IMPACT OF DIGITAL MARKETING ON HOSPITAL PERFORMANCE: IN CASE OF VISAKHAPATNAM CITY, ANDHRA PRADESH, INDIA

Gopalakrishna Vakamullu[1] and Manoj Kumar Pukkala[2]

1. Research Scholar in Department of Business Administration
Berhampur University, Berhampur
2. Research Scholar in Department of Commerce and Management Studies
Andhra University, Visakhapatnam

Abstract: *Having attained the firm footing, the digital marketing platforms are have been informed by travelling in the path of achievements with drastic shift to mobile users and undoubtedly paved the way for all marketers to promote their products through different and distinguished medias. To be more specific, the aim of this research is to focus on unsort services of hospitals and to analyses the impact of digital marketing tools on the performance of hospitals with respect to out-patients flow. Methodology carried out in this research was the design of descriptive and exploratory research, the mixed approach of qualitative and quantitative research, standardized questionnaire with measurements, stratified random sampling technique and data analysis with ANOVA and Multiple regression. The respondents have been selected from online customer data where the results were interpreted and certain suggestions on website design, best use of social media and mobile application development have been forwarded. This paper explores the opportunities of digital marketing promotions to improve the performance of hospitals.*

Keywords: Digital Marketing, outpatient behaviour, hospital industry, multiple regression.

I. INTRODUCTION

Healthcare industry in India comprises of hospitals, medical devices, clinical trials, outsourcing, telemedicine, medical tourism, health insurance and medical equipment. The industry is growing at a tremendous pace owing to its strengthening coverage, services and increasing expenditure by public as well private players. Health care market in India is expected to grow US $372 billion by 2022, driven by raising incomes, greater health awareness, life style diseases and increasing access to insurance The world's largest funded healthcare scheme, Ayushman Bharat was launched on September 23,2018

There is a significant scope for enhancing healthcare services considering that healthcare spending as a percentage of Gross Domestic Product (GDP) is rising. The government's expenditure on the health sector has grown to 1.4 per cent in FY18E from 1.2 per cent in FY14. The Government of India is planning to increase public health spending to 2.5 per cent of the country's GDP by 2025.

Hospitals paying the most dominant sector related to healthcare industry has been tremendously developing with respect to different services catered with the help of technology. Besides physical equipment and service connected technologies a special focus has also been made to promote hospital services to the customers through digital operations is quite exceptional for the efficacious results. Digital marketing includes mobile marketing, content marketing, search engine marketing, social media marketing, and more. Since digital marketing is an inexpensive as well as an effective way of marketing when compared to traditional methods, healthcare industry cannot miss out on digital marketing.

Over the last few years, every industry is welcoming the big data and digital marketing in their line of business due to its numerous advantages. While it was possible in the earlier days to reach out the customer through the traditional way of marketing, but now it is difficult to target, as we have seen how innovative technology is taking over and how people got scattered on various medium. For most of us, a question might arise of how marketing spreads its footprints in the healthcare industry.

A recent report reveals that out of 20 searches on Google one search will be related to healthcare this is because, as a maximum number of people going online for information and searching for a solution

for their health related issues. Formerly word of mouth marketing played a vital role in the healthcare industry; as we used to visit a doctor on the recommendation given by the family and friend zone even though his/her clinic is miles away. Healthcare marketing is not a new one for us, we have seen it earlier also in various form like organizing Health camp by hospitals, Radio ads, Doctor promotion via scrolling on T.V sets, Testimonies and Banners on public transport.

According to a recent study conducted by Mediabistro, 54% of patients are more comfortable with their providers seeking advice from online communities to better treat their problems and the reports of MedTechMedia state that 31% of healthcare professionals use social media for professional networking.

As per Demi & Cooper Advertising and DC Interactive Group, 41% of people reported that social media would affect their choice of a specific medical facility, hospital, or a doctor. About 60% of the doctors say social media improves the quality of care delivered to patients. This shows that many doctors believe that the authenticity and transparency that social media helps spur is actually improving the quality of care provided by them to the patients.

While digital marketing is infusing in almost every sector, the healthcare industry is one of them. The last couple of years has seen a huge jump in the preference of digital marketing over traditional marketing in the healthcare. According to MM&M study, the greatest growth for the biotech, medical, diagnostics, and pharmaceutical device marketing budgets is taking place in digital sales material, mobile apps, and social media. Since consumer marketing tricks are shifting greatly to digital ads, social media, and mobile apps, therefore, the shift to digital channels in the healthcare industry is no wonder.

Andhra Pradesh being the state of newly formed has had several manifestations to develop healthcare industry in line with the services to be processed with digitalization. Andhra Pradesh MedTech Zone Limited (popularly known as AMTZ) is an enterprise under the Government of Andhra Pradesh to promote medical device manufacturing in India. It was laid foundation on Aug 20, 2016 and inaugurated by chief minister of Andhra Pradesh Nara Chandrababu Naidu on Dec 13, 2018.

Visakhapatnam, the proposed study area which is colloquially known as Vizag the largest city of Andhra Pradesh. In addition to its pride being exposed with lot of industries administrative offices and services, development hospitals of quite evident with the establishment of many corporate, private and public hospitals with hi-tech technology of digital operations have been well established, yet the gap has been found through the recent literature that the digital promotions expected to be reached to the targeted customers with exceptional message resulting the impact of hospitals performance is assumed to be different. This study will try to explore the variables of various digital promotion types with its proper adaptive nature influencing the performance of hospitals. The performance of hospitals as dependent variable will be evaluated through the number of outpatients, sales turnover and customers' satisfaction the services.

II. OBJECTIVES OF THE STUDY

1. To identify different types of digital promotions being used by corporate and private hospitals in Visakhapatnam City
2. To evaluate the awareness levels of Digital marketing tools amongst the customers of hospitals in Visakhapatnam.
3. To assess the customer perception on digital promotions of hospitals in Visakhapatnam
4. To assess the impact of digital promotion such as Website, Search engine optimization, Mobile application, Pay per click and Social media marketing tools on hospitals' performance
5. To offer particular recommendations backed up with management implications in order to promote exceptional services to the targeted customers of hospitals in Visakhapatnam

Hypothesis of the study:

Null Hypothesis is here under formed though the theoretical, empirical and methodological review of literature has been carried out because of the assumptions at raw stage could be appropriately established with no relation since the study area, Visakhapatnam is an ambiguous city with respect to its customers perceptual capability.

H01: Website marketing has no significant impact on the performance of hospitals in Visakhapatnam

H02: Social Media Marketing has no significant impact on the performance of hospitals in Visakhapatnam

H03: Search Marketing (SEM/PPC) has no significant impact on the performance of hospitals in Visakhapatnam

H04: Mobile applications has no significant impact on the performance of hospitals in Visakhapatnam

H05: E- Mail marketing has no significant impact on the performance of hospitals in Visakhapatnam

III. REVIEW OF LITERATURE

Digital marketing is an alternative marketing based on the essence of marketing. American Marketing Association (AMA) defined marketing as an organizational function to create, communicate, and deliver value to customers and manage customer relations, and the interested parties could acquire benefits (Kaufman, 2014). Kaufman & Horton (2015) pointed out digital marketing as anon-traditional marketing model. Generally speaking, marketing activity with information technology and digital tools could be digital marketing (Roopa et al., 2015).

When discussing digital marketing, the difference with tradition marketing was often associated. Triguero et al. (2015) pointed out three characteristics of digital marketing, in comparison with traditional marketing. (1) High efficiency: Information tools could assist marketers in good standards and vertical integration. (2) Penetration: Various types of media and communication channels allowed marketers more easily contacting with potential customers. (3)Interactivity: Instant measurement of information could have potential customers acquire more precise and personalized responses to the needs (Kevin, 2014).

Kargarfard, Sami, A., & Ebrahimie (2015) defined organizational performance as "the attainment of a specific desired end". In other words, performance was the consistency between the actual output and the desired output of an organization. However, the setting of "desired objective" became the dispute among organization theory scholars. The purpose of business performance measurement was a manager inspecting the goal attainment of the organization to judge the corporate performance. Since the idea of business performance is huge and abstract, the changeable measurement standards are generally classified into financial indicators (e.g. return on investment, return on sales, and revenue growth rate) (Damian, 2014) and non-financial indicators (e.g. customer satisfaction, new product launcher strategic goal attainment, employee efficiency, and R&D of product process) (Garris, 2014).

Lau et al. (2013) classified organizational performance into financial performance and operation performance. The former utilized output-based financial indicators for measuring the attainment of economic goals, such as sales growth, return on investment, and earnings per share. The latter, also called non-financial performance, was the evaluation indicator to measure technical efficiency, such as market share, new production introduction, product quality, and added-value creation. There were multiple standards for the evaluation with financial indicators. According to the research subjects and coverage, a single concept could also be applied, such as return on assets (ROA), return on sales (ROS), return on equity(ROE), and sales growth (Hritzuk, 2014).

YulinHswen (2014) in her paper "Mobile Technologies and Opportunities to Address Health Disparities" has explained the m-Health is an affordable technology by has its own drawbacks, Authors aim is not to question the promise of m-Health, but rather to emphasize that just as stated by Stein Buhl and colleagues in their concluding remarks, ''much remains to be done''. Just as clearly defined government regulations3, internationally recognized research guidelines, and robust clinical trial evidence are critically necessary for advancing this nascent field, consideration of how m-Health technologies can be adapted and strategically delivered to address the needs of the most vulnerable low-income patients is of equal value. The role of m-Health technologies for addressing health disparities has received less attention, though important opportunities exist.

Cipresso, P (2012) in his article "Is your phone so smart to affect your states? An exploratory study based on psycho physiological measures" has discussed the role of mobile in health system is important for us and to make use of this rapid growing technology in improving the public health of Indian people. A systematic review of related studies and literature of last 10 years published till 31st March 2013 on role of m-Health in public health was done. A wide variety of m-health applications are available in mobile phone market, needing proper regulation from health care authorities and with a hope of better future results. Recommendations: We must use these applications

weighing their benefits and utility in public health as well as capitalizing the better prospect of m-health worldwide in the field of public health. This can give a greater access to larger segments of a rural and underserved population in developing countries like India with a hope of improving the capacity of health system to provide quality healthcare to Indian people.

M V Ramana Murthy (2012) in his article "Mobile based Primary Health Care System for Rural India," has discussed about Primary Health Care Services using Mobile Devices to ensure improved access to primary healthcare and its gatekeeping function leads to less hospitalization, and less chance of patients being subjected to inappropriate health interventions. The research team is aiming to miniaturize the system, through designing sensors and mini-processors that are small enough to be carried by patients, and at the same time procure biomedical data. The network of sensors would be linked through a modem to mobile networks and the Internet, and to a hospital computer. Then, doctors can use this device to remotely monitor patients suffering from chronic diseases, like heart disease and diabetes, which plagues millions across the world.

Vuda Sreenivasa Rao (2014) in his Article "A design of Mobile Health for Android Application" has recommended health care support referring to excises on android Smartphone; it is designed to provide excurse depending on BMI, BMR & Energy used in each activity or sports. Which includes guides for necessary health care application and general food tips based on weight of their BMI, it has also been designed for different kinds of patients and exercise (back pain), and the application is tailored only for android platform.

Suraj Singh (2014) in his article "Health care services using Android devices" has mentioned an application iCare which runs on several android base devices with 3G and WIFI capabilities. This application accepts the symptom from the patients, process the data identifies the particular diseases and provides prescription using medical expert system by pattern matching techniques, the patients' needs to register on iCare and can access the services from anywhere using different types of network using WIFI, GPRS, 3G. More the application is used by patients the better will be the expert system which increases the accuracy of iCare.

Boulos, M. In his article "How smart phones are changing the face of mobile and participatory healthcare" The adoption of smart phones by older people and people with chronic disease will come with time, but also as the relative cost comes down, as apps become easier to use, as there is a greater awareness of what Smartphone can do, with the establishment of more 'community knowledge' to deal with the complexity of the new technology, and perhaps with apps moved to dedicated devices tailored for the specific needs of particular user groups and applications. These changes will almost certainly happen, but probably not as quickly as producers may predict. Producers may need patience and to put more effort into making the technology easier and cheaper to use for all. Boulos M in his article "How smart phones are changing the face of mobile and participatory healthcare" The adoption of smart phones by older people and people with chronic disease will come with time, but also as the relative cost comes down, as apps become easier to use, as there is a greater awareness of what Smartphone can do, with the establishment of more 'community knowledge' to deal with the complexity of the new technology, and perhaps with apps moved to dedicated devices tailored for the specific needs of particular user groups and applications. These changes will almost certainly happen, but probably not as quickly as producers may predict. Producers may need patience and to put more effort into making the technology easier and cheaper to use for all.

According to Armelini, G. et al (2011), social media have rapidly gained share and attention among all kinds of consumers and companies, and at the expense of traditional media. With advertising and online word of mouth competing with traditional marketing techniques, many companies regard having an active presence in social media as a viable alternative to traditional advertising. Yet as per the authors this would be a mistake, because the two strategies are complementary rather than substitutive.

Information dissemination on social media can take many forms, such as patient education, staff profiles and announcements of awards the organization has the capability to reach a wide audience at a relatively low cost compared to traditional forms of advertising (Thackeray, Neiger, Hanson & Mckenzie,2008).one study found that hospital staff believe that social media can be used to publish news items, educate users, create

discussion groups, maximize community exposure, change user behaviour and promote specific services offered by the hospital (Bermudez-Tamayo et al.,2013)

To identify whether hospitals use social media, hospital websites were reviewed for links to YouTube, Twitter, Blogs, Facebook, Google+ and LinkedIn. YouTube enables users to share experiences and observations with video (Kietzmann, Hermkens, McCarthy & Silvstre, 2011). Twitter involves the exchange of short messages as real-time status updates. Blogs are sites for publishing articles on a subject that often express a viewpoint and can facilitate lengthy discussion. Facebook and Google+ allow individual users to connect with many friends and business in a simple, shorthand manner to share news and multimedia content. LinkedIn connects professionals by providing access to people, jobs, updates and career insights.

The integration of Face book with other social media, such as YouTube, Flickr, and Twitter, makes it easy not only for health organizations to manage their messages, photos, and audio/video materials but also for their Face book visitors or fans to find needed information in various formats (Reed 2010). The use of social media channels creates an opportunity to facilitate the flow of health information by virtue of a dynamic and evolving ecology of networks across different social media platforms (Thackeray and Neiger 2009). Effectively implementing various social media outlets may further contribute to increasing consumers' awareness of health-related products and services advertised by health organizations by accelerating the speed of shared information.

Of many social networking sites available on the Web, Facebook is the most popular, with more than 750 million users and 30 billion pieces of content (web links, news stories, blog posts, notes, photo albums) shared each month (Facebook 2011). As a virtual social media platform, Facebook offers an easy, cost-effective way for both profit and nonprofit sectors to communicate health information, promote their products and services, and build brand communities. For example, an increasing number of health organizations have come up with Facebook health applications that allow users to keep track of their exercise and diet goals (Donohue 2009) and coordinate their exercise plans (Dugan 2010). Health insurance companies also have begun providing health tips and advice and send marketing messages via Facebook in an effort to interact with customers to enhance the image of the insurance industry (Terry 2011).

According to Armelini, G. et al (2011), social media have rapidly gained share and attention among all kinds of consumers and companies, and at the expense of traditional media. With advertising and online word of mouth competing with traditional marketing techniques, many companies regard having an active presence in social media as a viable alternative to traditional advertising. Yet as per the authors this would be a mistake, because the two strategies are complementary rather than substitutive

Because of different online social applications like blogs, social networking sites, user-generated content sites and countless communities across the Web, people are finding it ease to connect to each other. People are now beginning to define their own perspective on companies and brands. Bernoff, J. & Li, C. (2008), in their article with the help of a survey developed a strategic framework that businesses can use to implement social applications in a number of departments, including research and development, marketing, sales, customer support and operations.

A recent study was done to determine the effectiveness of a search marketing campaign and the effect of print advertising on SEM (Olbrich& Schultz 2014). It was found that the budget and the degree of keyword matching had the largest effect on the yield in business gained, followed by the click-through rate and the bid amount. This result seems to indicate that SEM needs to be planned with care as a larger budget might reduce expenditure on the marketing efforts. This fact supports the current study. SEO and pay-per-click schemes (PPC) are generally considered to be the two main categories of SEM which are to be investigated.

PPC, as the name suggests, charges the advertiser the bid amount every time an Internet user clicks on an advertisement. The keywords all have different competition ratings and the more popular a keyword, the higher the cost per click would be (Chen et al. 2011). A recent study on the value of the bid price per keyword for a new PPC campaign determined the best of a number of methods to determine this price (Nabout 2015). This study confirms the importance of financial expenditure, which could easily grow beyond what a company decided they could spend on a marketing campaign.

Ross, A. M. (2008). The article discusses search engine optimization (SEO), examining the efforts of business enterprises to appear on the first page of search engine results pages (SERPs). 62% of search engine users click only on the results that appear on the first page of the SERP, the author states. Other topics include SEO techniques that violate search engine guidelines, bans placed on organizations by search engines, and SEO techniques, called black hat techniques, that can lead search engines to ban a Web site from showing in SERPs.

Due to the varying nature of advertisement formats in the online environment, advertisements are classified into three general categories, namely search, classifieds and display advertising (Goldfarb 2014). Search engine advertising is where advertisers pay to displayed alongside organic, non- sponsored search results (Ghose and Yang 2009). These paid research advertisements run on complex algorithms and require brands to bid on keywords with cost based on popularity and relevance (Katona and Sarvary 2010,Yao and Mela2011).Classified advertising appears on website specifically designed for hosting these advertisements, such as Craigslist, Gumtree or online job sites (Goldfarb 2014).Display advertising is the most popular and prominent form of online advertising, being ubiquitous on the internet due to its presence on many websites (Cho and Cheon 2004, Balseiro, Feldman et al .2014). Display advertisements include banner advertisements in various locations on a webpage, pop-ups, interstitials and screen-takeovers (Burns and Lutz 2008, Goldfarb and Tucker 2010).

IV. METHODOLOGY:

The city is the administrative headquarters of Visakhapatnam district and set to become Executive Capital of Andhra Pradesh once the decentralization bill is enacted as it has been approved by AP legislative assembly. It has got the maximum possible potentiality of medical establishment with respect to corporate, private and public hospitals

Based on the objective of the study, the research design is a combination of qualitative and quantitative approaches to obtain the required data. Description of phenomenon may use to describe phenomenon since the researcher had prior knowledge about problems and information needed to explain situations followed by field survey to supplement the phenomenon with descriptive statistics.

The questionnaires will be distributed to out-patients of different hospitals and hospital staff of different designations. Besides, in-depth interviews with hospital management will also be conducted. The study will use a cross-sectional descriptive and field survey that lasts short duration and focuses on gathering quantitative and qualitative data from primary and secondary sources.

The survey will be cross-sectional in nature and a self-administered questionnaire is used to collect the data from the respondents. So the design of this study is to assess the impact of digital marketing promotions on the health care industry among a large number of respondents that are selected across different corporate and private hospitals in Visakhapatnam.

The sample size of the study will be decided up on by calculating proportionally and statistically based on the number of respondents (out patients and staff) from corporate and private hospitals. Stratified random sampling technique will be used.

Both qualitative and quantitative data was collected from both secondary and primary sources using data collection tools such as questionnaires, interviews, focus group discussion, direct observation and document reviewing (documentation, internet and textbooks that published and unpublished).

To understand the underlying scenarios, the collated data will systematically be verified, described, analyzed and interpreted using both quantitative and qualitative approaches. Data that is gathered using predominantly qualitative variables will be subject to description and narrations. Qualitative data obtained from field observation and notes, interviews and sound records will be organized, reduced and analyzed into meaningful arrangements.

The data from questionnaires will be analyzed to obtain descriptive statistics, frequency, percentage, mean and scale for their relationships according to the study objectives, theoretical and conceptual framework using Likert's scales of 5-points to analysis variables. Besides descriptive statistics, analytical and inferential statistics for the analysis such as Correlation, ANOVA, and Multiple Regression analysis with Structural Equation Modelling will be used and further management implications on certain epidemic issues will be supplemented.

V. ANALYSIS AND INTERPRETATION

- ***Performance of Specialty Hospitals on dependence with digital applications***

Table 5.1 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.403[a]	.162	.098	1.054

a. Predictors: (Constant), DMF1, DMF2, DMF3, DMF4, DMF5

As shown in the table 5.1, R Square value is 0.162 which means that all the levels of items in the independent factors are contributing 16.2 per cent in Performance of Specialty Hospitals. The remaining 85.8 per cent is being contributed by other unknown variables.

Table 5.2 ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	22.374	8	2.797	2.518	.015[b]
	Residual	115.502	104	1.111		
	Total	137.876	112			

a. Dependent Variable: Performance of Specialty Hospitals.
b. Predictors: (Constant), DMF1, DMF2, DMF3, DMF4, DMF5

The table 5.2 describes the relationship among Performance of Specialty Hospitals and predictors of infrastructure DMF1, DMF2, DMF3, DMF4, and DMF5. The F value between dependent variable and predictors is 2.518, and the significant value is 0.015 which is significant at level of 0.05. It is also noted that there will be the increase of 115.502 in the digital marketing factors if there is one level in items' increase.

Table 5.3 Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.193	.504		4.353	.000
1. Website Marketing	.223	.085	.322	2.626	.010
2. Social Media Marketing	-.252	.090	-.357	-2.788	.006
3. Mobile applications	-.293	.118	-.324	-2.482	.015
4. Search Marketing	.174	.145	.157	1.200	.233
5. E- Mail Marketing	.050	.084	.066	.599	.551

a. Dependent Variable: Performance of Specialty Hospitals

According to the result drawn from the table 5.3, it can be inferred that the first, second and third items of the Infrastructural factors i.e. *"*Website marketing*",* *"*Social Media Marketing*" and "*Mobile applications*"* are showing the significance on Performance of Specialty Hospitals with the values of 0.010, 0.006 and 0.015 respectively which are significant since the significance level less than 0.05.

Hence it can be concluded that Performance of Specialty Hospitals is affected by *"*Website marketing*",* *"*Social Media Marketing*" and "*Mobile applications*"* and the insignificant variables such as Search marketing and E-Mail marketing show no significance since the values respectively are .233 and .551 which are insignificant at 0.05 level.

Table 5.4: Hypothesis Results

HOs	Statement	Significant value	Test result
H01:	Website marketing has no significant impact on the performance of hospitals in Visakhapatnam	0.010	***Rejected***
H02:	Social Media Marketing has no significant impact on the performance of hospitals in Visakhapatnam	0.006	***Rejected***
H03:	Search Marketing (SEO/PPC) has no significant impact on the performance of hospitals in Visakhapatnam	0.233	***Accepted***
H04:	Mobile applications has no significant impact on the performance of hospitals in Visakhapatnam	0.015	***Rejected***
H05:	E- Mail marketing has no significant impact on the performance of hospitals in Visakhapatnam	0.551	***Accepted***

As per the values attributed to the variables shown in table 5.3 representing Coefficients, it is well understood that the impact of website marketing is significant since the p value is 0.010, hence as shown in table 5.4 HO1 is rejected.

While discussing social media marketing influencing on hospital performance which shows significant since the p value is 0.006, HO2 is rejected.

When it comes to search marketing the p value shows insignificant with 0.233 which is greater than 0.05, hence search marketing shows insignificance on the performance of hospitals so it can be concluded that HO3 is accepted.

As to mention the influence of mobile application on the performance of hospitals the value shown in the tables is 0.015 which is highly significant at 0.05 level so it can be interpreted that HO4 is rejected.

Finally thee-marketing which is one of the most influencing online media surprisingly shows insignificance with 0.551, hence it can be understood that HO5 is accepted

VI. RECOMMENDATIONS

1. Services pertaining to hospital industry specifically media core and large hospitals require to get the attention from the customers and it is quite evident that they all should use the maximum possible online promotional activities. The research outcome suggest that overall performance will be increased by streamlining the ideal combination of integrated online marketing communications which should be strategically formulated by corporate leaders of hospital management
2. Since there have been a lot of options with respect to the hospital services such as facilities accommodation, ambulance service , medicines, labs, specialty divisions , parking etc., the information can have all chances to be explicated to the consumers through their website

design. Hospital should focus on content development with creative work in order to design the website with high optimization would be a value addition for their marketing activities. There should also be a view of making the website more flexible and user friendly which makes the traffic higher.

3. Mobile usage being increased day by day drastically and may companies from different sectors formulate company apps for the best use of services being provided to the customers effectively, hence researchers suggested that hospitals should have a centralized service facility in the way of an app which should exclusively devote all the services with immediate response should be arranged.
4. It can be said that there is nothing increasing as like as social media which is trendy and most of the people irrespective of their demographics especially from urban accustomed to use multiple social media vehicles, hence the promotional activities of hospital with respect to the medical service, facility management, payment methods etc., can be executed by hospital managements which will easily be carried forward to the masses and there will be the dexterous influence on the performance.

References:

1. Armelini, G. & Villanueva J. (2011). Adding Social Media to the Marketing Mix. IESE-Insight Magazine, 3(4), 29-36.
2. Bermudez-Tamayo, C., Jimenz-Pemett, J., Garcia Gutierrez,J., Yubraham-Sanchez,D., Alba-Ruiz,R., &Traver-Salcedo, v(2013). Use of social media by Spanish hospitals: perceptions, difficulties and success factors. Telemedicine and e-health, 19(2), 137-145.
3. Boulos,M. “How smart phones are changing the face of mobile and participatory healthcare” Published online 2014 May 30. doi: 10.5853/jos.2014.16.2.86 PMCID: PMC4060267
4. Cipresso, P.; Serino S., Villani D., Repetto C., Selitti L., Albani G., Mauro A., Gaggioli A., Riva G.(2012) "Is your phone so smart to affect your states? An exploratory study based on psychophysiological measures". Neuro computing 2012:84: 23–30.
5. Chen, C.-Y., Shih, B.-Y., Chen, Z.-S. & Chen, T.-H., 2011, ‘the exploration of internet marketing strategy by search engine optimization: A critical review and comparison’, African Journal of Business Management 5(12), 4644–4649.
6. Deepika Jasti1, KVNR Pratap, MDS2, MadhaviPadma.T, MDS3, V. Siva Kalyan, MDS4, M. PavanaSandhya, MDS5, ASK. Bhargava, (2015) Health Care Apps- Will They Be A Facelift For Today’s Medical/Dental Practice? Journal MTM 4:1:8_14, 2015 doi:10.7309/jmtm.4.1.3
7. Damian, R. (2014). Understanding Digital Marketing: Marketing strategies for engaging the digital generation. Kogan Page Ltd.
8. Donohue, Shelley (2009), "Facebook Fitness Application: Fitify Health and Fitness Tracker," http://www.examiner.com/fitness-in-portland/facebookfitness- application-fit-ify-health-and-fitness-tracker (accessed October 25, 2010).
9. Forbat, L., Cayless, S., Knighting, K., Cornwell, J., & Kearneya, N (2009). Engaging patients in healthcare: An empirical study of the role of engagement in attitudes and action. Patient Education and Counseling, 47(1), 84-90.
10. Goldfarb, A. (2014). “What is difference about online advertising?" Review of industrial organization 44(2):115-129
11. Ghose, A.and Spying (2009). “An empirical analysis of search engine advertising: Sponsored search in electronic markets.”Management Science 55(10):1605-1622.
12. Garris, M. (2014). A Beginner’s Guide to Mobile Marketing, New York: Business Expert Press.
13. Hritzuk, N. (2014). Multi-Screen Marketing: The Seven Things You Need to Know to Reach Your Customers Across TV’s, Computers, Tablets, Oxford: John Wiley & Sons Inc.
14. John A, Schibrowsky JW, Peltier AN (2007). The state of internet marketing

research: A review of the literature and future research directions. Eur. J. Market., 41(7/8): 722 – 733.

15. Kaplan, A., & Heinlein, M., (2010). Users of the world unite! The challenges and opportunities of social media. Business Horizons, 53(1)", 59-68.
16. Kaye, Barbara K. and Medoff, Norman J.(2001). Just a Click Away: Advertising on the Internet. Allyn and Bacon, Needham Height, MA. P.6
17. Kietzmann,J., Hermkens,K., McCarthy,I.,&Silvestre,S.(2011). Social media get serious! Understanding the functional blocks of social media. Business Horizons, 54(3), 241-251.
18. Kargarfard, F., Sami, A., & Ebrahimie, E. (2015). Knowledge discovery and sequence-based prediction of pandemic influenza using an integrated classification and association rule mining (CBA) algorithm. Journal of Biomedical Informatics, 57, 181-188.
19. Keane, M. T., O'Brien, M. & Smyth, B. (2008). Are People Biased in Their Use of Search Engines?. Communications of the ACM, 21(2), 49-52.
20. Kietzmann,J., Hermkens,K., McCarthy,I.,&Silvestre,S.(2011). Social media get serious! Understanding the functional blocks of social media. Business Horizons, 54(3), 241-251.
21. Kaufman, I. & Horton, C. (2015). Digital marketing: Integrating strategy and tactics with values. New York: Routledge.
22. Kevin, M.R. (2014). Taking down Goliath: Digital Marketing Strategies for Beating Competitors with 100 Times You're Spending Power, London: Palgrave Macmillan.
23. Dugan, Lauren (2010), "8 Healthy Facebook Applications You Should Use to Stay Fit," http://www.allfacebook.com/facebook-health-applications- 2010-02 (accessed October 25, 2010).
24. M V Ramana Murthy, (2013)" Mobile based Primary Health Care System for Rural India," Department of Health centre. doi:10.7309/jmtm.2.2.3
25. Malaga, R.A., 2010, 'Search engine optimization - Black and white hat approaches', Advances in Computers 78, 1–39. http://dx.doi.org/10.1016/S0065-2458(10)78001-3
26. Nabout, N.A., 2015, 'A novel approach for bidding on keywords in newly set-up search advertising campaigns', European Journal of Marketing 49(5/6), 668–691. http:// dx.doi.org/10.1108/EJM-08-2013-0424.
27. Olbrich, R. & Schultz, C.D., 2014, 'Multichannel advertising: Does print advertising affect search engine advertising?' European Journal of Marketing 48(9/10), 1731– 1756. http://dx.doi.org/10.1108/EJM-10-2012-0569
28. Ross, A. M. (2008). Worst Practices in Search Engine Optimization. Communications of the ACM, 51(12), 147-150.
29. Suraj Singh (2014) "Health care services using Android devices" Volume 3 Issue 4 Pages 41-45 ISSN (e): 2319 – 1813 ISSN (p): 2319 – 1805
30. Terry, Ken (2011), "Health insures try to 'Humanize' Themselves via Facebook, Twitter," http://www.fiercehealthit.com (accessed April 6, 2011).
31. Thackeray, Rosemary and Brad L. Neiger (2009), "A Multidirectional Communication Model: Implications for Social Marketing Practice," Health Promotion Practice, 10 (2), 171-75.
32. VudaSreenivasa Rao (2014) in his Article "A design of Mobile Health for Android Application" JMIR mHealthuHealth 2015;3(3):e86) doi:10.2196/mhealth.4649
33. Wamger,S.(2010).More than just social. Hospital leaders discover the revenue cycled gains from social media. Healthcare informatics, 27(6), 65-66.