MANAGEMENT RESEARCH AS HELPING TOOL FOR INDUSTRIAL RESEARCH

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ABSTRACT

Industry research is a vital tool for the survival of an industry in today's competition dominated market. Industry research is required to be carried out in order to increase sale of goods or products. Research pertaining to any industry encompasses the various means by which a company can enhance sales and retain the consumers. Industry research comprises of data related to growth, size, demarcations in the market and various other aspects. In addition, an industry research report also throws light on domestic and international markets in context related to industrial technology, information on patenting, Research and development, emerging technologies, industry trends, industry analysis, industry forecasts etc.,. In order to carry out a research, necessary data pertaining to the particular industry has to be gathered. Equal information is not always available owing to the differences in age, technological aspects, size etc., of a company within an industry.

The business world is becoming increasingly competitive due to rapid advancement of Internet technologies whereby many business organizations have incorporated the web as the new marketing channel to reach out for their stake holders in the global market, particularly the suppliers and the customers. Many companies are finding it difficult to sustain competitive advantage in today's markets as more and more new entries are competing in the same market segment, also known as the red ocean market which has become overcrowded and profits are thinning. With the looming of the possible recession facing the largest economy in the world and possibly the whole world, the future of business organizations look groom and many of them will finally collapse if nothing is done about it.

The current research paper will focus on; Purpose of Industrial Research, How Industrial Research should be carried out?, India's concern on Management Research, and finally Benefits of Management Research to industry.

Keywords: Industrial Research, Management Research

INTRODUCTION:

Research can be defined as the search for knowledge, or as any systematic investigation, with an open mind, to establish novel facts, usually using a scientific method. The primary purpose for applied research (as opposed to basic research) is discovering, interpreting, and the development of methods and systems for the advancement of human knowledge on a wide variety of scientific matters of our world and the universe.

PURPOSE OF INDUSTRIAL RESEARCH:

Industrial research is a vital tool for the survival of an industry in today's competition dominated market. Industry research is required to be carried out in order to increase sale of goods or products. Research pertaining to any industry encompasses the various means by which a company can enhance sales and retain the consumers. Industry research comprises of data related to growth, size, demarcations in the market and various other aspects. In addition, an industry research report also throws light on domestic and international markets in context related to industrial technology, information on patenting, Research and development, emerging technologies, industry trends, industry analysis, industry forecasts etc.,. In order to carry out a research, necessary data pertaining to the particular industry has to be gathered. Equal information is not always available owing to the differences in age, technological aspects, size etc., of a company within an industry.

It is often claimed that managers do not read serious research papers in journals. If true, this neglect would seem to pose a problem because journals are the dominant source of knowledge in management science. By examining results from the forecasting principles project, which was designed to summarize all useful knowledge in forecasting, we found that journals have provided 89 percent of the useful knowledge. However, journal papers relevant to practice are difficult to find because fewer than three percent of papers on forecasting contain useful findings. That turns out to be about one useful paper per month over the last half century. Once found, papers are difficult to interpret. Managers need low-cost, easily accessible sources that summarize advice (principles) from research; journals do not meet this need. To increase the rate of progress in developing and communicating principles, researchers, journal editors, textbook writers, software developers, Web-site designers, and practitioners should make some changes. We offer some examples: Researchers should directly study forecasting principles. Journal editors should actively solicit papers; invited submissions were about 20 times better than standard submissions at producing useful findings that were often cited, and they do so at lower cost. Textbook writers should focus on principles so that readers can apply knowledge. Web-site and software developers should provide practitioners with low-cost ways to use principles. Practitioners should apply the principles that are currently available.

STEPS FOLLOWED IN INDUSTRY RESEARCH:

In order to carry out industry research, usually the following steps are followed in a majority of the cases.

Structure of the industry:

This segment deals with the organizational structure of an industry. This part contains information on Standard Industrial Classification System or SIC. Explanations related to North American Industry Classification System or NAICS also finds place in this section of the industry research report. It only gives a generalized view and not any particular company.

Profile of the industry:

This segment deals with the various industry trends and forecasts. Also included in this section is the profile of certain companies belonging to different industries.

Current developments in industries:

Industry research report in this section highlights the industrial activities taking place in the industry currently. The industrial activities may include industrial snags, acquisitions, mergers, restructuring of industrial policies etc.Magazines, business journals, monthly articles are published pertaining to the same.

Statistical data of industries:

Deals with statistical date relating to financial ratios, business ratios, importance of trade associations etc. The statistical data are obtained from various sources.

DIMENSIONS OF MANAGEMENT RESEARCH IN INDIA:

Management research has been steadily gaining increased prominence as a 'field of study' in management institutions across India. This could be due to more and more 'career avenues' emerging not only in the steadily increasing management institutions but also in the ever-growing corporate sector characterized by the entry of growing number of TNCs both in the manufacturing and service sectors, year by year, in the country. Today management research students in India identify and pursue research in diverse issues covering not just the four functional areas of finance, human resources, marketing, production and systems, and economics but allied as well as emerging areas such as energy and environment, intellectual property and policy issues.

These research activities would not only provide solutions to the growing management challenges in the competitive environment confronted by corporate leaders as well as policy-makers but also expand the frontiers of management related knowledge in the Indian context. More significantly, it would give the 'much-needed' upward thrust to the quality of management education and training in the country. It is to identify, address and deliberate upon the core management research issues in the country that the Department of Management Studies, Indian Institute of Science (USc), Bangalore formed the Consortium of Students in Management Research (COSMAR) in 2001 and organized the first COSMAR Conference. Since then the COSMAR Conference has become an annual event. COSMAR Conference is unique in India as it brings together management research students from diverse institutions across the country.

INDIANs CONCERN ON MANAGEMENT RESEARCH:

The Department of Scientific and Industrial Research in India has demand for grants in the field of Industrial Research. The table No.1 below clearly shows the revenue sections right from 2009 to 2011.

Table No.1

Demand for Grants by Department of Scientific and Industrial Research in India (2009-2010 and 2010-2011)										
										(Rs. in Crore)
Particulars	Major Head	Budget 2009-2010			Revised 2009-2010			Budget 2010-2011		
		Plan	Non-Plan	Total	Plan	Non-Plan	Total	Plan	Non-Plan	Total
Revenue Section										
Secretariat - Economic Services	3451	-	8.50	8.50	-	8.31	8.31	-	8.00	8.00
Other Scientific Research	3425	1345.30	1332.50	2677.80	1274.30	1410.44	2684.74	1594.20	1380.00	2974.20
Total-Revenue Section		**1345.30**	**1341.00**	**2686.30**	**1274.30**	**1418.75**	**2693.05**	**1594.20**	**1388.00**	**2982.20**
Capital Section										
Capital Outlay on Public Works	4059	-	-	-	-	-	-	2.00	-	2.00
Capital Outlay on Telecommunication and Electronics Industries	4859	2.00	-	2.00	2.00	-	2.00	1.50	-	1.50
Capital Outlay on Other Scientific and Environmental Research	5425	0.70	-	0.70	0.70	-	0.70	0.80	-	0.80
Loans for Telecommunication and Electronics Industries	6859	2.00	-	2.00	2.00	-	2.00	1.50	-	1.50
Total- Capital Section		**4.70**	-	**4.70**	**4.70**	-	**4.70**	**5.80**	-	**5.80**
Grand Total		**1350.00**	**1341.00**	**2691.00**	**1279.00**	**1418.75**	**2697.75**	**1600.00**	**1388.00**	**2988.00**

Source: Budget Documents, Ministry of Finance, Govt. of India. (11299)

Table No. 2 shows The Budget Allocations, Net of Recoveries and Plan Outlay for Ministry of Science and Technology (Department of Scientific and Industrial Research) in India (2009-2010 and 2010-2011).

Table No. 2

Budget Allocations, Net of Recoveries and Plan Outlay for Ministry of Science and Technology (Department of Scientific and Industrial Research) in India (2009-2010 and 2010-2011)										
										(Rs. in Crore)
Particulars	**Major Head**	**Budget 2009-2010**			**Revised 2009-2010**			**Budget 2010-2011**		
		Plan	**Non-Plan**	**Total**	**Plan**	**Non-Plan**	**Total**	**Plan**	**Non-Plan**	**Total**
Revenue		1345.30	1341.00	2686.30	1274.30	1418.75	2693.05	1594.20	1388.00	2982.20
Capital		4.70	-	4.70	4.70	-	4.70	5.80	-	5.80
Total		**1350.00**	**1341.00**	**2691.00**	**1279.00**	**1418.75**	**2697.75**	**1600.00**	**1388.00**	**2988.00**
1. Secretariat - Economic Services	3451	-	8.50	8.50	-	8.31	8.31	-	8.00	8.00
Other Scientific										

Research										
Assistance to Council of Scientific & Industrial Research (CSIR)										
2. Administration	3425	25.00	484.00	509.00	25.00	495.00	520.00	30.00	480.00	510.00
3. National Laboratories	3425	1085.00	722.00	1807.00	1085.00	792.30	1877.30	1335.00	785.00	2120.00
4. Scientists' Pool	3425	-	6.50	6.50	-	4.54	4.54	-	5.00	5.00
5. Research Schemes, Scholarships and Fellowships	3425	75.00	120.00	195.00	54.40	118.60	173.00	75.00	110.00	185.00
6. Intellectual Property & Technology Management	3425	40.00	-	40.00	40.00	-	40.00	30.00	-	30.00
7. New Millenium Indian Technology Leadership Initiative	3425	70.00	-	70.00	50.00	-	50.00	75.00	-	75.00
8. Institute of Translational Research (Innovation Complexes)	3425	5.00	-	5.00	1.60	-	1.60	5.00	-	5.00
Total Assistance to CSIR		**1300.00**	**1332.50**	**2632.50**	**1256.00**	**1410.44**	**2666.44**	**1550.00**	**1380.00**	**2930.00**
9. Assistance to Other Scientific Bodies										
9.01 Support for R&D Schemes to Central Electronics Limited	3425	2.00	-	2.00	-	-	-	3.00	-	3.00
9.02 National Research Development Corporation	3425	6.50	-	6.50	6.50	-	6.50	10.00	-	10.00
Total		**8.50**	**-**	**8.50**	**6.50**	**-**	**6.50**	**13.00**	**-**	**13.00**
10. Technology Promotion, Development and Utilisation Programme	3425	36.80	-	36.80	11.80	-	11.80	31.20	-	31.20
	5425	0.70	-	0.70	0.70	-	0.70	0.80	-	0.80

(including Consultancy Development Centre)										
Total		**37.50**	**-**	**37.50**	**12.50**	**-**	**12.50**	**32.00**	**-**	**32.00**
11. Investment in Public Enterprises - Central Electronics Limited	4859	2.00	-	2.00	2.00	-	2.00	1.50	-	1.50
	6859	2.00	-	2.00	2.00	-	2.00	1.50	-	1.50
Total		**4.00**	**-**	**4.00**	**4.00**	**-**	**4.00**	**3.00**	**-**	**3.00**
12. DSIR Building and Infrastructure	4059	-	-	-	-	-	-	2.00	-	2.00
Grand Total		**1350.00**	**1341.00**	**2691.00**	**1279.00**	**1418.75**	**2697.75**	**1600.00**	**1388.00**	**2988.00**
B. Investment in Public Enterprises	**Head of Dev.**	**Budget Support**	**IEBR**	**Total**	**Budget Support**	**IEBR**	**Total**	**Budget Support**	**IEBR**	**Total**
Central Electronics Limited	12859	4.00	-	4.00	4.00	-	4.00	3.00	-	3.00
Total		**4.00**	**-**	**4.00**	**4.00**	**-**	**4.00**	**3.00**	**-**	**3.00**
C. Plan Outlay										
1. Other Scientific Research	13425	1346.00	-	1346.00	1275.00	-	1275.00	1597.00	-	1597.00
2. Telecommunication and Electronics Industries	12859	4.00	-	4.00	4.00	-	4.00	3.00	-	3.00
Total		**1350.00**	**-**	**1350.00**	**1279.00**	**-**	**1279.00**	**1600.00**	**-**	**1600.00**

Source: Budget Documents, Ministry of Finance, Govt. of India. (11301)

BENEFITS OF MANAGEMENT RESEARCH TO INDUSTRIES:

The business world is becoming increasingly competitive due to rapid advancement of Internet technologies whereby many business organizations have incorporated the web as the new marketing channel to reach out for their stake holders in the global market, particularly the suppliers and the customers. Many companies are finding it difficult to sustain competitive advantage in today's markets as more and more new entries are competing in the same market segment, also known as the red ocean market which has become overcrowded and profits are thinning. With the looming of the possible recession facing the largest economy in the world and possibly the whole world, the future of business organizations look groom and many of them will finally collapse if nothing is done about it. So the big question how do the business organizations survive in such troubling time?

The best strategy is to venture into something totally new, a market that nobody or very few competitors exist, a strategy which is now popularly known as the blue ocean strategy as advocate by W.Chan Kim and Renee Mauborgne. However, it might not be so easy to put the blue ocean strategy into practice, so the next best thing to do could be to think of new strategies which could give the particular business organization competitive advantage over the competitors, even in the traditional red ocean market. Irrespective of which two strategies above to be adopted by a business organization, a new strategic planning is the key for survival and success. Human capital is becoming very important now as the world

economy is transforming into knowledge economy, where human intelligence can be used to generate useful knowledge which can tapped to bring profits to the business organization. For R&D facilities, one of the most important components is the Management Information system (MIS) which researchers can use some of the automation tools to conduct research. These automation tools are software that was cleverly designed to do data mining and to generate information and knowledge as well as to help the managers make decisions. Some of these tools are the Decision Support System (DSS) and Executive Information System (EIS). Combining human intelligence and ICT automation tools, the business organization will be able to carry out effective research and would be able to produce innovative and creative ideas that will certainly help the organization to implement new strategies that will enable it to ride on the wave of change and push it to a greater height.

The benefits/importance of management research can be in many forms; some of them are listed below;

- Marketing research
- Business research
- Production research
- Nursing research
- Scientific research etc…

MARKETING RESEARCH:

Market research is considered very important for the organizations to determine the feasibility of a plan or a project. Market research helps the companies to find where the products are most likely to sell. It helps the companies to identify the potential market segments. The domestic and the international competitors of the company are also determined in the market research. Market research also helps the companies to determine the customers' needs and the new trends. Therefore, the market research covers all the major challenges, threats and opportunities of the company, thereby increasing the feasibility of the study. If a company conducts the market research, it can determine the feasibility of the study and reduces the uncertainty and risks of the company.

BUSINESS RESEARCH:

Business research consists of a programme which tells how applicable information is to be gathered and examined, so that the consequences are helpful and appropriate for making promotion decisions. Once the research and analysis are done, the outcome is communed to management. This is why business research is important as it provides information concerning critical issues that have an influence on the aim market and existing marketing mix. Business research also helps to make great changes in the market.

PRODUCTION RESEARCH:

The production research goes into the actual production process to first explore and identify the areas where there are some problems and then later on look for solutions. Research in the production is also very important because it helps in the development of new, improved and effective ways to perform. Production research can involve an analysis of all the things that are related to production and then helps identify the most important aspects and eliminate the unnecessary processes. It helps establish which equipments and processes are the best for our purpose.

NURSING RESEARCH:

Nursing research plays an important role in the field of nursing. It promotes lifelong professional development of the discipline of nursing and supports the fact that nursing is a professional discipline. Nursing research improves clinical expertise and personal knowledge, helps to implement changes to provide excellence in nursing care, and helps to locate additional resources.

SCIENTIFIC RESEARCH:

Scientific research helps us understand the world around us. Research helps people understand how things work and why certain things look or act the way they do. In addition to satisfying curiosity, research can also help save or prolong human life. Scientific research contributes to knowledge about how our bodies work, diet and nutrition, preventing and treating disease and safety considerations. It also leads to inventions of conveniences such as cell phones and microwaves.

CONCLUSION:

The Management Research plays a very important role in industries, applied that the research should be done in a correct manner keeping in mind the industrial type. The research should cover all the major Challenges, Threats and Opportunities of the company, thereby increasing the feasibility of the study. If a company conducts the research, it can reduces the uncertainty and risks of the company. Countries concern also plays a major role for encouraging the research activities.

The output of research works in a GIGO (gold in gold out or garbage in garbage out) manner that is if the input given to the research is gold i.e. quality input than the output from the research would be true and useful which can solve the real world problem.

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