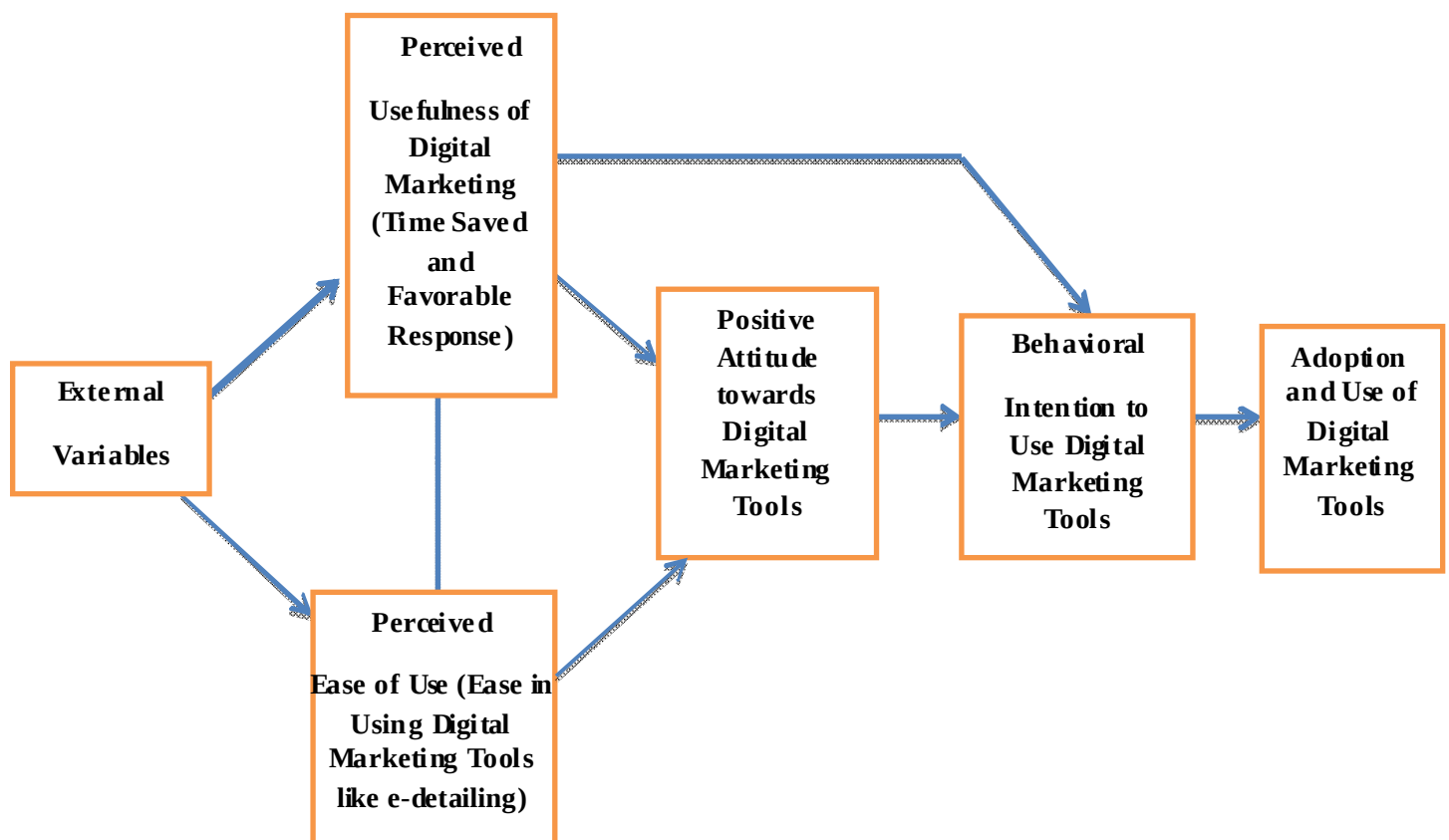
6.0 The technology acceptance model (TAM) by Fred Davis^x is an information systems theory that models how users come to accept and use a technology. The model suggests that when users are presented with a new technology, a number of factors influence their decision about how and when they will use it.



The TAM is an adaptation of the theory of reasoned action (TRA). The TAM has two elements, perceived usefulness (PU) and perceived ease of use (PEOU), that are correlated with the decision to adopt a new technology. TAM is designed to explain new technology adoption in an organization.

- Perceived usefulness (PU) – This was defined by Fred Davis as "the degree to which a person believes that using a particular system would enhance his or her job performance".
- Perceived ease-of-use (PEOU) – Davis defined this as "the degree to which a person believes that using a particular system would be free from effort".

- **6.1 Attitude of Medical Representative toward digital marketing tools in Relation to TAM (Technology Acceptance Model)**



References

- i Lidstone, J., Madennan, J. (1999). Marketing Planning for the Pharmaceutical Industry. 2nd edition. Hampshire. England. Gower Publishing
- ii Liang, B. A., & Mackey, T. K. (2011). Prevalence and global health implications of social media in direct-to-consumer drug advertising. Journal of Medical Internet Research, 13(3), e64.

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- iii Greene, J. A., & Kesselheim, A. S. (2010). Pharmaceutical marketing and the new social media. *New England Journal of Medicine*, 363(22), 2087-2089.
- iv Masood, I., Ibrahim, M., Hassali, M. A., & Ahmed, M. (2009). Evolution of marketing techniques, adoption in pharmaceutical industry and related issues: a review. *J Clin Diagnostic Res*, 3, 1942-52.
- v Parise, S., & Guinan, P. J. (2008, January). Marketing using web 2.0. In *Hawaii International Conference on System Sciences, Proceedings of the 41st Annual* (pp. 281-281). IEEE.
- vi Sawhney, M., Verona, G., & Prandelli, E. (2005). Collaborating to create: The Internet as a platform for customer engagement in product innovation. *Journal of interactive marketing*, 19(4), 4-17.
- vii Lerer, L., & Piper, M. (2003). *Digital strategies in the pharmaceutical industry*. Springer.
- viii Lerer, L. (2002). E-business in the pharmaceutical industry. *Journal of Medical Marketing*, 3(1), 69-73.
- ix Wind, J., & Mahajan, V. (2002). Digital marketing. *Symphonya. Emerging Issues in Management*, (1), 43-54.
- x Davis, F. D.; Bagozzi, R. P.; Warshaw, P. R. (1989), "User acceptance of computer technology: A comparison of two theoretical models", *Management Science*, 35 (8): 982–1003,