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ABOUT AIMT

Army Institute Of Management & Technology (AIMT) was established by the Army Welfare Education Society (AWES) in 2004 in the emerging futuristic hi tech city of Greater Noida. The forerunner of the Institute was Faculty of Management Studies (FOMS), College of Materials Management (CMM), Jabalpur which was set up in summers of 1995. In a span of about ten years, FOMS carved a niche for itself and became a reputed business institution. In 2002 the college relocated and re-established itself with a new identity and a new name in the plush and quite environs of Greater Noida.

AWES has so far established 130 Army Schools and 11 professional colleges. Designed to capture the increasing needs of industry for Management and Computer Application professionals for the benefit of the wards of Army Personnel, a sprawling new campus of the Institute was constructed over an area of 15.34 acres.

AIMT, Greater Noida has been established to conduct MBA program in a fully residential campus. The first batch of students joined the Institute in Aug 2004. The Institute is affiliated to the Guru Gobind Singh Indraprastha University, Delhi. The campus can accommodate nearly 500 students at its peak capacity. The Institute has all modern learning tools/facilities and aims to provide top class management and education to the students. The campus also has a residential complex to house all its teaching and non teaching staff. The Institute is set to become one of the premiere professional colleges of the country.



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From the Editorial Board

he AIMT Journal of Management (AJM) is a broad-scope publication aiming to publish high-quality research and expert knowledge on topics that guarantee the functionality of the management throughout its business environment.

The Journal has a strong emphasis on interdisciplinary issues as we're conscious that many complex problems in the business environment require multi-disciplinary solutions. Interdisciplinary research is often difficult to publish in specialized journals and part of AJM's aim is to capture high-quality work focusing on research related to the business environment.

The scope of the Journal has expanded to accommodate the consequences of the various contemporary issues like Print media, politics, e-governance etc. We encourage not only traditional theoretical and experimental physiological research, but also welcome qualitative research that builds on theoretical model for further research, and research perspective which evokes management dimension from diverse sources. In fact, we envision the Journal to be developed, as one of the best place to publish all of these levels of research.

Working with knowledgeable International Editorial Advisory Board members and the Associate Editors, I can assure you of a rapid, robust and fair peer-review process. We also have begun to work towards making Journal online.

Thank you once again for your valuable contribution and would anticipate same in future.

Sincerely,

Dr. Pawan Gupta

Editor-in-Chief AIMT Journal of Management Army Institute of Management & Technology M-1, P-5, Greater NOIDA Uttar Pradesh



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Coverage of Development News in Print Media

Prof. (Dr.) Bandana Pandey* Pramod Kumar Pandey** Mahesh Kumar**

Abstract

Journalism has always thrived on the spirit of bringing positive change amongst the populace. Ever since it's advent, it has been regarded as agent of change and development. The mission and zeal with which many newspapers began their journey in the pre-independence era dried up with time. Strong inkling for profit, huge capital and evolved ownership patterns were the factors responsible which changed the newspaper content. The researchers have tried to analyze the content of e-papers of four highly read newspapers. The sample has been collected for a period of 45 days and analysis has been done. The results hints that the orientation of the English newspapers towards the development issues is more in comparison to Hindi newspapers. The research also throws light on the development issues being given most prominence and the areas of development which are highly neglected by the mainstream print media.

Keywords: Development Communication, Development Journalism, Development News

Introduction

The general understanding of the subject of development communication is that it is the use to which communication is put in order to further development. This concept of development communication has been given by Mass Communication expert Everett M. Rogers, who defined development communication as "It refers to the uses to which communication is put in order to further development. Such applications are intended to either further develop in a general way, such as by increasing the level of the mass media exposure among the nations citizen, in order to create a favorable climate for development, or to support a specific definite program or project"¹. Simply put, it is how the communication is used for creating an atmosphere which is conducive for development. Development Communication being a broader area includes development journalism within itself. It works the same way as journalism is a subset of communication.

J. Vilanilam defined development journalism as "journalism that deals with the process of development in developing

nations"². Here, the context becomes more specific and in place of talking about the entire spectrum of communication, the onus is on journalism dealing with the process of development in the developing countries.

Development journalism being an essential part of development communication needs to be seen from the right perspective. Fred Siebert, Theodore Peterson and Wilbur Schramm authored a book, Four Theories of the Press, in 1956, which formed the initial perspective on how development journalism was to be seen. It clearly stated the type of media and the functioning of the media in the light of the type of regime and political leadership. The initial four types of theories, which included authoritarian, libertarian, communist media and social responsibility theories did not seem to have incorporated all the types of media functioning. Debates across the world focused precisely on the social responsibility theory and as a result, the offshoot of social responsibility theory emerged and two more theories were added to the ones already proposed. The two offshoot were Democratic

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Participant theory and Development Media theory, the first having a view against commercialization and monopolization of the media institutes. The Development Media theory on the other hand treating newspapers, radio, television, films and national news services as mobilizing agents supported by the government to support nation building, building consensus, building political consciousness and assisting in economic development. This theory, in the light of the social responsibility of became to most talked about theory and most relevant to the third world³.

During the mid 40s and the early 50s of the twentieth century, many countries started gaining independence. For any newly independent country, development was high on the priority list of their agendas. Policy formations were swift and to make the policies work and make the fruits of development reach to the farthest person possible, seeking services of media was inevitable. The same applies in the case of India as well where media was seen as a major driving factor supporting the five year plans of India. For a very long time, the most important information disseminated was through TV and Radio in the form of programs like 'Krishi Darshan', the content of which empowered the huge population involved with the primary sector which included farming, animal rearing etc. The program was a huge success with a huge number of people waiting to watch it whenever it was telecast. The program continued for many decades. This passage of time however witnessed plenty of economic and political changes which led to change in the focus of five year plans. The focus shifted from agriculture to building infrastructure to information technology. This also led to various socio-economic changes finally leading to the gravest of all changes i.e. the 1991 economic reforms. This paved way for the plenty of news channels and newspapers. Many such avenues mushroomed post 1991. The post 1991 era witnessed many foreign media channels collaborating with Indian media channels, various newspapers starting, the newspapers turning colored and drastic rise in the number of pages and introduction of heavy supplements along with the main newspaper. This led to the decline of the news related to various development related issues⁴.

Objectives & Methodology

The objective of this study is to find out the total number of development news and explore the total space covered by the development news in the four newspapers selected as sample in the study. The study also aims to analyze the manner of presentation of the of development news in the newspapers. In addition to this, the study also tries to find out which specific areas of development are given most and least space and hence importance.

Methodology

Content analysis is communication study. It is a method for coding and categorizing messages. Whether from TV, newspaper or of films may be analyzed according to their description, potency or critical content. The present study is content analysis and is taken up to identify the content and the treatment of development news in the newspapers. The particular method is therefore selected for study for the content and treatment of development news in the news in the newspapers⁵.

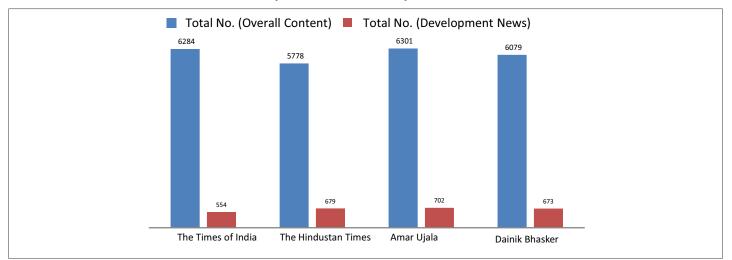
This particular method is therefore, selected for study of the content and treatment of development news of the Hindi and English e-papers. Hence this method was incorporated for this research study. The data collected from the 45 issues of four English and Hindi dailies have been recorded, coded and categorized for this study.

The Researcher has purposely selected the four English and Hindi daily newspapers based on the circulation and readership figures in Haryana. Both English and Hindi newspapers were taken under study to know the coverage development news.

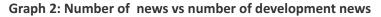
| Name of the Newspaper | C | ontent | Develo | pment News | Development C | ontent (%) |
|-----------------------|------------------|-------------------------------------|------------------|-------------------------------------|------------------------------------|--------------------------------|
| | Total No. (N) | Space Covered (cm ²) | Total No. (n) | Space Covered (cm ²) | % in terms of number of content | % in terms of space covered |
| The Times of India | 6284 | 1756950 | 554 | 610137 | 8.82% | 34.73% |
| The Hindustan Times | 5778 | 1769823 | 679 | 572160 | 11.75% | 32.33% |
| Amar Ujala | 6301 | 1333200 | 702 | 366519 | 11.14% | 27.49% |
| Dainik Bhaskar | 6079 | 1477060 | 673 | 362982 | 11.07% | 24.57% |
| TOTAL | 24442 | 6337033 | 2608 | 1911798 | 10.67% | 30.17% |

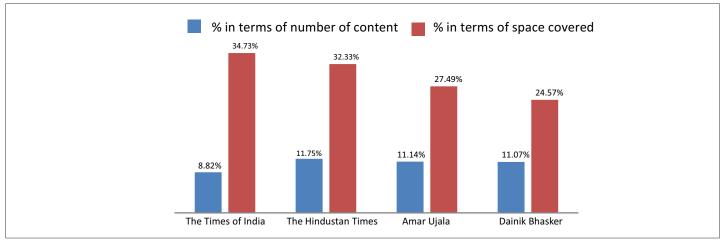
Tabulation & Analysis

Table 1. Coverage of Development News with space



Graph 1. News vs Development News





Graph 2: Number of news vs number of development news

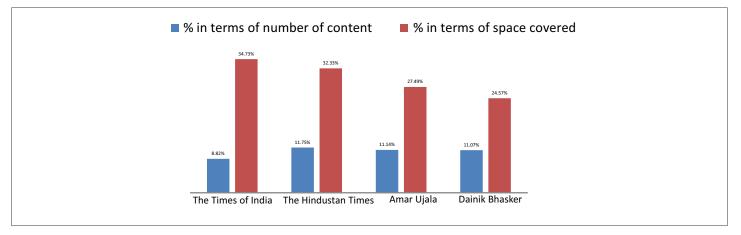


Table 1 shows that the total number of news items in the four newspapers during the 45 days were 24442 which covered 6337033 cm2 space. Total number of development news were 2608. This made up 10.67% of news to be development news.

Looking at the development news from the perspective of space covered, development news comprised of 30.17% of the total space covered. Among the four newspapers, Amar Ujala (702) had highest number of development news which

comprised of 11.14% of the total news. Amar Ujala had 27.49% space covered with development news. Followed by Amar Ujala, The Hindustan Times (679) has second highest number of development news. This made up 11.75% of the total news items found in The Hindustan Times. The percentage of development news in the context of space covered for The Hindustan Times was 32.33%. In terms of number of development news, third highest development news were

Table 2 shows that the percentage of number of development news in Hindi dailies is 11.2% and the same for English dailies is 10.22%. There is very less difference between the two newspapers when it comes to number of development news published. However, looking at the percentage of space covered by development news in the Hindi dailies, there is difference of bigger magnitude. In comparison to the Hindi newspapers

| Language of the Newspaper | Number of content | Spæce covered by content (cm ²) | Total number of development news | Total Space covered by development news (cm ²) | Percentage of number of development news (%) | Percentage of space covered by development news (%) |
|-------------------------------|-------------------------|---|--|--|---|---|
| Hindi Language Newspaper | 12380 | 3526773 | 1375 | 729501 | 11.12% | 20.68% |
| English Language Newspaper | 12062 | 2810260 | 1233 | 1182297 | 10.22% | 42.07% |
| TOTAL | 24442 | 6337033 | 2608 | 1911798 | 10.67% | 30.17% |

Table 2. Priority of Development News in Hindi and English Newspaper

found in Dainik Bhaskar (673). Dainik Bhaskar had 11.07% of the total news and development news in Dainik Bhaskar comprised of 24.57% of the total space. The Times of India had 554 development news which made up 8.82% of the total number of news items and covered 34.73% of the total space.

which have dedicated only 20.68% space to the development news, English dailies have given 42.07% space to the development news which is 21.39% higher than what the Hindi dailies are dedicating to the development news.

| Name of the Newspaper | Content | : | Devo nt N | elopme ews | Clas | ssificati | on o | f Devel | opmo | ent Ne | ws | | | | | | | |
|--------------------------|-----------|------------------|--------------|------------------|------|-----------------------------|------|-----------------------------|------|-----------------------------|---------------|-----------------------------|----|----------------|---------|-----------------------------|---------|-----------------------------|
| | Total No. | Space Covered | Total No. | Space Covered | | orcultura velopmer | | Food duction | Tari | ide, ffs & ices | Econ Perfo | omic rmance | | nomic Ining | - | Rural elopment | - | Iraban elopment |
| | (N) | (cm²) | (n) | (cm²) | No | Space (cm ²) | No | Space (cm ²) | No | Space (cm ²) | No | Space (cm ²) | No | Space | No | Space (cm ²) | No | Space (cm ²) |
| The Times of India | 6284 | 17569 50 | 55 4 | 6101 37 | 18 | 4512 2 | 9 | 1102 1 | 7 | 2109 3 | 21 | 5632 2 | 9 | 7036 | 31 | 20921 | 20 | 27002 |
| The Hindustan Times | 5778 | 17698 23 | 67 9 | 5721 60 | 15 | 3572 4 | 14 | 1631 6 | 5 | 1533 5 | 31 | 7055 6 | 11 | 1231 9 | 45 | 15912 | 27 | 29094 |
| Amar Ujala | 6301 | 13332 00 | 70 2 | 3665 19 | 29 | 2547 0 | 18 | 1423 0 | 17 | 9666 | 19 | 3102 5 | 17 | 1091 2 | 51 | 31896 | 28 | 20117 |
| Dainik Bhaskar | - 6079 | 14770 60 | 67 3 | 3629 82 | 36 | 2236 3 | 17 | 1129 5 | 12 | 6077 | 25 | 2187 2 | 14 | 1522 4 | 42 | 27847 | 35 | 14230 |
| TOTAL | 24442 | 63370 33 | 26 08 | 1911 798 | 98 | 1286 79 | 58 | 5286 2 | 41 | 5217 1 | 96 | 1797 75 | 51 | 4549 1 | 16 9 | 96576 | 11 0 | 90443 |

Table 3 shows that Dainik Bhaskar published maximum number of agricultural development related news (36), followed by Amar Ujala (29). The frequency of agricultural development related news was lesser in English newspapers in comparison to Hindi newspapers. The Times of India and The Hindustan Times had 18 and 15 stories related to agricultural development. The table also depicts that the stories related to food production were published most by Amar Ujala (18) followed by Dainik Bhaskar (17). English newspapers again had published lesser stories related to food production than the Hindi newspapers. It is however to be noted that even though the agricultural development stories were lesser in English newspapers, The Times of India still had given maximum space to the agricultural development related news in comparison to the Hindi newspapers. Whereas Dainik Bhaskar, which had published maximum number of agricultural development stories had dedicated least space to the same. Which means English newspapers had been giving lesser stories but whichever stories they did on the agriculture, those stories were detailed and in-depth. Trade, price and tariff based stories were not very frequent and were even lesser frequent in English newspapers. Amar Ujala had given maximum number of space to such development news with The Times of India still giving maximum

space to such development stories. Economic performance as the development story was published most by The Hindustan Times (31) followed by Dainik Bhaskar (25) and The Times of India (21) and Amar Ujala (19). The data depicting the space dedicated correlated with the other data and The Hindustan Times gave maximum space to the economic performance related news. Economic planning as development news was discussed mostly by Amar Ujala and Dainik Bhaskar. The English newspapers lagged behind the Hindi newspapers in the context of development news related to the economic planning. Rural development was discussed maximum number of times by the Hindi newspapers with Amar Ujala giving maximum frequency and space to the rural development related news. In case of urban development, the maximum number of stories appeared in Dainik Bhaskar but highest space was given by The Hindustan Times.

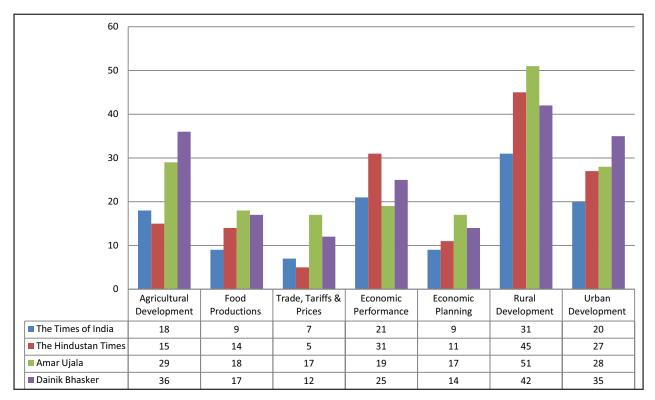
Table 4 shows that the economic development news was most frequently seen in Dainik Bhaskar (26.89%) followed by Amar Ujala (25.50%). The percentage of English newspapers were 20.76% and 21.80% (The Times of India and The Hindustan Times respectively).

| Name of the Newspaper | Agricultural Development | Food Productions | Trade, Tariffs & Prices | Economic Performance | Economic Planning | Rural Development | Urban Development | Total Economic Development News | Total No. of Develop ment News | %age |
|---------------------------|-----------------------------|---------------------|-------------------------------|-------------------------|----------------------|----------------------|----------------------|--|--|-------|
| The Times of India | 18 | 9 | 7 | 21 | 9 | 31 | 20 | 115 | 554 | 20.76 |
| The Hindustan Times | 15 | 14 | 5 | 31 | 11 | 45 | 27 | 148 | 679 | 21.80 |
| Amar Ujala | 29 | 18 | 17 | 19 | 17 | 51 | 28 | 179 | 702 | 25.50 |
| Dainik Bhaskar | 36 | 17 | 12 | 25 | 14 | 42 | 35 | 181 | 673 | 26.89 |
| TOTAL | 98 | 58 | 41 | 96 | 51 | 169 | 110 | 623 | 2608 | |

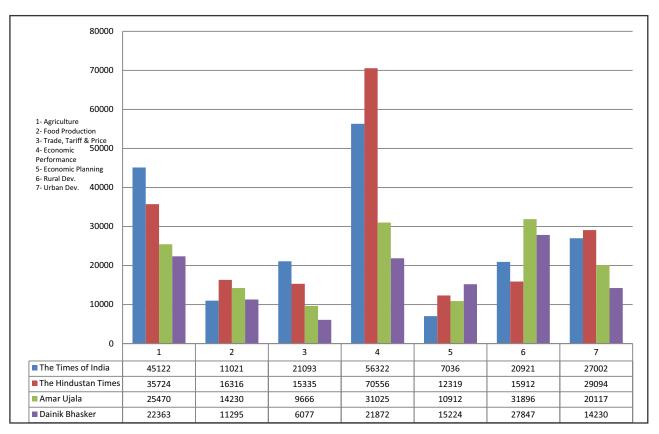
Table 4. Number of Development News

| | Con | tent | Developr | nent News | Devel | opment News | (classified o | on the basi | s of econo | mical asp | ect) |
|---------------------------------|---------------------|--|---------------------|--|--|--|--|--|---|---|---|
| Name of the Newspa per | Total No. (N) | Space Cover ed (cm ²) | Total No. (n) | Space Covered (cm ²) | Agricultural Developme nt Space (cm ²) | Food Productions Space (cm ²) | Trade, Tariffs & Prices Space (cm ²) | Econom ic Perfor mance Space (cm ²) | Econom ic Plannin g Space (cm ²) | Rural Develo pment Space (cm ²) | Urban Developm ent Space (cm ²) |
| The Times of India | 6284 | 17569 50 | 554 | 610137 | 45122 | 11021 | 21093 | 56322 | 7036 | 20921 | 27002 |
| The Hindust an Times | 5778 | 17698 23 | 679 | 572160 | 35724 | 16316 | 15335 | 70556 | 12319 | 15912 | 29094 |
| Amar Ujala | 6301 | 13332 00 | 702 | 366519 | 25470 | 14230 | 9666 | 31025 | 10912 | 31896 | 20117 |
| Dainik Bhaskar | 6079 | 14770 60 | 673 | 362982 | 22363 | 11295 | 6077 | 21872 | 15224 | 27847 | 14230 |
| TOTAL | 24442 | 63370 33 | 2608 | 1911798 | 128679 | 52862 | 52171 | 179775 | 45491 | 96576 | 90443 |

 Table 5. Space covered by Development News





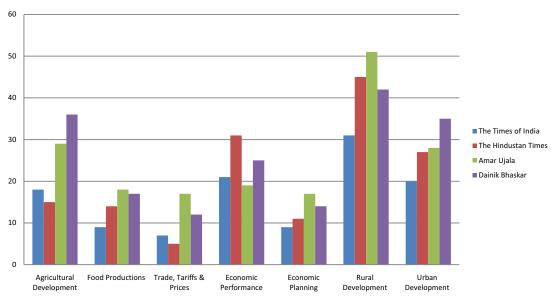


Graph 5. Development News (classified on the basis of space covered in cm2)

| | С | ontent | Develop | ment News | | | | Social | Devel | opment N | lews | | | | | | | |
|---------------------------|--------------|------------------|--------------|--------------------|---------|-----------------------------|--------|-----------------------------|-------|-----------------------------|------|-----------------------------|------------------|-----------------------------|----|-----------------------------|-----|-----------------------------|
| Name of the | Total No. | Space Covered | Total No. | Space Covered | Educati | on | Employ | ment | Labor | Welfare | | ation & y Planning | Health Nutrit | | H | ygiene | Hum | an Rights |
| Newspaper | (N) | (cm²) | (n) | (cm ²) | No | Space (cm ²) | No | Space (cm ²) | No | Space (cm ²) | No | Space (cm ²) | No | Space (cm ²) | No | Space (cm ²) | No | Space (cm ²) |
| The Times of India | 6284 | 1756950 | 554 | 610137 | 39 | 17880 | 9 | 9773 | 4 | 4230 | 9 | 11272 | 6 | 5403 | 16 | 10640 | 28 | 15436 |
| The Hindustan Times | 5778 | 1769823 | 679 | 572160 | 51 | 25481 | 6 | 11753 | 3 | 3698 | 7 | 15192 | 17 | 10951 | 21 | 17541 | 28 | 17852 |
| Amar Ujala | 6301 | 1333200 | 702 | 366519 | 39 | 13719 | 17 | 11312 | 1 | 898 | 11 | 14517 | 9 | 6092 | 13 | 12180 | 20 | 10178 |
| Dainik Bhaskar | 6079 | 1477060 | 673 | 362982 | 41 | 16711 | 11 | 7984 | 2 | 1798 | 9 | 9004 | 4 | 4567 | 18 | 15345 | 18 | 9704 |
| TOTAL | 24442 | 6337033 | 2608 | 1911798 | 170 | 73791 | 43 | 40822 | 10 | 10624 | 36 | 49985 | 36 | 27013 | 68 | 55706 | 94 | 53170 |

Table 6. Social Development News

Table 6 depicts the number of social development news. Education news was most frequent on The Hindustan Times (51) followed by Dainik Bhaskar (41). The Times of India and Amar Ujala have had 39 news each on education. The space given to the education news was highest by The Hindustan Times. The Hindustan Times gave 25481 cm2 space to the education news. Amar Ujala had maximum number of news stories on employment (17) and The Hindustan Times had the lowest number of news stories on employment (6), however maximum space given to the employment news was by The Hindustan Times (11753 cm2) followed by Amar Ujala. Labor welfare news stories were least in number. Population and family welfare news was highest in Amar Ujala (11) followed by The Times of India and Dainik Bhaskar with nine stories each on population and family welfare. Hygiene and Health and Nutrition based development news were most frequent on The Hindustan Times (21 and 17 respectively) with maximum space also dedicated also by The Hindustan Times (17541cm2 and 15192 cm2 respectively).



Graph 6. Number of Social Development News

| Name of the Newspaper | Co | ntent | | opment ews | | Inf | orma | tion T | echr | iology ۵ | & Infi | astruct | ure I | Develop | ment | News |
|--------------------------|--------------|--------------------|--------------|----------------------|-----|--------------------|------|--------------------------|--------|--------------------|--------|--------------------|-------|--------------------|------|--------------------|
| | Total No. | Space Covered | Total No. | Space Covere d | Ind | istries | | entific and mology | | wer and Energy | Mass | s Comm | | commun ation | Inf | rastructure |
| | | | | | | Spac e | | Spac e | | Space | | Space | | Spac e | | Space |
| Name of the Newspaper | (N) | (cm ²) | (n) | (cm ²) | No | (cm ²) | No | (cm ²) | N 0 | (cm ²) | No | (cm ²) | No | (cm ²) | No | (cm ²) |
| The Times of India | 6284 | 1756950 | 554 | 610137 | 13 | 3012 3 | 23 | 4024 6 | 11 | 10351 | 13 | 12063 | 5 | 7686 | 18 | 43987 |
| The Hindustan Times | 5778 | 1769823 | 679 | 572160 | 23 | 3376 5 | 31 | 3984 2 | 15 | 9703 | 13 | 8796 | 8 | 6532 | 15 | 29675 |
| Amar Ujala | 6301 | 1333200 | 702 | 366519 | 17 | 1786 5 | 18 | 1331 8 | 8 | 6783 | 21 | 5600 | 3 | 2321 | 11 | 11740 |
| Dainik Bhaskar | 6079 | 1477060 | 673 | 362982 | 11 | 1506 3 | 19 | 1409 5 | 3 | 3342 | 18 | 14233 | 3 | 3127 | 13 | 14675 |
| TOTAL | 24442 | 6337033 | 2608 | 191179 8 | 64 | 9681 6 | 91 | 1075 01 | 37 | 30179 | 65 | 40692 | 19 | 1966 6 | 57 | 100077 |

Table 7. Information Technology & Infrastructure Development News

Table 7 shows that industrial development news is covered most frequently by The Hindustan Times (23) and also highest space is provided by The Hindustan Times only (33675 cm2).This is followed by Amar Ujala (17), The Times of India (13) and Dainik Bhaskar (11). Dainik Bhaskar has given least space to the news related to industrial development. Science and technology development news is covered highest by The Hindustan Times (31) followed by The Times of India (23), Dainik Bhaskar (19) and Amar Ujala (18). Although The Times of India did not have maximum number of stories but has devoted maximum space or science and technology related news. The Times of India and The Hindustan Times have done better than Amar Ujala and Dainik Bhaskar in the context of power and energy development news. Mass Communication is covered highest by Amar Ujala (21) followed by Dainik Bhaskar (18). In contrast, The Times of India and The Hindustan Times have covered mass communication related development news 13 times each. The highest space dedicated however has been by Dainik Bhaskar dedicating 14233 cm2 space. Telecommunication as an agent of development was mentioned more frequently by The Hindustan Times (8) followed by The Times of India (18), the frequency with which the infrastructural development has been covered, the space covered is very high. This indicates very in-depth and detailed development news on infrastructural development. The Times of India has given 43987 cm2 space to the infrastructural development which is very high in comparison to The Hindustan Times, which has devoted 29675 cm2 area to the infrastructural development. The Hindi newspapers, Amar Ujala and Dainik Bhaskar are lagging far behind with 11740 cm2 and 14675 cm2 respectively.

| | Со | ntent | Develop | ment News | | | | | | |
|------------------------|-----------|------------------|--------------|------------------|---------|----------------|-----|------------------|--------|--------------|
| Name of the | Total No. | Space Covered | Total No. | Space Covered | Nationa | al Integration | | lssues & orms | Cultur | e & Religion |
| Newspaper | | | | | No | Space | No | Space | No | Space |
| | (N) | (cm²) | (n) | (cm²) | NO | (cm²) | NO | (cm²) | NO | (cm²) |
| The Times of India | 6284 | 1756950 | 554 | 610137 | 51 | 20151 | 51 | 30171 | 37 | 17817 |
| The Hindustan Times | 5778 | 1769823 | 679 | 572160 | 69 | 32452 | 56 | 34138 | 43 | 17232 |
| Amar Ujala | 6301 | 1333200 | 702 | 366519 | 86 | 21450 | 71 | 13456 | 51 | 12022 |
| Dainik Bhaskar | 6079 | 1477060 | 673 | 362982 | 73 | 23122 | 69 | 25650 | 61 | 15716 |
| TOTAL | 24442 | 6337033 | 2608 | 1911798 | 279 | 97175 | 247 | 103415 | 192 | 62787 |

| Table 8. Humanities and National Development News |
|---|
|---|

| | | | Ne | ews | | | | | Oth | ers | | | | | | | | |
|-----------------------------|--------------|------------------|--------------|------------------|----|-----------------------------|-----|-----------------------------|-----|-----------------------------|----|-----------------------------|----|-----------------------------|----|-----------------------------|----|-----------------------------|
| | Total No. | Space Covered | Total No. | Space Covered | | inistrative orms | | litical omacy | | rnation reaties | | itary tters | | ire and conment | | dicine | Но | ousing |
| Name of the Newspaper | (N) | (cm²) | (n) | (cm²) | No | Space (cm ²) | No | Space (cm ²) | No | Space (cm ²) | No | Space (cm ²) | No | Space (cm ²) | No | Space (cm ²) | No | Space (cm ²) |
| The Times of India | 6284 | 175695 0 | 554 | 610137 | 31 | 9242 | 19 | 98255 | 2 | 1012 | 16 | 10348 | 18 | 6721 | 9 | 3402 | 11 | 5421 |
| The Hindustan Times | 5778 | 176982 3 | 679 | 572160 | 19 | 11016 | 26 | 14504 | 1 | 900 | 19 | 11360 | 24 | 12633 | 14 | 5647 | 22 | 6242 |
| Amar Ujala | 6301 | 133320 0 | 702 | 366519 | 16 | 7866 | 30 | 9140 | 3 | 3190 | 31 | 11020 | 21 | 8003 | 7 | 4314 | 19 | 6219 |
| Dainik Bhaskar | 6079 | 147706 0 | 673 | 362982 | 27 | 9234 | 31 | 13712 | 3 | 2120 | 18 | 9061 | 25 | 9567 | 1 | 800 | 14 | 5340 |
| TOTAL | 2444 2 | 633703 3 | 2608 | 191179 8 | 93 | 37358 | 106 | 135611 | 9 | 7222 | 84 | 41789 | 88 | 36924 | 31 | 14163 | 66 | 23222 |

Table 9. Other Development News

Table 9 shows that the development news related to administrative reforms were highest in The Times of India (31), on the contrary, highest space dedicated was by The Hindustan Times (11016 cm2). This is followed by Dainik Bhaskar (27), The Hindustan Times (19) and Amar Ujala (16). Political diplomacy for development was covered highest by Dainik Bhaskar (31) with the highest space being given by The Hindustan Times (14504 cm2). International treaties were the most ignored factors of development with only nine stories appearing in all the newspapers. Military matters related development stories appeared highly in Amar Ujala (31) followed by The Hindustan Times (19), Dainik Bhaskar (18) and The Times of India (16). Highest space to the military matter related development news was given by The Hindustan Times. Nature and environment is one aspect of development which has direct and indirect implications on every aspect of our lives. Dainik Bhaskar (25) and The Hindustan Times (24) were the two newspapers having first and second highest number of development stories discussing nature and environmental challenges. Highest space was given by The Hindustan Times. Medicine and Housing were covered most extensively by The Hindustan Times. The Hindustan Times has 14 and 22 news stories on medicine and housing. The highest space is also given by The Hindustan Times.

| Name of the Newspaper | Supporting | Government | Criticizing Gove | ernment | Neutral | / Not Clear | Т | īotal |
|--------------------------|------------|---------------------------------|------------------|-----------------------|---------|------------------------------------|------|---------------------------------------|
| | No. | Area Covered (cm ²) | No. | Area Covered (cm²) | No. | Area Covered (cm ²) | No. | Area Covered (cm ²) |
| The Times of India | 233 | 144276 | 156 | 87033 | 165 | 378828 | 554 | 610137 |
| The Hindustan Times | 197 | 154434 | 188 | 176002 | 294 | 241724 | 679 | 572160 |
| Amar Ujala | 293 | 173540 | 177 | 78889 | 232 | 114090 | 702 | 366519 |
| Dainik Bhaskar | 311 | 158987 | 198 | 90922 | 164 | 113073 | 673 | 362982 |
| TOTAL | 1034 | 631237 | 719 | 432486 | 855 | 847715 | 2608 | 1911798 |

Table 10. Inclination for Development News

Table 10 shows the inclination for development news. It was seen that more number of stories were supporting the government either for the policy formation or for the various initiatives taken by the government to bring the economy and country on the path of the development. Out of total 1034 stories in favor of the government, Dainik Bhaskar had 311 stories favoring the government followed by Amar Ujala favoring government in 293 stories, The Times of India supporting the government action and appreciating the efforts of the government was seen in 233 stories with only 197 stories appearing in The Hindustan Times favoring or supporting the government initiatives. On the contrary, The Hindustan Times (188) had the second highest number of stories criticizing government initiatives, policies and development programs. Neutral stories or such stories where the inclination was not clearly recognizable was highest in The Hindustan Times (294) followed by Amar Ujala (232). Neutral stores were least visible in Dainik Bhaskar (164) followed by The Times of India (165).

| Name of the Newspaper | Colored Font | Photograph | Box Item | Color in News | Graphics | Caption | Multiple font size |
|-----------------------|--------------|------------|----------|---------------|----------|---------|-----------------------|
| The Times of India | 12 | 336 | 147 | 189 | 211 | 197 | 121 |
| The Hindustan Times | 79 | 287 | 161 | 97 | 312 | 190 | 243 |
| Amar Ujala | 8 | 253 | 93 | 121 | 391 | 109 | 179 |
| Dainik Bhaskar | 21 | 311 | 67 | 117 | 379 | 81 | 113 |
| Total | 120 | 1187 | 468 | 524 | 1293 | 577 | 656 |

Table 11. Presentation of Development News

Table 11 shows the way development news is presented in the four newspapers. Colored fonts to grab attention was used in highest number by The Hindustan Times (79) and least number of times by Amar Ujala (8). The Times of India used photographs highest number of times i.e. 336 times. Dainik Bhaskar was second in this with photographs used 311 times in the development news. Box item used to add prominence to a news story was used mostly by The Hindustan Times (161) followed by The Times of India (147). Dainik Bhaskar used the same object least number of times (67). Color in news was used as an object for adding detains and attributing more importance. This was used in highest number by The Times of India (189) and least by The Hindustan Times (97). Graphics were the highly used objects in the presentation of development news. 1293 news stories witnessed the usage of graphics with Amar Ujala using the graphics highest number of times (391) and Times of India using least number of graphics in the development story. Captions were seen mostly in the development stories published in The Times of India followed by The Hindustan Times (190). Dainik Bhaskar used captions least number of times (81). Multiple font sizes in the same development news were mostly visible in The Hindustan Times (243) followed by Amar Ujala (179). Dainik Bhaskar has used this way of presentation least number of times (113).

FINDINGS

- The percentage of development news found in all the newspapers is very low whereas the space covered is higher in comparison. This means that even if development news lesser presence, they were in-depth and had relatively better presence in terms of space covered.
- 2) It was The Times of India which had least number of stories on development yet had devoted the highest space.
- 3) Classifying the newspapers on the basis of the language gave a grim picture of the Hindi newspapers. Although the number of stories in both English and Hindi newspapers were almost similar but the space devoted by English newspapers to the development news was almost double that of the space offered by Hindi newspapers.
- 4) It was seen that the Rural development was given the highest importance by overall newspapers which was followed by Urban development news. It was however seen that no aspect of development got a share of more than 7-8%. Agriculture development stories made only around 3% of the total development stories. The situation stands better in terms of space covered though.
- 5) Education had a share of around 7% whereas some very importantaspectsofdevelopmentwerecompletelyignored by all the newspapers. Areas like labor welfare did not even have 0.5% share in the development news. Issues like health & nutrition and employment have fared a little better but have still been on the lower side. Health and Nutrition being an important factor in the development process is having verylesspresence in the printmedia. Only 36 newsstories out of 2608 stories discussed health and nutrition.

- 6 It is seen that the highest number of development stories and the highest space in the social development news has been in the case of education related development news. This may have been possible because of the various programmes initiated and promoted by the government. It was seen that majority of the development news on education had reference of Beti Bachao, Beti Padhao which shows that with the help of support from the government certain facets of development can be promoted and their percentage in terms of number and space covered can be improved.
- 7 IT and infrastructure were covered extensively with great depth and details in comparison to the other types of development news. The number does not justify it but the space covered in comparison shows the best proportion. It may have been because the duration in which the data
- was collected was when the Rio Olympics were going on. This led to great debates and talks on the lack of medals for India at Rio and its relationship with the lack of infrastructure. It therefore witnessed relatively high space coverage.
- 8) Social Issues, National Integration and Culture and Religion were discussed at length by all the newspapers. There were many special reports on caste divide and communal divide. The numbers of such stories are highest but the space is relatively less in comparison. This means that development stories on the mentioned themes were frequent.
- 9) Power and energy is covered very scantily by all the newspapers. In the era of sustainable power and energy sources, such news stories need to be given more space and prominence.
- 10) It was seen that the number of development stories favoring or appreciating the government's initiatives or the programs started by them outwitted the ones which criticized them in number. Higher percentage of stories were supporting of the government which includes both

the government at the central level and the state level. In fact the ones in which the rhetoric was critical of the various government policies and programs was also bypassed by the stories which were neutral. It can be said that the development news stories either appreciated the various development initiatives of the government or it stood neutral and gave a very objective view of the various issues pertaining to development.

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E-governance Parameters Assessment: An AHP Approach

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Abstract

E-governance is well recognized concept in today's business environment.E-governance provides flexibility to the citizens of the country by shifting government services from tradition form to digital form. In developing country like India, the citizens are also starving towards adoption of e-governance practices. Moreover, Indian government is initiating digitalization rigorouslyin almost all fields. Any e-governance project moves through the three stages i.e. planning, implementation and adaptation by citizen. Usually, e-governance projects starts with discussions with senior government officials after doing deep need analysis and the technicians involved in implementation of e-governance projects and finally, adopted by the citizens of country. Egovernance brings more transparency and accountability in the government system. Many e-governance projects in developing countries like India are at different stages of progression. The government developed various e-governance portals as interface to provide their services online as well as offline in adoption phase. The objective of this paper is to understand and analyse the various parameters which make impact on the assessment of e-governance portals. E-governance portals are evaluated on the attributes such as static appearance, features and service quality by the citizens. Under these aspects, many parameters are identified from vast literature review and then shortlisted with the help of expert's opinion. A framework is developed on the basis of shortlisted parameters. Further, aspects and parameters are prioritized by using Analytical Hierarchy Process (AHP). The study identifies the most important aspect for evaluation of e-governance portal is service quality. The findings of the study will be highly useful for the developers of e-governance portals. For more successful e-governance projects, the developers and practitioners may adopt these findings at the time of planning, designing and implementing of e-governance project.

Keywords: E-governance, E-governance portal, Assessment, Analytical Hierarchy Process

Introduction

All things and process becoming automated, having shift from manual to digital in today's competitive world. Due to hectic busy schedule, citizens preferred to get served with high quality of services in minimum possible time.

Citizens started shifting from basic needs to luxury facilities by making use of plastic money and online transactions, so in this type of the concept of e-government. Electronic governance (Egovernance) is basically getting the government services electronically. Usually, the benefits of e-governance are availed by public, private agencies, government departments and businesses in order to disseminate static information, offline/ online transactions and may have participatory framework. The idea of e-governance is to bring IT to the common public (Dwivedi et. al., 2013). E-governance brings transparency, increases efficiency, enforcing accountability, optimizes cost and reduces time delays.

The Indian Government has initiated with many citizen-centric e-governance projects. On May 2006, the government came up with National E-governace Plan (NeGP) which comprises of 27 Mission Mode Projects (MMPs) and 8 components. Currently, after revision, 31 MMPs are in process and running at central and state level across the country, The state government has power to start with any five MMPs specific to their individual needs. In India, many existing or ongoing e-governance projects are at

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different levels of progression. Many projects which specifically implemented to serve needs of urban people like Passport Sewa, online railways ticketing and status updation, filling income tax, e-education and checking availability of doctors and blood at government hospitals etc., to name few. Similarly, many egovernance projects are developed and implemented to cater the requirements of rural people like Agricultural Marketing Information Network (AGMARKNET), Bhoomi (automation of land records), CARD (computer aided administration of registration department) and e-panchayats etc.

The primary delivery models of e-Government can be divided into four categories, that is, G2C (Government to citizens), G2B (Government to Businessman), G2G (Government to Government) and G2E (Government to Employees). All the egovernance projects are designed to serve and connect the needs of all associated stakeholders. Any e-governance project progresses through three stages. Firstly, in the planning stage, government officials and top management conceives the idea of any project then the idea is further implemented by technicians from private or public organizations in second stage. At last stage, the citizens tries to adopt the idea electronically. Normally, it has seen that there is mismatch between policy maker vision of benefitting end users at optimum, implementers understanding about the project and final end users perception about the project.

During adoption stage, the appearance, availability of information, the quality of services and overall processes of egovernance portal make huge impact on satisfaction level of citizens. The user friendliness, accuracy and authenticity of content available with quick feedback generally attracts customer and becomes a responsible reason for satisfaction from services. In this paper, an attempt has being made to identify the various parameters required for evaluation of egovernance portal to make e-governance practices successful. The objective of this study is to prioritiz4e the parameters as per their importance in order to have more successful egovernance projects.

The remaining paper will be as follows. Literature review of egovernance and identified parameters are discussed in section-2. In section-3, the research methodology, Analytical Hierarchy Process (AHP) is discussed. The evaluations have been done using AHP in section-4. The findings and conclusions are discussed in section-5 which is followed by conclusion.

LITERATURE REVIEW

Many studies defied e-governance as an emerging field in developing countries, which can be evidenced through clearly rcognizable benefits to the mango people of the country. Heeks (2001) defined e-governance as making use of information, communication and technology to deliever government services in more convient manner. According to Schwester in 2009, the basic idea with which e-governance concept starts is to disseminate information by converting offline to online but later, the e-governance takes place as an interactive platform where an individual can make online transactions and can develop participatory framework.

Three main contributions of e-governance are to improve government processes (e-administration), to connect citizens (e-citizens) and to create awareness (e-services). E-governance brings comfort and more accountability to the citizens of the country. Various framework of e-governance has been developed by many authors and reflects the same understanding on good governance. Many models are developed in order to study the acceptance of e-governance by end users (Saxena, 2006)

The citizens are more involved at the adoption stage of any egovernance project. It is very important for developers and implementers to understand the exact needs of citizens while using any e-governance portal. The categories and parameters which are critical and observed by every individual when they access any e-governance portal. From three vast literature review, 25 parameters ar identified and after discussing with experts, 12 parameters are finalized by combining common ones and ignoring less important parameters. Then these parameters are categorised into three categories namely, static appearance, features and service quality of e-governance portal. All the parameters are discussed in detail along with their references in table 1.

| S.No | Parameter | Sources |
|------|-------------------------|---|
| 1. | Outlook | Park and Gretzel (2007), Hausman and Siekpe (2008) |
| 2. | User friendly | Park and Gretzel (2007), Hausman and Siekpe (2008) |
| 3. | Design | Gilbert et. Al (2004), Delopoulous(2011) Bhatnagar(2002) |
| 4. | Navigation | Flavian et al. (2009), Unwin et al. (2010) |
| 5. | Relevant Information | Liang and Lai (2002), Iqbal et. Al(2006) Delopoulous(2011), |
| 6. | Content Quality | De Wulf et al. (2006), N.P. Rana(2010), Chae et al.(2002) |
| 7. | Query Handling | Park and Gretzel (2007), Rose et al. (2010) |
| 8. | FAQ | Agarwal and Venkatesh (2002) |
| 9. | Accountability | Jothimani et al. (2014), Kaynak et al. (2014) |
| 10. | Responsiveness | Gefen (2002), Reix (2003) |
| 11. | Accuracy | Yeung et al. (2012), Markovic(2006), |
| 12. | Security/ Privacy | Korgaonkar and Wolin (1999), Alsheri et Al(2010), Gilbert et. Al(2004) Schwester(2009). Huizingh et. Al (2003), |

Table1: Parameters for evaluation of e-governance portal

RESEARCH METHODOLOGY

Multi-criteria decision making method was developed by Satty (1980) known as Analytical Hierarchical Process (AHP). Analytical hierarchy process is a flexible and structured technique to manage complex decisions. It provides a broad and intelligible approach to structuring the problem, quantifying the elements related to the objectives of the problem. It also helps in evaluating alternative solutions of the problem. AHP is used in various fields such as government, commerce, health, industry and education. It has been used in many decisions in the field of management, economy, energy, environmental, industry, transport, agriculture and military. AHP method as a decision making model based on flexibility of situations, it clarify the problems which have several potential solutions. AHP uses the expert method which is mathematical, it divides the main problem into sets of possibility and go to more detailed alternatives.

The decision by AHP method can be subdivided into three different levels i.e. hierarchy, priorities and consistency

Hierarchy: The hierarchy structure is designed for the decision process by consulting with the group of experts their criteria and alternatives. The tree structure is prepared.

Priorities: After sorting using literature review and experts comments their criteria's are finalized and establish in hierarchical structure at all levels of assessment, and also various alternatives or criteria of assessment are considered. The result is given by the weight in proportion to the scale of alternatives and criterions are examined using AHP.

Weight allocation: The correct determination of the individual sub-scales of assessment criteria is one of the key tasks in solving multi-criterial problems. It is therefore necessary to know the solved issue well and know the importance and impact of the criteria used to evaluate the result achieved

AHP is well-defined and structured process. It helps in dealing with both quantitative and qualitative techniques. AHP evaluates on set of criteria, it takes the final decision of selecting best alternative among all the alternatives taken for study. AHP methodology to attune the numeric scale for the measurement of quantitative as well as qualitative performances. The scale ranges from 1/9 for least valued than, to 1 for equal, and to 9 for absolutely more important than covering the entire spectrum of the comparison 9 as shown in table 2. Some key and basic steps involved in this methodology are (Saaty, 1980)

| Option | Numerical value(s) |
|---|--------------------|
| Equal | 1 |
| Marginally strong | 3 |
| Strong | 5 |
| Very strong | 7 |
| Extremely strong | 9 |
| Intermediate values to reflect fuzzy inputs | 2, 4, 6, 8 |
| Reflecting dominance of second alternative compared with the first | Reciprocals |

Table 2: Scale for quantitative comparison of parameters

The decision maker can express his preference between each pair of elements verbally as equally important, marginally strong, strongly, very strong, and extremely strong. These descriptive preferences would then be translated into numerical values 1, 3, 5, 7, 9, respectively, with 2, 4, 6 and 8 as intermediate values for comparisons between two successive qualitative judgments. Reciprocals of these values are used for the corresponding transposed judgments.

- 1. Problem definition statement.
- 2. Decide the Broaden categories or consider all actors that defined the categories objectives.
- 3. discuss the criteria that defines the broad categories.
- 4. Structure the problem in a hierarchy of different levels constituting goal, criteria, and alternatives.
- 5. Compare each element in the corresponding level and calibrate them on the numerical scale. This requires n(n 1)/2 comparisons, where n is the number of elements with the considerations that diagonal elements are equal or '1' and the other elements will simply be the reciprocals of the earlier comparisons.
- 6. Perform calculations to find the maximum Eigen value, consistency index CI, consistency ratio CR, and normalized values for each criteria/alternative.
- Where λ max is the maximum eigenvalue of the judgement matrix. This CI can be compared with that of a random matrix, RI. The ratio derived, CI/RI, is termed the consistency ratio, CR. Saaty suggests the value of CR should be less than 0.10.

$$CL = (\lambda_{max} - n)/(n-1)$$

| RI values | Ν | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|----------------------|----|------|------|------|------|------|------|------|------|------|
| Ri values | RI | 0.00 | 0.58 | 0.90 | 1.12 | 0.12 | 1.32 | 1.41 | 1.45 | 1.51 |
| Table -3 : RI values | | | | | | | | | | |

7. If the maximum Eigen value, CI, and CR are satisfactory then decision is taken based on the normalized values; else the procedure is repeated till these values lie in a desired range.

Proposed Framework

A user when access any e-governance websites / portals then three major categories are main reasons responsible for his/her selection of website. From literature review, features, static appearance and service quality are considered to be three broader categories for selection. Further, from past scholarly articles, it has been observed that it is one deciding factor for attracting and retaining customers for long term. Relevant Information, Content Quality, Query Handling and FAQ are responsible to evaluate features of any e-governance portals. The parameters outlook, user friendly, design and navigation responsible for Static Appearance of the portal. After discussing with experts and from literature, it is found that Accountability, Responsiveness, Accuracy and Security/ Privacy are important features under Service Quality. It is something which worked as order winner rather than order qualifier. Organizations usually give utmost preference to serve customers with best quality. These are the main parameters which should include under service quality as justified from past studies also.

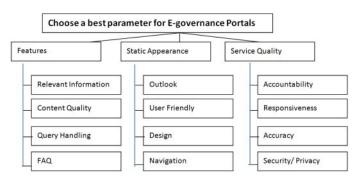


Fig 1. Proposed Framework for selection of best parameter for e-Governance Portals

Findings and Results

In this analysis, the identified parameter from literature under Features, Static Appearance and Service Quality category are prioritized by using AHP methodology as discussed in section 3. The data for the study is collected from 100 consumers. The findings of the evaluation by using AHP are shown in this section. In Table 4 the pairwise comparison matrix of three major categories required for selection of best e-Governance Portal is shown.

| | Features | Static Appearance | Service Quality | Weighted Sum |
|-------------------|----------|-------------------|--------------------|--------------|
| | 0.16 | 0.27 | 0.15 | 3.04 |
| Features | | | | |
| | 0.05 | 0.09 | 0.11 | 3.01 |
| Static Appearance | | | | |
| | 0.79 | 0.64 | 0.74 | 3.14 |
| Service Quality | | | | |
| | | | | 3.07 |
| | | | Lambda = | |

Table 4: Evaluation of weights for three main categories

CR is 0.057, which is acceptable. According to our findings by using AHP, Service Quality (3.14) is most important category for selection of e-commerce website. Service Quality is followed by Features (3.04) and then Static Appearance (3.01). The results are in lined with past studies. It can be easily validated from past studies and also looking at e-governance citizen centric trends, users give first preference as Service Quality then to Features and give last preference to Static Appearance of portals.

| Static Appearance | Outlook | User Friendly | Design | Navigation | Weighted Sum |
|----------------------|---------|---------------|--------|------------|-----------------|
| Outlook | 0.10 | 0.05 | 0.13 | 0.07 | 4.03 |
| User Friendly | 0.30 | 0.15 | 0.13 | 0.21 | 4.08 |
| Design | 0.50 | 0.75 | 0.66 | 0.64 | 4.29 |

CR is 0.096, which is acceptable. According to our findings by using AHP, Content Quality (4.45) is most important parameter for selection of e-Governance portal under Features category. As shown in table-5, Relevant Information, FAQ and Query Handling having weights 4.30, 4.20 and 4.09 respectively.

| Static Appearance | Outlook | User Friendly | Design | Navigation | Weighted Sum |
|----------------------|---------|---------------|--------|------------|-----------------|
| Outlook | 0.10 | 0.05 | 0.13 | 0.07 | 4.03 |
| User Friendly | 0.30 | 0.15 | 0.13 | 0.21 | 4.08 |
| Design | 0.50 | 0.75 | 0.66 | 0.64 | 4.29 |
| Navigation | 0.10 | 0.05 | 0.07 | 0.07 | 4.06 |

Table 6: Evaluation of weights for parameters under Outlook

CR is 0.043, which is acceptable According to our findings by using AHP, Design (4.29) is most important parameter for selection of e-commerce website under Static Appearance category. As shown in table -6, User Friendly, Navigation and Outlook having weights 4.08, 4.06 and 4.03 respectively.

| Service Quality | Accountability | Responsiveness | Accuracy | Security/ Privacy | Weighted Sum |
|----------------------|----------------|----------------|----------|----------------------|--------------|
| Accountability | 0.13 | 0.19 | 0.05 | 0.10 | 4.08 |
| Responsivenes | 0.38 | 0.58 | 0.75 | 0.50 | 4.66 |
| Accuracy | 0.38 | 0.12 | 0.15 | 0.30 | 4.20 |
| Security/ Privacy | 0.13 | 0.12 | 0.05 | 0.10 | 4.13 |
| | | | | Lambda = | 4.27 |

Table 7: Evaluation of parameters under Service

CR is 0.099, which is acceptable, according to our findings by using AHP, Responsiveness (4.66) is most important parameter for selection of e-commerce website under Service Quality category. As shown in table -7, Accuracy, Security/ Privacy and Accountabilityhaving weights 4.20, 4.20 and 4.08 respectively.

| Parameters | Local Weights | Weightage | Global Weights | Rank |
|----------------------|---------------|-----------|----------------|------|
| Responsiveness | 4.66 | 3.14 | 14.63 | 1 |
| Content Quality | 4.45 | 3.04 | 13.96 | 2 |
| Design | 4.29 | 3.01 | 13.48 | 3 |
| Relevant Information | 4.30 | 3.04 | 13.52 | 4 |
| Accuracy | 4.20 | 3.14 | 13.21 | 5 |
| FAQ | 4.20 | 3.04 | 13.19 | 6 |
| Security/ Privacy | 4.13 | 3.14 | 12.97 | 7 |
| User Friendly | 4.08 | 3.01 | 12.83 | 8 |
| Accountability | 4.08 | 3.14 | 12.81 | 9 |
| Navigation | 4.06 | 3.01 | 12.76 | 10 |
| Query Handling | 4.09 | 3.04 | 12.85 | 11 |
| Outlook | 4.03 | 3.01 | 12.65 | 12 |

Conclusion

Analytical Hieratical Process is a multidimensional criteria technique most convenient approach suitable for this study. The parameters accountable for selection of e-governance websites are identified through massive literature review. Based on experts' discussions, 12 parameters are finalized under three categories. Features, Static Appearance, Service Quality are the three broader categories which make impact on final decision of selection of e-governance website. The pairwise comparison matrices for all categories and parameters are generated on the basis of expert opinion. Then, by using AHP, the local and global weights for all parameters are calculated. Based on the results, Service Quality is found to be most important category among all. Responsiveness is found to be most important parameter considered while selecting egovernance website. Content Quality is second important criteria desired by users. Then users also give importance Design, Relevant Information, Accuracy and FAQ as well. Although the results discussed in table 8 reflects minor difference in average values. All the e-governance websites are doing well. The study is very useful for decision makers to plan and design their websites as per the ranking shown in results. This study can be extended by considering more categories and parameters.

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Impact of R&D Intensity on Market Capitalization

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Abstract

The present study is an attempt to assess the impact of Research & Development (R&D) intensity, profit margin and firm size on market valuation of firm proxied by Tobin's q with special reference to pharmaceutical sector. The pharmaceutical industry has been chosen due to intensive research and development expenditures. There are many pharmaceutical companies listed on the BSE and NSE but 25 companies have been chosen at random and analyzed for a period of 10 years from 2005 to 2014 through regression technique. Theoretically, it sounds true that when a company invests in R&D, it increases the probability of innovation and thereby improved growth prospects which reflects in the market capitalization. An attempt has been made to test this hypothesis and much to our surprise, this assumption does not hold true in case of pharmaceutical sector.

Keywords: R&D intensity, Tobin's q, Market capitalization

Introduction

TJoseph Schumpeter has mentioned in his famous book, Capitalism, Socialism and Democracy, that "the fundamental impulse that sets and keeps the capitalistic engine in motion comes from the new consumers' goods, the new methods of production or transportation, the new markets, the new forms of industrial organization that capitalist enterprise creates." (Schumpeter, 1942, p. 83). As per Schumpeter, a firm can grow in a capitalistic economy only if it is innovative and competitive. Innovation in an organization is said to take place when it is able to supply better quality goods and services at lower prices than their competitors. Thus, with innovation comes efficient utilization of nation's resources which further leads to accelerated growth of the firm and economy. Thus, innovation is not only fruitful for the firms but for the consumers as well.

There are broadly two kinds of innovations which takes place in a firm, i.e., product innovation and process innovation. Research & Development activity helps a firm in doing Product innovation, i.e., enhancing its ability to learn new technologies which helps in creating new products and solutions designed to

satisfy customer needs that cannot be not easily imitated by competitors and hence gain competitive advantages. Thus, R&D activity gives an added advantage over its competitors by bringing innovative products to the market. Another form of innovation is Process Innovation which leads to innovation in the way that they produce goods. R&D helps in developing effective ways of producing goods, thereby minimizing the production costs which leads to larger market share and higher profitability (Xu and Zhang, 2004). The focus of this paper will be on product innovation within the pharmaceutical industry. Investment in R&D generates uncertain rewards and takes long time. Moreover, sometimes the investment in R&D may not even lead to fruitful conclusion and all financial resources may be a complete wastage. R&D results belong to future which leads to higher volatility in firm value. The companies which undertake R&D are indeed patient and risk takers. Pioneering firms invest more in R&D practices to establish its competitive position.

Theoretically it is said that as a firm spends more on R&D, it increases the probability of new drug discovery, which will lead to growth of the firm. Growth in the firm takes place when there

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is higher sales, higher profits and thereby increased shareholder value. This study attempts to analyze empirically whether high R&D Intensity leads to higher Share Price.

Many research studies have already been conducted in the past to study the impact of innovation on growth of the firm. A very common way to assess this relationship is by examining performance of those industries that specialize in innovation. If it is true that innovation does lead to growth, then those firms who invest in R&D and innovate should grow at a faster speed than those who do not innovate. In the present study, an attempt has been made to study whether innovative firms in the pharmaceutical sector are able to increase their shareholders wealth, i.e., increase the market capitalization.

The pharmaceutical industry has been chosen due to intensive R&D expenditures. Moreover, drug discovery not only requires a very high rate of innovation, but also the cost of innovating new medicine is extremely high. Thus, it will be fascinating to see if R&D intensity increases the market capitalization and shareholder's wealth in case of pharmaceutical industry.

When firms in pharmaceutical industry innovate, they receive patents for their innovation, which entitles them with a temporary monopoly over the market, leading to excess profits. These excess profits raise the market value of the firm. A positive relationship between R&D intensity and market capitalization in our analysis will support Schumpeter's view that innovation is a driving force of a capitalistic economy.

There is a large and increasing demand for innovation in the pharmaceutical industry because of new varieties of diseases that are being faced by the world today. The estimated costs of discovering, developing, and launching a new drug now exceeds 2.5 billion dollars in 2014 (Mullin, R. (2014)). With this high amount of spending and such a dire need for product innovation, the pharmaceutical industry appeared to be a viable selection for the present study.

As mentioned earlier, the present study will assess the impact of R&D intensity, firm size and profit margin on market capitalization as proxied by Tobin's q, with special reference to pharmaceutical sector. An attempt has been made to empirically analyze 25 companies in the pharmaceutical sector listed on both Bombay Stock Exchange and National Stock Exchange listed. The data has been collected for a number of variables on yearly basis, for the period 2005 to 2014, and processed using the regression technique.

Literature Review

R&D necessitates heavy investment outlay, and therefore the firms often wonder, whether the massive R&D expenditures

lead to positive results, in terms of increased market capitalisation. Many researches have been conducted in this area. Several studies show that there is positive and significant relationship between R&D intensity and market capitalisation. On the other hand some studies show that the investment in R& D is not helpful in increasing the market capitalization because of huge time gap between investment and its impact on market capitalization. The increase in market capitalization can be due to multitude of reasons.

Ben-Zion (1978) was the first one who studied the relationship between market value, R&D and advertising capital. He developed a model in which market value was influenced by advertising capital and lagged values of R&D. He showed a positive and significant relationship between market value, profitability and R&D. Many researchers have studied the relationship between market capitalization and R& D by applying Tobin's q models. Hall (1993), Hirschey and Weygandt (1985) and Cockburn and Griliches (1988) applied Tobin's q models and found positive influence of R&D on market value. Hirschey (1982) and Chauvin and Hirschey (1993) used market valuation approaches with similar results. Finally, Bublitz and Ettredge (1989) followed a different approach and used a model that surveyed market reaction. They identified that on an average, the market assesses advertising as short-lived whereas R&D is long-lived. Ballardini et al. (2005) calculated an average coefficient of 0.96 for R&D capital in their meta-study. The results showed that R&D has a robust and positive influence on market valuation. The ideal coefficient is close to 1, i.e., investment in R&D generates as much enterprise value as it costs in the first place. Chung et al. (2003) examined the association between R&D expenditure and the market value of firms for US for the period of 1991–1995. The results showed a positive relationship between R&D expenditure and market value measured by Tobin's q. Munari and Oriani (2002) examined the same relationship using a hedonic model over the period 1982 to 1997 for six different Eastern European countries. They used OLS regression and showed a positive and significant impact of R&D investment on Tobin's q, but for privatized firms, the coefficient is statistically insignificant.

A major portion of the literature validates that the investment in R&D contributes positively to the enterprise value. But, there are substantial variations between the findings on the extent of the influence. The results have shown the variation at regional and industry level also. Hall and Oriani (2006) examined 2,156 companies of U.S and Europe for the period 1989 to 1998. They concluded positively but with low coefficient of 0.3 for R&D capital in France and Germany and 0.8 in the UK. These figures suggest overinvestment in R&D.

Anne Cazavan-Jeny and Thomas Jeanjean(2006) tested the 197 French firms between 1993 and 2002 to value relevance of R&D reporting. They found that capitalized R&D is negatively associated with returns and stock prices. This negative coefficient on capitalized R&D implies that investors are concerned with and react negatively to capitalization of R&D.

Duqi and Torlucci (2010) took a sample of 416 European firms over the years 2001 to 2007 and found in their study that R&D had a negative effect in Italy and excessively large influence on market value in the UK, Germany, France and Sweden. Jaruzelski et al. (2005) shared a more cynical view on the relationship. They found no statistical relationship between R&D intensity and a series of corporate performance indicators such as sales growth, profits, market capitalisation or yield.

Variable Specification

Market capitalization is the aggregate valuation of the company based on its current share price and the total number of outstanding stocks. It is calculated by multiplying the current market price of the company's share with the total outstanding shares of the company. Market capitalization represents the public consensus on the value of a company's equity. Tobin's q has been calculated using market capitalization divided by total assets.

Innovative firms maintain their competitive position by minimizing their production costs through the active R&D practices. R&D activity escorts the firm towards new products, product design and production process. It gives the ample opportunity to firm to enter in new market or minimize production costs. The R&D investment of a firm generate some intangible assets which facilitate to speed up future cash flows. Increasing cash flows assist and therefore rise the market value of firm. R&D may be perceived as an asset in the financial markets in that it can generate future profits; however, it is expensed in the current period. The theoretical argument of the previous literatures indicates that R&D investments of a firm contributes to future profits by generating intangible capitals that is evaluated by the stock market. R&D Intensity means R&D Expenditure as a percentage of Net Sales.

Profit Margin is Profit after tax (PAT) as a percentage of Net Sales. PAT is the profitability of the firm which is distributable in nature . PAT has an impact on market capitalization, as, the greater the firm's profitability, the greater the distributable earnings available for shareholders which in turn, increases the firm's value. (Haugen and Baker (1996)

Data Collection

The data has been collected for a period of 10 years from 2005 to 2014 for randomly selected 25 pharmaceutical companies listed on the BSE and NSE using Capitaline software. The data has been collected for the mentioned variables: Market Capitalization, R&D Expenditure, Net Sales, Total Assets and Profitability.

Data Analysis

For determining the impact of firm size, R&D intensity and profit margin on the market capitalization, the technique of multiple regression has been used. The dependent variable is Tobin's q as a proxy for market capitalization and the deterministic variables are firm size, R&D intensity and profit margin. The descriptive statistics for the mentioned four variables are shown in Table 1.

| | Mean | Std. Deviation | N |
|----------------|-----------|----------------|-----|
| Tobin's q | 2.767771 | 2.0678454 | 250 |
| Profit Margin | 20.852129 | 99.9832387 | 250 |
| Size | 6.936960 | 1.0213842 | 250 |
| R& D Intensity | 5.462498 | 5.1934851 | 250 |

The Standard Deviation of size indicates that the companies are more or less of the same size. Moreover, they are spending similar amounts on R&D as a percentage of their respective sales revenue as reflected by the standard deviation which is equivalent to the mean. The standard deviation of profit margin is very high as it is evident from the Table 1. This implies that though the firms are of similar size and spend similar amount of money on R&D activities, the variation in profit margin is very high. It means that the profitability of companies in pharmaceutical industry depend on various other factors and not just R&D intensity. This is because there is a long time gap between the R&D investment and its positive output.

The following table shows the correlation among the variables under consideration.

| | | Tobin's q | Profit Margin | Size | R&D Intensity |
|--------------------|---------------|-----------|---------------|-------|---------------|
| | Tobin's q | 1 | -0.01 | 0.276 | 0.148 |
| Pearson | Profit Margin | -0.01 | 1 | 0.005 | -0.029 |
| Correlation | Size | 0.276 | 0.005 | 1 | -0.05 |
| | R&D Intensity | 0.148 | -0.029 | -0.05 | 1 |
| | Tobin's q | - | .437 | 0 | 0.01 |
| c: (4 , 1 , 1 , 1) | Profit Margin | .437 | - | .467 | .322 |
| Sig. (1-tailed) | Size | 0 | .467 | - | .214 |
| | R&D Intensity | .01 | .322 | .214 | - |

Table 2: Correlations

As it is evident from the Table 2, the correlation between the mentioned variables is very low and insignificant.

In order to see the impact of firm's size (measured by Log Sales)on market capitalization as proxied by Tobin's q, the following regression equation was used.

Tobin's $q = \alpha + \beta$. Log Sales + eit (1)

The R2 was 7.2% and significant as F statistic was 0. For every 1 unit change in Log sales, there is 0.55 unit change in Tobin's q.

In order to see the impact of R&D Intensity on market capitalization as proxied by Tobin's q, the following regression equation was used.

Tobin's $q = \alpha + \beta$. R&D Intensity + eit (2)

The R2 was 1.8% and significant at 5% as F statistic was 0.019. For every 1 unit change in R&D Intensity, there is 0.058 unit change in Tobin's q.

In order to see the impact of both firm's size(measured by Log Sales) and R&D Intensity on market capitalization as proxied by Tobin's q, the following regression equation was used.

Tobin's
$$q = \alpha + \beta 1 \text{ Log Sales} + \beta 2 \text{ R&D Intensity} + \text{eit}$$
 (3)

The R2 was 9.5% and significant as F statistic was 0. For every 1 unit change in Log Sales, there is 0.574 unit change in Tobin's q. For every 1 unit change in R&D Intensity, there is 0.064 unit change in Tobin's q.

To see the impact of profit margin, size and R&D intensity on market capitalization, we run multiple regression by taking Tobin's q as a dependent variable. The following regression has been used:

Tobin's q = α + β 1 Profit Margin + β 2 Log Sales + β 3 R&D Intensity + eit. (4)

| R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|------|----------|----------------------|-------------------------------|---------------|
| .320 | .102 | .091 | 1.9710362 | .576 |

Table 3: Regression Results

The results obtained after running the regression on SPSS are summarized in Table 3. In order to test auto correlation, DW test has been used. The DW statistic is 0.576 which indicates positive auto correlation which may be due to the fact that the data is time series. The coefficient of determination, R2, is 10.2% this indicate that profit margin, size and R&D intensity influence the Tobin's q to the extent of 10%. The F test results show that the model is fit as the F test result is significant as per Table 4.

| Model | Sum of Squares | d.f. | Mean Square | F | Sig. |
|------------|----------------|------|-------------|-------|------|
| Regression | 109.014 | 3 | 36.338 | 9.353 | .000 |
| Residual | 955.706 | 246 | 3.885 | | |
| Total | 1064.720 | 249 | | | |

| Table | 4: Anova | |
|-------|----------|--|
|-------|----------|--|

| Model | Unstandardized Coefficients | | Standardized Coefficients | т | Sig. | Collinea Statist | • |
|---------------|--------------------------------|------------|------------------------------|--------|------|---------------------|-------|
| | В | Std. Error | Beta | | | Tolerance | VIF |
| (Constant) | -1.569 | .875 | | -1.793 | .074 | | |
| Profit Margin | .000 | .001 | 007 | 113 | .910 | .999 | 1.001 |
| Size | .575 | .122 | .284 | 4.694 | .000 | .997 | 1.003 |
| R&D Intensity | .065 | .024 | .162 | 2.682 | .008 | .997 | 1.003 |

Table 5: Coefficients

As per Table 5, the coefficient of profit margin is 0 which shows that the one unit change in profit margin will have no impact on Tobin's q. But the results are insignificant indicating that such relationship is dubious. The Variance Inflation Factor (VIF) test has been used to test the multi-collinearity between the variables. The VIF factor for profit margin is 1.001, which indicates that multi-collinearity is absent.

The coefficient of firm's size is 0.575 which indicates that for 1% change in firm size, there will be 0.575% change in Tobin's q. The VIF factor for firm size is 1.003 which indicates no multi-collinearity with the other two variables.

The coefficient of R&D Intensity is 0.065 which shows that for one unit change in R&D Intensity, there will be 0.065 unit change in Tobin's q. Also, the VIF factor for R&D Intensity is 1.003, indicating no multi-collinearity with the other two.

Conclusion

The present study shows that R2 is 10%. This leads to the conclusion that in pharmaceutical industry, R&D intensity, size and profit margin collectively influence the market capitalization as proxied by Tobin's q, to the extent of 10%. The descriptive results shows that the companies which are included in data are of similar size and they spend almost similar amount on research and development activities but the profitability spread is very high. The impact of R&D intensity, as the only independent variable, on Tobin's q is only to the extent of 1.8%. This means that expenditure in R&D activity is a necessity for pharmaceutical companies in spite of the fact that it has almost no impact on the market capitalisation. It may be possible that R&D intensity will have more impact on market capitalisation in case of manufacturing or FMCG industries. The impact of firm's size, as the only independent variable, on Tobin's q is to the extent of 7.2%. Collectively the impact of firm's size and profitability on Tobin's q is 9.5%.

When the impact of all the independent variables in the present study was analysed on Tobin's q using the technique of multiple regression, it was found that the impact is 9.14%. The multicollinearity among the variables is tested by using VIF. The result shows that there is no multi-co linearity between the variables. DW test showed positive autocorrelation which may be due to presence of time series data. Thus, it can be concluded that the R&D intensity has positive but little impact on market capitalization as proxied by Tobin's q in the Pharmaceutical Industry.

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Appendix

| S No. | Name of the Company |
|-------|---------------------|
| 1 | Aarti Drugs |
| 2 | Ajanta Pharma |
| 3 | Aurobindo Pharma |
| 4 | Cadila |
| 5 | Cipla |
| 6 | Divis |
| 7 | Dr Reddy Labs |
| 8 | FDC |
| 9 | Glenmark |
| 10 | GSK Pharma |
| 11 | Hikal Ltd |
| 12 | Indoco |
| 13 | IPCA |
| 14 | J B Chemicals |
| 15 | Jubilant |
| 16 | Lupin |
| 17 | Natco Pharma |
| 18 | Novartis |
| 19 | Piramal Enterprises |
| 20 | Sanofi India |
| 21 | Shasun Pharma |
| 22 | Sun Pharma |
| 23 | Suven Life Sciences |
| 24 | Unichem |
| 25 | Torrent |

Analysis of Customer Brand Preferences among Indian Paint Companies using Analytic Hierarchy Process

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Abstract

India is the second largest consumer of paint in Asia. The Indian paint industry consists of two segments, namely the decorative segment, which basically caters to the housing sector and the industrial segment, catering to the automobile, marine, and other manufacturing industries. The objective of the research was to examine customer brand preferences among Indian paint companies. The analytic hierarchy process has been used for this purpose. Based on the literature, the four major criteria considered by customers in selecting a paint brand include price, quality, durability, and variety, and the same were used for both segments to test. The results of the study suggest that for decorative paints, durability is the important factor, followed by price, and lastly variety.

Introduction

India is the second largest consumer of paint in Asia. In 2015, the Indian paint industry was valued at US\$ 6.1 billion, and growing at a CAGR of about 15% per annum by volume. In the same period, the global paint market was valued at US\$ 132.3 billion, with the combined global sales of the top three companies exceeding US\$ 10.0 billion.

The Indian paint industry consists of two segments, namely the decorative segment, which basically caters to the housing sector and which accounts for 73% of the total demand for paints; and the industrial segment, catering to the automobile, marine, and other manufacturing industries and which accounts for the remaining 27%.

The decorative segment is subdivided into the premium subsegment (high-end acrylic emulsions), catering mainly to metros and large cities; the medium segment (enamel paints), catering to smaller cities; and the distemper segment (low-end paints), catering to semi-urban and rural areas. Most paint companies in India offer all three categories of paints: premium, medium, and economy. Most of the revenue for the manufacturers is from premium category paints. The organized players contribute to about 65% of the total industry value, while the unorganized players contribute to about 35% of the total industry value. The distemper segment in particular is dominated by the unorganized sector.

The major products in the decorative segment include exterior wall paints, interior wall paints, emulsions, varnishes, distemper, wood finish, metal finish, and specialised paints (such as weather protection paints and non-toxic paints). The major products in the industrial segment include powder coatings, surface coatings, floor coatings, high performance coatings, and specialised coatings (such as thermo-protective, rust protective, and non-combustible coatings).

The strength of the Indian paint industry lies in its established manufacturing networks and strong marketing and distribution networks. The typical cost structure of paint companies comprises raw materials (56%), employee costs (22%), and selling & administration expenses (22%). Demand for

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decorative paints is significant in the festive season (Sept-Dec) as compared to other periods. While the major demand thrust has come from the decorative segment, the industrial paints segment is also set to witness higher growth, with the Modi government promoting the 'Make in India' campaign, which will bolster domestic manufacturing and industrialisation. Within the industrial segment, the automotive sector accounts for 66.67% of the market, while the remaining consists of white goods, electronic products, and so on. The increased demand for two-wheelers and four-wheelers will also translate into growth for the industrial paints segment.

As of Dec' 2015, the top five players in the Indian paint industry are: Asian Paints (54.1%), Berger Paints (17.5%), Kansai Nerolac (15.4%), Akzo Nobel (10.9%), and Shalimar Paints (2.1%). Thus, the market can be considered to be highly concentrated, i.e. a small number of players dominate the market. Asian Paints is the market leader in the decorative paints segment. The market share of the organized sector is continuously improving as consumer preference is shifting towards better products offered by the leading brands. Berger Paints and Mysore Paints are the market leaders in the industrial paints segment.

Macro-environmental Factors

Among the political factors affecting the paint industry is the reduction in the excise and custom duties, which helps in importing better quality of raw material and in exporting of finished goods. Another crucial factor is the relaxation in FDI for the industry, attracting foreign players to invest in the Indian market by acquiring existing Indian companies. Kansai Paints of Japan entered the Indian market by acquiring Nerolac. Akzo Nobel, the world's largest paint company, entered the Indian market by acquiring ICI Paints (now Akzo Nobel India).

There are several socio-economic factors affecting the paint industry. There has been a continual increase in per capita income and real purchasing power of the neo-middle class, an increase in urbanisation and a trend in nuclearisation of families, along with an increase in education and awareness levels (Swar, 2007). This has led to a shift in preference from cheaper paints to more expensive, branded paints, resulting in growth and improved profitability for the industry.

The industry uses state-of-the-art technology, equivalent to that employed internationally. Paint companies set aside a portion of their income for research and development, introducing new and improved varieties of paints such as waterproof paints, Teflon coatings, ultra-thin colour coats, oil roll-off coats, anti-ultraviolet coats, all-weather guard, and so on. Other technological improvements include marble finish, paints that cool room temperature, and stencils. However, the excessive chemicals in paint lead to pollution, so the industry is subject to stringent pollution control regulations. The industry is currently in the process of adopting lead-free paints and water-based technologies which are eco-friendly and use lowvolatile organic/nano-compounds which are less harmful for health.

Competitive Analysis (Porter's Five Force Model)

The threat of new entrants is low, as the paint industry is highly capital-intensive, and subject to stringent norms. Nevertheless, there is scope for entry of established foreign players, particularly with the easing of FDI norms and encouraging the 'Make in India' campaign.

The overall bargaining power of suppliers is moderate/high. In particular, one of the most important raw materials required in paint is titanium dioxide, the supply of which is highly limited globally.

The overall bargaining power of buyers is moderate. Demand for decorative paints depends mainly on the housing and realty sector, whereas demand for industrial paints depends on industries like automotive, engineering, and customer durables. Also, dealers perform a pivotal role as an interface between the consumers and the manufacturers, and the success of the manufacturer depends largely on dealer support (Jha, 2008).

The threat of substitutes is low/moderate, as there are not many substitutes for paints. In rural areas lime wash is conventionally used as a substitute for paints. An alternative option for decorative paints available today is wallpaper, but this is used for interior decoration, and has not gained much in popularity in the Indian market.

The degree of competitive rivalry in the industry is high, even though the market is highly dominated by the top four/five players. Paints companies have to act aggressively and efficiently to stay abreast in this highly competitive market. The key to success in this market lies in building a strong brand image through aggressive marketing strategies and gaining customer loyalties (Pandey, 2009).

A majority of customers tend to repaint their houses once in four to five years, and usually on occasions, such as during the Deepavali festival season, or during a marriage function. Thus, paint companies can introduce offers to induce customers to repaint their houses within three years, and provide off-season discounts to smoothen demand.

The paint industry needs to come up with more innovative ideas for the decorative segment to attract more customers to the premium segment. This is being done by offering new combinations of paints to customers to give an exclusive ambience for houses, to give customers pleasure and change their mood, to fascinate customers with artistic designs, and to beautify their homes. Mishra (2007) suggested that consumers look for new solutions for their painting needs, as well as valuefor-money. Paint manufacturers have to be very creative in the way they package and sell their paints. This market, like other markets, is moving towards being service-oriented rather than just being product-oriented. Companies need to sell more than just paint to furnish in this market. Companies have to understand their consumers' needs and preferences; and package products accordingly. Companies who do so promptly and efficiently are sure to see success in this market. With the present technology various companies have been trying to develop various colours with a long-lasting coating and freshness.

Paint markets in Asia are dominated by multinationals and a few large local companies. These companies are now looking to expand in the region, and many large companies are turning to unexplored markets, as they are showing tremendous growth potential for the paint industry.

Methodology

The objective of the study is to examine customer brand preferences among Indian paint companies. The analytic hierarchy process has been used for this purpose.

The analytic hierarchy process (AHP) is a structured way of organizing and analysing complex decisions. AHP works through pairwise comparison matrices and weighted averaging. The first step is that of defining the problem and stating the goal. The second step is that of defining the criteria or factors that influence the goal. The third step is that of performing paired comparisons between the criteria, and between the alternatives under each of the criteria. The weightage for each of the criteria and for each alternative under each of the criteria are obtained from the pairwise comparison matrices. The fourth and final step is that of synthesising the weightages of the alternatives, selecting the alternative with best weighted average (Saaty and Forman, 1992; Saaty, 2008).

According to Pandey (2009), quality and durability are the main attributes influencing customer choice of paint brands. Gangopadhyay et al (2013) further identified variety and promotional offers as relevant attributes affecting customer choice of paint brands. Thus, four characteristics were taken for the comparison of paint companies using AHP analysis: price of the paint (x1), durability of the paint (x2), quality of the paint (x3), and the variety or range of shades/colours available (x4).

For convenience of comparison, the companies were classified into the decorative paints segment and the industrial paints segment. The decorative and industrial segments were analysed separately, as customer preferences would be affected by the purpose of application of the paint. In the decorative paint segment, the major players taken for the analysis were Asian Paints (y1), Berger Paints (y2), Kansai Nerolac (y3), and Akzo Nobel (y4). In the industrial paints segment, the major players taken for the analysis were GNP Madras (z1), DIC Coatings (z2), Mysore Paints (z3), and PSL Corrosion (z4).

Analysis & Interpretation

The analysis for the decorative segment is presented below. The pairwise comparison matrix for the criteria is presented in Table 1 below. The resulting weightage for each of the criteria is presented in Table 2.

| | x ₁ | x ₂ | X ₃ | x ₄ |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| x ₁ | 1 | 1/5 | 1/9 | 5 |
| x ₂ | 5 | 1 | 1 | 6 |
| X ₃ | 9 | 1 | 1 | 9 |
| x ₄ | 1/5 | 1/6 | 1/9 | 1 |

 Table 1: Pairwise comparison matrix for the criteria (Decorative Segment)

| | weightage |
|------------|-----------|
| price | 0.109598 |
| durability | 0.371799 |
| quality | 0.473303 |
| variety | 0.045300 |

Table 2: criteria weightage (decorative segment)

The weightages resulting from the pairwise comparison of criteria indicate that quality is given the highest level of importance, followed closely by durability, price, and variety. This finding is consistent with those of Pandey (2009).

The pairwise comparison matrices for the selected paint companies in the decorative segment under each of the criteria are presented in Tables 3-6 below:

| | y 1 | y ₂ | y ₃ | y 4 | |
|--|---|---|---|-------------------------------------|----------------|
| У1 | 1 | 7 | 1/5 | 1/3 | |
| У2 | 1/7 | 1 | 1/5 | 7 | |
| Уз | 5 | 5 | 1 | 8 | |
| y 4 | 3 | 1/7 | 1/8 | 1 | |
| Table 3: | pairw | ise cor | nparis | on ma | trix for price |
| | | rative s | | | |
| | y 1 | Y ₂ | Y ₃ | y 4 | |
| Y 1 | 1 | 5 | 7 | 8 |] |
| y ₂ | 1/5 | 1 | 6 | 7 | |
| у_ У3 | 1/7 | 1/6 | 1 | 6 | |
| y 4 | 1/8 | 1/7 | 1/6 | 1 | |
| Table 4: pairwise comparison matrix for durability (decorative segment) | | | | | |
| | y 1 | y ₂ | y 3 | Y 4 | |
| y ₁ | 1 | 8 | 9 | 9 | |
| y ₂ | 1/8 | 1 | 6 | 7 | |
| Уз | 1/9 | 1/6 | 1 | 5 | |
| y ₄ | 1/9 | | | | |
| 74 | 1/5 | 1/7 | 1/5 | 1 | |
| | airwise | | arison | matri | x for quality |
| | airwise | comp | arison | matri | x for quality |
| | airwise (decor | comp ative s | arison | matri nt) | x for quality |
| Table 5: p | airwise (decor y ₁ | comp rative s y ₂ | arison segme y₃ | matri nt) y₄ | x for quality |
| Table 5: p | airwise (decor y ₁ 1 | comp rative s y ₂ 7 | arison segme y ₃ 9 | matri nt) y ₄ 9 | x for quality |
| Table 5: р. У1 У2 | airwise (decor y ₁ 1 1/7 | comp ative s y ₂ 7 1 | arison segme <u>y</u> 3 9 7 | matri nt) y₄ 9 7 | x for quality |

| | | - | | | |
|----------------|----------|------------|----------|----------|-----------|
| | price | durability | quality | variety | AHP score |
| Asian Paints | 0.198385 | 0.582868 | 0.641562 | 0.619346 | 0.570162 |
| Berger Paints | 0.162858 | 0.259114 | 0.222188 | 0.231335 | 0.229829 |
| Kansai Nerolac | 0.518211 | 0.116764 | 0.097345 | 0.112159 | 0.151362 |
| Akzo Nobel | 0.120547 | 0.041255 | 0.038905 | 0.037159 | 0.048647 |

The scores for each of the companies under each of the criteria and the overall AHP scores are presented in Table 7 below.

Table 7: criteria scores and overall AHP scores

In the decorative segment, Asian Paints was found to dominate under each of the criteria, except for price. Kansai Nerolac was found to dominate in terms of price. Overall, however, Asian Paints was found to be the most preferred brand, followed by Berger Paints, Kansai Nerolac, and finally Akzo Nobel.

The analysis for the industrial segment is presented below. The pairwise comparison matrix for the criteria is presented in Table 8 below. The resulting weightage for each of the criteria is presented in Table 9.

| x ₁ | 1 | 2 | 1/6 | 5 |
|-----------------------|-----|-----|-----|---|
| x ₂ | 1/2 | 1 | 1/7 | 3 |
| x ₃ | 6 | 7 | 1 | 9 |
| X ₄ | 1/5 | 1/3 | 1/9 | 1 |

 Table 8:
 pairwise comparison matrix for the criteria (industrial segment)

| | weightage |
|------------|-----------|
| price | 0.179629 |
| durability | 0.107234 |
| quality | 0.665138 |
| variety | 0.048000 |

Table 9:criteria weightages
(industrial segment)

The weightages resulting from the pairwise comparison of criteria indicate that quality is given the highest level of importance, followed by price, durability, and variety.

The pairwise comparison matrices for the selected paint companies in the industrial segment under each of the criteria are presented in Tables 10-13 below:

| | Z1 | Z ₂ | Z ₃ | Z4 |
|----------------|-----|----------------|----------------|----|
| z_1 | 1 | 1/6 | 1/7 | 7 |
| z ₂ | 6 | 1 | 1/7 | 7 |
| Z ₃ | 7 | 7 | 1 | 8 |
| z ₄ | 1/7 | 1/7 | 1/8 | 1 |
| | | | | |

| Table 10: | pairwise comparison matrix for pric (industrial segment) | | | | | | |
|----------------|---|----------------|----------------|------------|--|--|--|
| | z_1 | Z ₂ | Z ₃ | Z 4 | | | |
| Z ₁ | 1 | 1/5 | 1/7 | 1/5 | | | |

| | · · · | | | | |
|----------------|-------|-----|-----|---|--|
| z ₄ | 5 | 1/7 | 1/8 | 1 | |
| Z ₃ | 7 | 7 | 1 | 8 | |
| Z ₂ | 5 | 1 | 1/7 | 7 | |

 Table 11:
 pairwise comparison matrix for durability (industrial segment)

| | z_1 | Z ₂ | Z ₃ | Z4 |
|----------------|-------|----------------|----------------|-----|
| z ₁ | 1 | 5 | 1/7 | 1/5 |
| z ₂ | 1/5 | 1 | 1/7 | 1/5 |
| z ₃ | 7 | 7 | 1 | 7 |
| Z4 | 5 | 5 | 1/7 | 1 |

 Table 12:
 pairwise comparison matrix for quality (industrial segment)

| | z_1 | Z ₂ | Z ₃ | Z ₄ |
|----------------|-------|----------------|----------------|----------------|
| z_1 | 1 | 1/7 | 1/8 | 1/5 |
| Z ₂ | 7 | 1 | 1/8 | 5 |
| Z ₃ | 8 | 8 | 1 | 7 |
| Z4 | 5 | 1/5 | 1/7 | 1 |

 Table 13:
 pairwise comparison matrix for variety (industrial segment)

The scores for each of the companies under each of the criteria and the overall AHP scores are presented in Table 14 below:

| | price | durability | quality | variety | AHP score |
|---------------|----------|------------|----------|----------|-----------|
| GNP Madras | 0.124095 | 0.048285 | 0.119336 | 0.041951 | 0.108857 |
| DIC Coatings | 0.237550 | 0.232751 | 0.048629 | 0.227225 | 0.110881 |
| Mysore Paints | 0.598511 | 0.607654 | 0.613131 | 0.621368 | 0.610313 |
| PSL Corrosion | 0.039845 | 0.111309 | 0.218903 | 0.109456 | 0.169948 |

 Table 14:
 criteria scores and overall AHP scores

In the industrial segment, Mysore Paints was found to dominate under each of the criteria; while DIC Coatings was ranked second according to price, durability, and variety, PSL Corrosion was ranked second in terms of quality. Overall, Mysore Paints was found to be the most preferred brand, followed by PSL Corrosion, DIC Coatings, and finally GNP Madras.

Discussion

The study has applied the analytic hierarchy process to examine customer brand preferences among Indian paint companies. The decorative and industrial segments were analysed separately, as customer preferences would be affected by the purpose of application of the paint. Based on the literature, the four major criteria considered by customers in selecting a paint brand include price, quality, durability, and variety, and the same were used for both segments.

The results of the study suggest that the crucial factor when selecting decorative and industrial paint brands is that of quality. For decorative paints, durability is the next important factor, followed by price, and lastly variety. Thus, customers are willing to pay more for decorative paints that are of better quality and that will last longer. This is why innovative and hightech decorative paints are increasingly in demand and are able to command a premium price. This has lead to increased brand differentiation, and growth in the market share of the organised sector in the decorative segment.

However, for industrial paints, price is the next important factor, followed by durability, and lastly variety. This suggests that cost

is a much more important factor for the industrial segment, as manufacturing supply chains are continuously looking for ways to reduce manufacturing costs.

Asian Paints is the market leader in the decorative segment, and it was found to dominate over the competitors in terms of quality, durability, and variety, and Berger Paints was the follower under the same criteria, while Kansai Nerolac dominated in terms of price. These three brands are the closest competitors in the segment. There is stiff competition between the three players, mainly through price/discounts and product innovation.

Mysore Paints is the market leader in the industrial segment, and it was found to dominate over the competitors under all the criteria. The competition in this segment is for the follower position, with DIC Coatings as the follower in terms of price, durability, and variety, while PSL Corrosion was the follower in terms of quality. There is stiff competition between the three followers, mainly through quality and price/discounts.

There are some limitations inherent in the study. Only a small number of brands were selected for the study, so that the results may not reflect the entire industry. Also, the study is based on qualitative data, and is thus somewhat subjective in nature and may not be generalisable. Further, there is scope to extend the study by considering secondary level criteria for each of the primary level criteria. This would yield a more understanding of the competitive forces in the industry.

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Application of Goal Programming inMedical Management

Dr.Abha Dave*

Abstract

Significant advances in the field of medical care management are observed in the recent years. The theory of goal programming (GP) can be used as an effective tool, particularly in the area of intelligent modeling and solution analysis. This paper studies a goal programming model for maximizing the profit of the hospital by determining maximum distribution of resources to patients.

Keywords: Goal programming, hospital, patients, resources, profit

Introduction

Hospitals always face problems regarding the balance of manpower and the available resources, since the number of patients and their time of arrival is always unpredictable. The cost of equipment's is increasing day-by-day and new researches lead to replacing the old ones, add to the difficulties. The resources need to be planned and allocated efficiently. In order to achieve all these the operation research can play an important part. The technique of goal programming can be a useful tool to develop and plan the resources

An extension of GP model for problems of multipleconflicting objectives was developed by Charnes and Copper^[1]. They developed the powerful tool of Goal Programming, which draws upon the highly developed and tested techniques of Linear Programming in order to optimize several diversified goals. Goal programming is used to form the model for the problem and the problem is solved in different context. There is a large scope of goal programming in several other fields like human resource, finance, agriculture management, hospital administration, resource allocation etc. A GP model for a

number of contradictory goals in natural resource allotment for management's decision problems. was given by Kenneth et al^[2]. It was found that GP was a very flexible decision aiding tool to handle problems of linear programming with multiple goal preferences. Integer Goal Programming was applied by Fortenberry and Mitry^[3],to facility location problem with multiple conflicting goals.J.K.Sharma and Ravindra Babu Ghanta [4] determined the optimum sequence for treatment of surgical patients for maximizing total contribution to profit. Management of agricultural resources using goal programming has been studied by Dave^[4].

Operational Research finds its application in the various fields of medical care administration and development. OR has the ability to transform complex real world problems into mathematical models. These models can then be optimized and analyzed. These models relate to cost effectiveness and guidelines in public health, medical decision-making, treatment, developmentand design, resource allocation and utilization etc. for the hospital system.

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In this paper we have used and developed the Goal programming model in order to optimize the combination of surgical patients and maximize the total contribution to profit.

Data Collection

We have taken a local maternity hospital for the collection of data. This hospital has an expertise of children surgeries. The surgery is minor in nature and the patients (children) do not need to stay in the hospital for long. These are conducted as outpatients and the patients can go back and resume their normal activities very soon. These surgeries are small and not have many complications. We have taken the following minor surgeries for our study

- Placement of ear tubes
- Hernia repairs
- Correction of bone fractures
- Removal of skin lesions
- Biopsy of growths

The required information is given in the following table: -

| | Types of surgical patients | | | | | | |
|--|----------------------------|-------|----------------|-----------------------|----------------|-----------------|--|
| | S ₁ | S2 | S ₃ | S ₄ | S ₅ | Capacity/Year | |
| Operating Room | 3 | 2 | 3 | 2 | 2 | 1850 hours | |
| Recovery Room | 5 | 3 | 7 | 6 | 5 | 3250 beds hours | |
| Surgical Room | 2 | 2 | 6 | 5 | 4 | 2020 beds days | |
| Average contribution to profit (Rs.) | 12500 | 12700 | 12300 | 13700 | 13900 | | |
| Average contribution to profit is taken hypothetically as the hospital is run by government and there is no profit | | | | | | | |

Where S_1 = the number of ear tube patients

- S₂ = the number of hernia patients
- S₃ = the number of bone fracture patients
- S_{4} = the number of skin lesions patients
- $S_s =$ the number of biopsy growth patients.
- $I_1 = idle hours of operating room$
- $I_2 = idle hours of recovery room$
- I_{3} = idle hours of surgical service beds

Goal Programming Model

In linear programming we one goal where as goal programming compromises of mathematical model programming with multiple goals. Goal programing contains all the basic methods of solving linear programming model with the addition of deviations between the goals that are to be achieved and the realized results. For this two non negative deviational variables d-, the amount by which the profit goal underachieves and d+: the profit goal that over-achieves are taken for the goal achievements. In obtaining the solution of the model, for deviational variables d- and d+ are given positive values for at most one of the variables.. As for any problem profit cannot over achieved and under achieved at the same time. The value of the two deviational variables will be zero when the goal is achieved exactly. If one or other variables will be zero then the goal cannot be attained. The model formed in our case is as follows:

Minimize $Z = \sum Pj(di + +di-) : j = 1,2,3,....n$.

Subject to

 $\sum (aijxij) - di + + di - = bi : i = 1,2,3...m$

Methodology and Model Structure

In this study, a goal programming model is constructed for determining important constraints of operating room hours, recovery room hours and surgical service hours. All this was identified through the review of literature and interview with experts. The determination of objective function is based on constraints. The model containing 5 constraints is given below:-

Minimize Z = P1 (d1-) + P2 (d2-) + P3(d3-) + P4(d4-)

Subject to constraints

12,500 S1 + 12,700 S2 + 12,300 S3 + 13,700 S4 + 13,900 S5 + d1-d1+ = 1,24,24000 Target profit

3S1 +2S2 + 3S3 +2S4 +2S5 + d2- - d2+= 1850 operating room hours

5S1 + 3S2 + 7S3 + 6S4 + 5S5 + d3- - d3+ = 3250 recovery room hours

2S1 + 2S2 + 6S3 + 5S4 + 4S5 + d4- - d4+= 2020 surgical room hours

S1,S2, S3,S4, S5, d1- ,d1+ , d2- ,d2+, d3- ,d3+ ,d4- ,d4+ $\geq 0.$

Where d_1 , d_1 , d_2 , d_2 , d_3 , d_3 , d_4 , d_4 , d_4 are the slack variables representing the difference between the solution variables and goal achievements. Two slack variables are required in the above equations in order to allow the possible deviation above and below the goal achievements. Pi and di appear together in the objective function, since the first goal requires at least making1,24,24000 and there is no need to put restriction on d_1 . The objective of the second, third and

fourth goal is to minimize the idle capacities of all the scarce resources including under achievement variables, d2-, d3-, d4- respectively, without inserting the over achievement variables.

Solutions and Conclusions

Solutions are obtained for the decision variables (Si's) and deviational variables (di's). The solutions obtained in accordance with the Priorities (Pi's) are given below:

S1=0,S2=790,S3=90,S4 = S5=S6=0, d1-=0,d1+=0, d2- = 0,d2+=0,

d3- =250, d3+=d4- = d4+ =0

The first priority goal for (target profit) is fully achieved (since d1-=0).

Treating only hernia patients and bone fracture patients. We find that the best combination of these patients will be 790 hernia patients and 90 bone fracture patients.

Since d3- =250,this will decrease the recovery room hours by 250 hours.

On the basis of model of the goal program the results of the input were compared with output to get the optimum allocations of resources. Resource allocation plays a very important role in health care since the resources are limited and need to be utilized to the optimum. Excel solver methods for goal programming can be used to find the solution values of the decision variables Si'sand di's. The solution value can be obtained in accordance with the priorities. In the present study due to lac of availability of some records some goal objectives could not be calculated. In order to get the accurate results the data should be collected and analyzed regularly.

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Impact of Training and Development on the Employees of Shoppers Stop

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Abstract

Training is something which an organization gives to their employees for their growth and welfare. There are different kinds of training imparting what is the goal of the organization and how training can be a mode to achieve those goals and objectives. "Impact of training and development on the employees of Shoppers Stop" gives a brief idea of how trainings are conducted in the organization, what are the various methods used and how to evaluate the trainings given to identify the effectiveness. Shoppers Stop is a retail store in which there are employees at different hierarchical level and how training can influence their performances which leads to their personal growth also thus" Impact of training and development on the employees of Shoppers Stop" brings lightning on the portion of training that different trainings are required at each hierarchical level as the sample was taken of forty employees and putting confirmatory factor analysis and analyzing the fact that organizations should take initiatives to bring out such programs which can lead to individual and organizational development. In this research the secondary data is collected from various research papers of few researchers like Pallavi P. Kulkarni, NeoEase and F.A khan and soon had shown how training can be useful in organization, methods and evaluation of the trainings. In this research the analysis is done through the primary data collection is with the help of questionnaire and the findings of the research is through factor analysis using SPSS (Statistical Package for Social Science) tool for training evaluation with the components as experience.

Introduction

Shoppers Stop is an Indian retailing company promoted by the K Raheja Corp Group, started in the year 1991 with its first store in Andheri, Mumbai. K Raheja group of companies were largest company in the real estate development and hospitality. There are almost 80 stores of Shoppers Stop in India. In1991 starting from only Men's ready to wear in Mumbai, it lead to entry in Business World completely by 2016. Shoppers Stop is a Department store having Apparel and Non- Apparel. Including all the national and international brands. The research was conducted in the Rohini Store of New Delhi.

Training and development is a function of human resource management concerned with organizational activity aimed at bettering the performance of individuals and groups in organizational settings. Training is the act of increasing the skills of an employee for doing a particular job". Training is the process of teaching the new or present the basic skills they need to effectively perform their job. Training refers to teaching the act of increasing the knowledge and skill of an employee for doing his/her job Training constitutes a basic concept in human resource department. It is concerned with developing a particular skill to desire a standard by instruction and practice.

Training and development is considered to be the only official and ongoing educational activities within an organization designed to enhance the employee performance. Training and development describes the formal, ongoing efforts that are made within organizations to improve the performance and self-fulfillment of their employees through a variety of educational methods and programs. In the modern workplace, these efforts have taken on a broad range of applications—from

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instruction in highly specific job skills to long-term professional development. Training refers to the process of imparting specific skills.

An employee undergoing training is presumed to have had some formal education. No training program is complete without an element of education. Hence we can say that Training is offered to operatives.

Development means those learning opportunities designed to help employees to grow. Development is not primarily skills oriented. Instead it provides the general knowledge and attitudes, which will be helpful to employers in higher positions. Efforts towards development often depend on personal drive and ambition. Development activities such as those supplied by management development programs are generally voluntary in nature.

Literature Review

Pallavi P. Kulkarni (2013), Training and development play a vital role in every organization. It focuses on improvement of Employee Performance at workplace, it updates Employee Knowledge and enhances their personal Skills and it helps in avoiding Managerial Obsolescence These training programs also help the managers in succession planning, employee retention and motivation. It creates Efficient and Effective employees in the Organization. Training enables the employees to develop their skills within the organization and hence naturally helps to increase the organization's market value, earning power of the employees and job security of the employees.

William Fitzgerald (2003); Training and development are integrated elements of any organization. This strategy is supported by four pillars: entry-level recruitment of the best and the brightest; training for skill building; career broadening to develop versatility and to help nurture future leaders; and providing a positive work environment that helps to win the commitment of career employees.

NeoEase (2014); Human Resource Management Theme by Training & Development is any attempt to improve current or future employee performance by increasing an employee's ability to perform through learning, usually by changing the employee's attitude or increasing his or her skills and knowledge." The need for Training and Development is determined by the employee's performance deficiency, computed as follows:

Training & Development Need = Standard Performance – Actual Performance.

Shelley Fros (2005). The Importance of Training & Development in the Workplace. Training presents a prime opportunity to expand the knowledge base of all employees, but many employers find the development opportunities expensive. Employees also miss out on work time while attending training sessions, which may delay the completion of projects. Despite the potential drawbacks, training and development provides both the company as a whole and the individual employees with benefits that make the cost and time a worthwhile investment.

An employee who receives the necessary training is better able to perform her job. She becomes more aware of safety practices and proper procedures for basic tasks. The training may also build the employee's confidence because she has a stronger understanding of the industry and the responsibilities of her job. This confidence may push her to perform even better and think of new ideas that help her excel. Continuous training also keeps your employees on the cutting edge of industry developments. Employees who are competent and on top of changing industry standards help your company hold a position as a leader and strong competitor within the industry.

Ruth Stuart (2014); learning and development varies with the trends, It examines how integrated L&D processes are with other aspects of HR management and anticipated future changes affecting learning and development. The most commonly used L&D practices organizations tend to favor internal over external L&D practices. As last year, on-the-job training is most commonly among the most used and most effective practices. In-house development programs also remain popular and are nearly twice as likely to be included among organizations' most common practices as external conferences, workshops and events. Similarly, coaching by line managers is more popular than coaching by external practitioners.

Preferences for internal practices may be partly driven by cost efficiencies, but internal training and programs can have additional benefits as they are more easily tailored to the specific needs of the employees and organization. Nevertheless, while in-house development programs remain popular, there has been a decline in the proportion including them among their most commonly used methods compared with last year (2014: 46%; 2013: 57%).

This may be explained by the inclusion of an additional option this year; 'blended learning (such as combining instructor-led training with e-learning methods)', which 15% included among their top three methods. It is possible that in some organizations in-house development programs are making use of technology as well as instructors, shifting towards blended learning practices.

Objective

The Objective of the present study is "To identify the factors effecting training and development needs of employees based upon ongoing training Practices at various levels in Shoppers Stop".

Research Design And Methodology

The Research Design used in this study is Descriptive Research, A descriptive research study is the one in which information is collected without changing the environment (i.e. nothing is manipulated). Sometimes these are referred to as correlation or observational studies.

The Research Type of this study is the Cross-sectional form of descriptive study, i.e., a group of people/subjects are surveyed and interacted with, only once unlike longitudinal study that involves repeated investigation and survey of the sample over time.

The Sample Size of 40 employees of Shoppers Stop, Rohini is taken for surveying purpose to study the effect of Training and development.

In this study, the probability sampling method used is Judgemental sampling and Convenience sampling. Judgemental sampling or convenience sampling is used because Shoppers stop provides training to only those who are incorporated as their permanent employees.

The Secondary data is in the form of already done work on the subject/topic obtained from previous studies and researched conducted and published whereas, The Primary data is the first-hand data taken in the present on the same subject/topic of study. Primary data is that data which is collected through the use of surveys, meetings, focus group discussions, interviews or other methods that involve direct contact with the respondents. The method of Primary data collection used in this study is a Structured Questionnaire

A structured questionnaire is created based on the factors taken into consideration. This questionnaire is then given to the 40 randomly selected employees who have to give appropriate response to the questions within 20 minutes. The name and department is written on the questionnaire.

To study a particular topic requires the defining of the main research problem. The Research Problem is to study the (effect of Training and Development on the employees of Shoppers Stop Ltd.) And the factors on which it are evaluated.

There are certain factors that are taken into consideration for determining and evaluating the effect of training and development are; these factors are-

- $1. \ \ {\rm Training} \ {\rm is} \ {\rm given} \ {\rm to} \ {\rm all} \ {\rm employees}.$
- 2. Induction process helps to understand the basic job and responsibilities.
- 3. Increasing knowledge pattern.
- $\label{eq:cashiering training provides benefit to you.$
- 6. Training on Customer service
- 7. Career goals
- 8. Merchandise knowledge
- 9. Selling skills enhancement
- 10. Have you attended English Training?
 - A. If yes, it makes you comfortable while talking to customer.
 - B. If not, are you interested for this training?
- 11. Promotional assessments.
- 12. Manager's supervision.

Hypothesis

On the basis of Objective of the study, Hypothesis derived were;

- H0- There is no significant difference amongst employees having different experience levels with respect to the key factors in training and Development practices.
- H1- There is significant difference amongst employees having different experience levels with respect to the key factors in training and Development practices.

Data Analysis

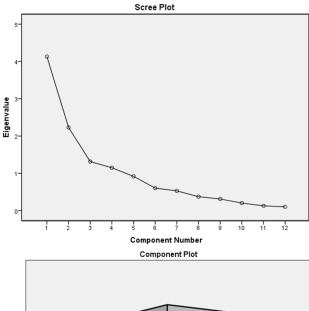
In the present study SPSS 21 is used for performing confirmatory factor analysis using Principal component analysis technique.

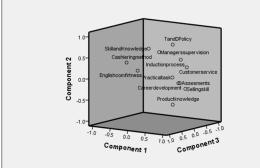
Confirmatory factor analysis- Confirmatory factor analysis (CFA) is a statistical technique used to verify the factor structure of a set of observed variables. CFA allows the researcher to test the hypothesis that a relationship between observed variables and their underlying latent constructs exists.

Technique used for CFA- confirmatory factor analysis; Principle component analysis- Principal component analysis (PCA) is a statistical procedure that uses an orthogonal transformation to convert a set of observations of possibly correlated variables into a set of values of linearly uncorrelated variables called principal components.

Factor Analysis is done to analyze the various components of experience which is taken to understand the impact.

1.1 Experience 1: 0 – 3 years





Component Matrix^{a,t}

| | | Comp | onent | |
|---------------------------------|------|------|-------|------|
| | 1 | 2 | 3 | 4 |
| Training and Development Policy | .097 | .694 | 586 | 017 |
| Induction process | .569 | .432 | 239 | 076 |
| Skill and Knowledge | .038 | .721 | .310 | 373 |
| Cashiering method | 305 | .415 | .723 | 020 |
| Practical task | .724 | .107 | .323 | 366 |
| Customer service | .757 | .275 | 216 | .227 |
| Career development | .840 | 028 | .245 | .187 |
| Product knowledge | .543 | 594 | .052 | .082 |
| Selling skill | .911 | 180 | .062 | .083 |
| English comfortness | 326 | .152 | .241 | .770 |
| Assessments | .805 | 042 | .139 | .069 |
| Managers supervision | .152 | .610 | .047 | .415 |

Extraction Method: Principal Component Analysis.

a. 4 components extracted.

b. Only cases for which Experience = 0 3Years are used in the analysis phase.

Analysis:

On the basis of above component matrix it is observed that out of total 14 variables, 5 factors have been extracted which are relevant for employees having experience of less than 3 years.

- A. Component 1: The factors extracted from this component were;
 - Practical task,
 - Customer Service,
 - Career Development,
 - Selling Skill, and
 - Assessments.

This shows that employees having less than 3 years of **experience are given more practical knowledge.**

- **B. Component 2:** The factors extracted from this component were;
 - Training and Development
 - Managerial Supervision
 - Skill and Knowledge

This shows that employees are more into managerial supervision as now they are well aware about the culture of the organization and can connect more from the roles and responsibilities given.

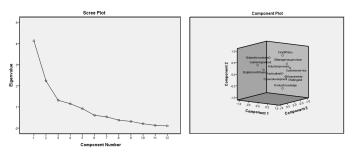
- C. Component 3:The factors extracted from this component were;
 - Cashiering method

This shows that the employees were given Cashiering training more to enhance that particular skill.

- **D. Component 4:** The factors extracted from this component were:
 - English comfortness

This shows that employees were more focused on English training and have attended most of the English module training.

1.2Experience 2: 3 – 5 years



a,b Component Matrix

| | С | ompone | nt |
|---------------------------------|------|--------|------|
| | 1 | 2 | 3 |
| Training and Development Policy | .642 | .423 | .151 |
| Induction process | 740 | .126 | .354 |
| Skill and Knowledge | 215 | 803 | .044 |
| Cashiering method | 905 | .325 | .114 |
| Practical task | .297 | 408 | .815 |
| Customer service | .802 | 526 | 027 |
| Career development | .821 | .013 | 313 |
| Product knowledge | .723 | .296 | 229 |
| Selling skill | .980 | 080 | 028 |
| English comfortness | 707 | .246 | 357 |
| Assessments | .367 | .835 | .086 |
| Managers supervision | .397 | .522 | .564 |

Extraction Method: Principal Component Analysis.

a. 3 components extracted.

b. Only cases for which Experience = 3-5Years are used in the analysis phase.

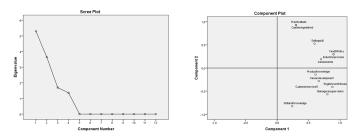
Analysis: On the basis of above component matrix it is observed that out of total 14 variables, 54 factors have been extracted which are relevant for employees having experience of 3-5 years.

- A. Component 1: The factors extracted from this component were;
 - 1. Customer Service
 - 2. Career Development
 - 3. Product knowledge
 - 4. Selling Skill

This shows that these employees get more Customer focus training.

- **B.** Component 2: The factors extracted from this component were:
 - Assessment
- **C. Component 3:** The factors extracted from this component were:
 - Practical task

1.3 Experience 3:5-10 years



Component Matrix^{a,b}

| eempenent in | | |
|----------------------|------|---------|
| | Con | nponent |
| | 1 | 2 |
| T and D Policy | .896 | .297 |
| Induction process | .896 | .297 |
| Skill and Knowledge | .239 | 823 |
| Cashiering method | .299 | .929 |
| Practical task | .299 | .929 |
| Customer service | .636 | 401 |
| Career development | .661 | 281 |
| Product knowledge | .611 | 142 |
| Selling skill | .595 | .527 |
| English comfortness | .878 | 409 |
| Assessments | .699 | .191 |
| Managers supervision | .798 | 566 |

Analysis: On the basis of above component matrix it is observed that out of total 14 variables, 9 factors have been extracted which are relevant for employees having experience of 5-10 years.

- A. Component 1: The factors extracted from this component were:
 - 1. Training and Development Policy.
 - 2. Induction Process.
 - 3. Customer Service.
 - 4. Career Development.
 - 5. Product Knowledge and selling skill.
 - 6. English comfortness.
 - 7. Assessment
 - 8. Manager Supervision.
- **B. Component 2:** The factors extracted from this component were:

Findings

The findings which came out from the Data analysis and interpretation were as follows:

- Training is mandatory for each employee at any designation.
- Training is given at each level of experience.
- Training leads to employee growth via enhancing their skill and knowledge.
- 1. Component 1: Experience 0-3 Years
 - More focus on Induction process is given
 - Practically knowledge is provided
 - Career developments
- 2. Component 2: Experience 3-5 Years
 - Customer Service
 - Product knowledge
 - Selling Skill trainings are given.
- 3. Component 3: Experience 5-10 Years

More strategic trainings are given to employees to whom following trainings are given;

- Training and Development Policy.
- Induction Process.
- Customer Service.
- Career Development.
- Product Knowledge and selling skill.
- English comfortness and cashiering method
- Assessment
- Manager Supervision.
- Practical task

Limitations

- 1. Due to the small sample size the respondent's biasness was higher as compared to other studies.
- 2. Since it was a longitudinal study therefore Pre and post effect of Training and Development could not be compared to other studies previously conducted.

Suggestion

There should be different trainings at different levels for the employees as far as the experience is concerned because same training knowledge will not be able to broaden their view.

| EXPERIENCE | | FACTORS | | | | | |
|------------|--------------------|-------------|-------------|---------------|-----------|---------------|--|
| 0-3 YEARS | Practical task | Customer | Career | Selling Skill | Product | Assessment | |
| | | Service | Development | | Knowledge | | |
| 3-5 YEARS | Customer Service | Career | Product | Selling Skill | | | |
| | | Development | Knowledge | | | | |
| 5-10 YEARS | Training and | Induction | Customer | Career | Product | Selling Skill | |
| | development policy | process | Service | development | knowledge | | |

Employees under this category should be focused more on Induction training as fresh joiners should be more aware from organization culture and key responsibilities, Product Knowledge training should also be given because in such trainings employees get aware about the product, their manufacturing process and can easily make it understand to their customers.

There are some common factors which is going in each category

thus on the basis of above each category need some more focus

B. Category 2-3-5Years of experience

Employees under this category should be focused on Product knowledge, English trainings, and Selling skills training and should work upon their Career Development.

C. Category 3- 5- 10 Years of experience

Employees under this category are more attached with the organization thus focus should be more in Assessments programs as career enhancement is also important Apart from this employees having maximum experience should enhance with leadership programs also so that they are able to develop their leadership skills.

Conclusion

From the data analysis it has been drawn that Alternate hypothesis is correct and there is significant differences among the employees regarding their experience and the trainings which are provided. Thus the outcome is the various factors which are evaluated and linked with the experience and designation of employees.

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Politics and Event Marketing- A New Emergence

Dr. Shelka*

Abstract

Marketing means understanding and responding to customer needs, a prerequisite for any organization's success. Marketing is used to identify the customer, to satisfy the customer and to keep the customer. Philip Kotler defines marketing as 'satisfying needs and wants through an exchange process'. Marketing is the process by which companies create customer interest in goods or services. It generates the strategy that underlies sales techniques, business communication, and business developments. It is an integrated process through which companies build strong customer relationships and create value for their customers and for themselves. It includes the coordination of 4 P's of marketing: Product, Price, Place and Promotion. From last decade marketing have expended to every area. Marketing is used in everywhere now. So, there are new concept originated in marketing. Politics marketing and Event Marketing are both of new one concepts. Political marketing is about how political elites use marketing tools and concepts to understand, respond to, involve and communicate with their political market in order to achieve their goals. Political elites include candidates, politicians, leaders, parties, governments, government departments and programmes, NGOs and interest groups. Event marketing is a promotional strategy that involves face-to-face contact between companies and their customers at special events like concerts, fairs, and sporting events. Brands use event marketing entertainment (like shows, contests, or parties) to reach consumers through direct hand-to-hand sampling or interactive displays. This paper examines the utility of the politics and event marketing. . It also considers the propagation and evolution of the politics and event marketing. This paper also examines that how both of marketing concepts help to their respective organization to boost their market share.

Keywords: Marketing, Customers, Event marketing, Politics marketing

Introduction

Marketing is essentially a concept of customer orientation. Marketing means understanding and responding to customer needs. Marketing is the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large. The marketing concept involves:

- a) Customer orientation
- b) Competition orientation
- c) Ability to respond to environmental changes (changes

in customer needs, competition, government policy, technology, etc.) before competition does.

Role of marketing in modern organizations is that integrating the needs and wants of the customers with other organizational functions like production, R & D, finance and personnel. Neither marketing nor any other function alone holds the key to success. Rather, all are important. It is evident that marketing performs the role of integration. Figure 1 shows this relationship.



Figure 1 Integrative function of marketing

Literature review

- Stephan C. Henneberg: "Political Marketing Theory: Hendiadyoin or Oxymoron" Research on political marketing has now established itself as a spirited sub discipline of mainstream marketing, producing considerable numbers of high quality learned articles and books each year. However, certain stagnation in knowledge development has been identified. Consequently, this paper links this inadequacy to the dominating tendency of focusing research on campaign applications of solely marketing instruments, emphasizing a reactive and managerial orientation.
- Jennifer Lees Marshment: "Political Marketing" This paper synthesizes academic research on political marketing, featuring theories and empirical examples from around the world. It seeks to explain what political marketing is, show how it is used in practice, and encourage reflection on how it should be used in future.

Politics marketing

Political marketing is about how political elites use marketing tools and concepts to understand, respond to, involve and communicate with their political market in order to achieve their goals. Political elites include candidates, politicians, leaders, parties, governments, government departments and programmes, NGOs and interest groups. Their political marketing goals, market, product, tools and approaches are wide-ranging. The most obvious is to get votes to get elected – but as in business where goals include long-term sustainability not just profit politics is about more than just winning power. Politicians and political parties have a range of ambitions and dreams:

- 1. Get a new issue on to the political agenda.
- 2. Create a long-term positive relationship with voters in a constituency.
- 3. Increase the number and activity of volunteers in a campaign or party.

- 4. Become a coalition partner in government.
- 5. win control of government.
- 6. Manage expectations of leaders.
- 7. Increase the vote at the next election.
- And many more.

The relative importance of such goals varies of course, depending on the party, candidate, electoral environment, and the rules of the marketplace, its size, its philosophy, resources, political system or country.

The political market

The political market is also more complex than just voters. . Political parties are dependent on various stakeholders. Political stakeholders include all those interested and with an investment in the party or candidate such as members or volunteers within a political party or campaign, other politicians, interest groups, donors, the media, professional associations or unions, electoral commission and party or government staff. See Figure 2.



Figure 2: The different stakeholders in politics

The political product

The political product is extremely complex. Like other physical product nobody can check political product. There are certain aspects of the political product which are more visible, including: behavior of members, their powers, image character, relationship with others, media relationship, their staff, rules, policies and many more. Political parties and candidates are not just judged on their current product but on their previous performance and their ability to deliver.

Political marketing functional tools

Marketing techniques ubiquitous in business are increasingly common in politics, offering politicians new ways of engaging with and responding to an increasingly demanding electorate. Political marketing offers political elites a range of functional tools they can use to achieve their goals of obtaining support from their market for their product.

| | Research | Polls, surveys, voter profiling Segmentation, composition research, analytics and experimental. Focus groups, Interviews, role-play, correction, deliberative consultation. |
|--|----------------|---|
| | Strategic | |
| | Organisational | Volunteer management, donor management and fund-raising. Resource and staff management |
| | Communication | Strategic communication, insights marketing, guerrilla marketing, get out the vote, government advertising, social marketing, crisis management, public relations, e-marketing, delivery marketing. |
| | | |

Figure 3: Political marketing functional tools

First, there are a range of political market research tools to identify and understand the public and other markets. Market research includes the usual quantitative and qualitative techniques such as polls and focus groups but also role play and deliberation and, more recently, experimental and analytical marketing research. Segmentation and voter profiling helps understand voters and volunteers at an individual level to then connect them into new groups politicians can target.

Event marketing

The activity of designing or developing a themed activity, occasion, display, or exhibit (such as a sporting event, music festival, fair, or concert) to promote a product, cause, or organization. Also called event creation.Event marketing is a promotional strategy that involves face-to-face contact between companies and their customers at special events like concerts, fairs, and sporting events. Brands use event marketing entertainment (like shows, contests, or parties) to reach consumers through direct hand-to-hand sampling or interactive displays.

The power of event marketing is: According to a 2012 study by the event marketing Institute:

- 58% of event marketing participants purchased the marketed product after the event
- 86% of these consumers became regular customers

A successful event marketing campaign provides value to attendees beyond information about a product or service. A discount, free sample, charity alignment, or fun event will make customers feel like they are receiving a benefit and not just attending a live-action commercial.

In contrast to traditional advertising, which blasts millions of consumers with the same general television, radio or billboard message, event marketing targets specific individuals or groups at gathering spots, in hopes of making quality individual impressions. The key to pulling off an effective event marketing campaign is to identify the target audience correctly and create an experience that remains in participants' memories. By finding an opportunity to interact with the right demographic of people – both current customers and prospective buyers – a brand can build favorable impressions and long-lasting relationships. The best, most creative events create interactions that not only reflect positively on the brand at the time, but generate a buzz long after the event is over.



Figure 4: An example of event marketing

How to Win (and Lose) an event marketing

Your event is scheduled, and it's time to start thinking about marketing. Any event in today's digital world has a lot of possible touch-points, so where do you start? What should you skip? Some authors who write the books on this topic, divide this event marketing in three sections.

| Pre Event- Marketing | Planning & Posting |
|--------------------------|--|
| During Your Event | Your Marketing is Your Message |
| Post Event- Marketing | • Remember and Recycle |

Figure 5: Three sections of Event-Marketing

Event-planning with 5W's concept:

- 1. **Why:** "Why" means why you want to organize the event i.e. what is your objective. What do you want to get from your event?
- 2. What: "What" means what do you going to do in your event?
- 3. When: "When" means when you are going to organize the event (date and time).
- 4. Where: "Where" means where you are going to organize your event?
- 5. Who: "Who" means who will be your organizers, sponsors etc.

Event-Marketing Challenges are:

- 1. Getting people to the event: one of the main challenge of event-marketing is getting people to the event. People are never easily ready for events. If they accept for coming they charge more. So cost of event will rise.
- 2. Getting people to respond to invites: people never give respond to invites. Remind these invites many time, than they respond.
- 3. Organizing and managing event responses: Eventmarketing is very big concept. It is very complicated to manage and organize. Managers never take the responsibility quickly to manage an event-marketing.
- 4. Tracking results: It is also a complex work. Managers never track the results easily.
- 5. Handling guests: Guests are the main attractions of these events. Event-managers never handle these guests easily.
- 6. Handling sessions: Many times there are lot of sessions in these events and persons never handle it properly.
- 7. Allow enough time: Start planning at least 16 weeks in advance of the event start date. Companies have no such long time.
- 8. Costly: It is a very costly methods. There are only few companies who can spent a big amount on event-marketing.

Event-Marketing solutions are:

- 1. Run a series of small events to build your audience.
- 2. Aggressively market to your existing contact data.
- 3. Spend your budget on data or third party campaigns.
- 4. Events are generally not a cheap tactic i.e. Venue hire, Catering, Audio-Visual, Printing, Agency fees, Media buys, Speaker fees, Delegates pack etc.

Conclusion

Politics marketing is also not an easy path. Politics is very different to business in many respects. Politics links marketing to elections and therefore to government and the decision as to who ultimately controls the world. Politics is not about making money and it isn't even just about getting votes. Political parties are there to provide representation, serving to ensure there is an effective link between citizens and the government; and to aggregate interests by reconciling a variety of conflicting individual demands, which aids governing and facilitates political socialization and mobilization. Political marketing is concerned with all aspects of political behaviour by politicians, parties and governments. It is about the design of the political product, its relationship to market demands, and the relationship between political elites and the public. Communication is a key part of political marketing.

Event marketing is a new approach. Event-Marketing is not an easy road, but it is an essential part of any B2B marketer's tool kit. It is also very expensive method of marketing. Companies should start this concept with proper planning. It is a time consuming and cost consuming also.

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Book Review Think Simple: How Smart Leaders Defeat Complexity

Book: Think Simple Written By: Ken Segall Publication: Penguin Publishing Group

Dr Sandhya Rai*

"Making everything as simple as possible but no simpler". —Albert Einstein

Simplicity is one of the most deceptive concept -Ken Segall

This is the second book by Ken Segall on the importance of simplicity in business. His first book "Insanely Simple" talk about the journey of Apple with simplicity. It talk about how Apple replaces big-business complexity with simplicity. Inspired by the Apple story, Ken took the concept further and explored simplicity in other businesses. In the Journey spread over almost two years, he met more than 40 people from different companies. This book is based on the experience of those people who defeated complexity and bought simplicity into their business. Each of these leaders have examples of how simplicity helps the company in improving its performance and set it apart from the competitors. All these views are unique and different in themselves but there is one similarity i.e. each of them favour simplicity.

The book contain the stories from diverse business like banking, automobile, fashion, entertainment, technology and many more who followed business strategy to be simple in values and de-root the complexity before it could takeoff. For example, Jerry Greenfield of "Ben and Jerry's" spoke about how simplicity helped them turn global from local without losing their focus on simple values. There is an interview of the CEO of Westpac Bank, one of Australia's largest banks where it is discussed how simplicity helped them in inviting new customers. Ron Johnson is another person who had been interviewed meticulously on his experience with Apple and post Apple. There are interviews from people associated with Hundai, Microsoft, Dell and many more.

There are ten chapters in the book including the introduction. The book starts with Simplicity Isn't Simple, followed by

chapters on Simplicity Is on a Mission, Simplicity Is in the Air, Simplicity Loves a Leader, Simplicity Is a Team Sport, Simplicity is True to the Brand, Simplicity Fits all Sizes, Simplicity Is Sleeker, Simplicity Creates Love, Simplicity Is Instinctive and Finding Your Road to Simplicity. Each of these chapters is devoted to business themes like leadership, mission, brand etc. and talk about how to use simplicity as a business tool. In these chapters, the author writes on areas like the science of simplicity, the transformational power of mission, finding a mission that scales, the beginning of simplicity, how strong values inspire bold decisions, a culture of commitment, how to maintain the startup as it grows, when leading for simplicity failed, and simplicity as a group effort. Over all these chapters, Segall's point is that being complicated is easy and making things simpler is the challenge. He further states that complexity is the side effect of civilization, "The more we discover, the more we invent, the more we advance, the more complicated life becomes. In the book, he offers fifteen specific recommendations that will helps the readers formulate a "roadmap to develop strategies to consider and actions you might take as you set out to leverage the power of simplicity." While the message in the book seems to be simple, getting things done is difficult. The philosophy that the author embraced in the book can be followed by anybody, in any kind of company in any sector and in any part of the world; the only challenge is to start. This book is a guide for all types of companies to crush their complexity and focus on what matters most to them, how to improve performance and be faster and better.



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