Hindrance Factors for Marketing Information System (MkIS): A Study of Small and Medium Enterprises (SMEs) in Punjab

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ABSTRACT *Small and medium enterprises (SMEs) in Punjab are doing finest task by introducing novel concepts in their system for achieving advanced standards of effectiveness and performance. In today's mounting competitive business environment, Marketing Information System (MkIS) is necessary for valuable decision making for a manager in SMEs, which in turn is accountable for its augmentation. The current study is an attempt to highlight the level of MkIS as a entire. A survey analysis has been undertaken for 140 SMEs viz. cutting tools, sports goods and bicycle components of manufacturing sector of Punjab in India to understand the hindrance factors for MkIS in SMEs. The results highlight that all the hindrance factors of MkIS are measured key by all the three categories of the firm viz. cutting tools, sports goods and bicycle components respectively.*

I. INTRODUCTION

MkIS is intended to bring together disparate items of data into a coherent body of information. MkIS has traditionally been proposed to provide marketing managers a thorough process of intelligence gathering. MkIS also provides methods for interpreting the information it provides. Moreover, MkIS is more than a system of data collection or a set of information technologies. According to [1], "A marketing information system consists of people, equipment and procedures to gather, sort, analyze, evaluate, and distribute needed, timely and accurate information to marketing decision makers". To attain a place in the competitive market, companies have to not only reduced the cost price of their product, but a consistent effort has to be placed on adopting new technologies and enhancing quality standards. Past experience shows that Indian firms took decades to be able to catch up with global productivity levels. Time has come to focus on technological strategies with a focus on MkIS. MkIS are mostly applied by large and dominant firms, but it is right time now for SMEs to focus on the MkIS and initiate steps to enhance information technology culture in SMEs of Punjab Manufacturing. The present study has attempted to find the hindrance factors of the MkIS which deter the growth of the manufacturing SMEs of Punjab in India.

II. LITERATURE OF REVIEW

Punjab is a progressive state of India with an average growth rate of 10 per cent. Punjab has been ranked as one of the growing states of India. Several studies have been done looking at different perspectives, issues, and requirements for MkIS. As per American Marketing Association, MkIS is "the systematic gathering, recording and analysing of data about problems relating to the marketing of goods and services". According to [2], results of a survey of small scale manufacturing units located in and around Jalandhar (Punjab), depicts that small scale industry is witnessing a very difficult time in global market after liberalization and globalization of economy, as a result competition amongst small scale manufacturers is becoming stiff. [3], says that the hindrances of MkIS in a developing country are due to lack of access to computers and the internet, and limited electronic payment capability. As per [4], tackling hindrance factors of MkIS is in fact very impor-

tant. Infact, system implementation success factors is not just use of technology. According to [5], problems are the result of the interaction between characteristics of the people being asked to adopt the system and characteristics of the system itself. On the basis of literature the following seven hindrance factors of MkIS are found:

1. The MkIS is conceived as a data processing and not as an information processing system. (HF1)
2. A belief that the computerized MkIS can solve all the management problems of planning and control of the business. (HF2)
3. Lack of training to the users of the information. (HF3)
4. Adequate attention is not given to the quality control aspects of the inputs of MkIS. (HF4)
5. The MkIS is an impersonal system. (HF5)
6. The MkIS does not give perfect information to all the users in the organization. (HF6)
7. Underestimating the complexity in the business systems. (HF7)

III. METHODOLOGY

The present study has been based on a survey analysis conducted in the state of Punjab, one of the growing states of Indian economy. Data has been collected through a self-structured questionnaire from 140 manufacturing industries which include 124 small and 16 medium enterprises respectively of Punjab from the following districts: Patiala for cutting tools, Jalandhar for sports goods and Ludhiana for bicycle components. Reason for selecting these districts is due to the 82 per cent exports of total exports from these districts of Punjab and they have prominent range of product. Cutting tools from Patiala, sports goods from Jalandhar and bicycle components from Ludhiana compromises nearly 15 per cent of total exports from Punjab and provides 75 percent of the country's requirement. These districts contribute to about 43 per cent of the total small units and about 34per cent medium units respectively in Punjab. The random samples were drawn from the population of enterprises in the Punjab state with 30 producing cutting tools, 50 producing sports goods and 60 producing bicycle components. Categories of firms within these sectors have been depicted in Figure 1
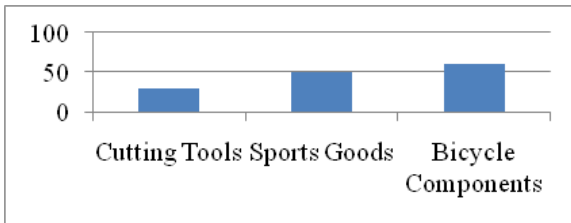
Fig 1. Category of Industry

Size-wise sample has 124 small enterprises and 16 medium enterprises as depicted in Figure 2.
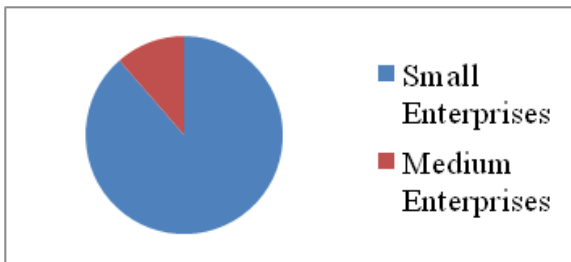

Fig 2. Type of Enterprises

The survey was tested for reliability and overall reliability score (Cronbach Alpha) of the questionnaire has been 0.902. Face and content validity have been done. The questionnaire had been validated by the peers and has a validation score 3.75 on a scale of five. The present study has been undertaken on the basis of three sectors of the firm viz. cutting tools, sports goods and bicycle and on the types of enterprises viz. small and medium.

Objectives:
1. To identify the important hindrance factors of MkIS of the manufacturing SMEs.
2. To find the difference between three sectors viz. cutting tools, sports goods and bicycle components regarding the hindrance factors MkIS.

IV. FINDINGS AND RESULTS

TABLE 1

Mean of Hindrance Factors of MkIS

		HF1	HF2	HF3	HF4	HF5	HF6	HF7
Cutting Tools	Mean	3.16	3.53	2.56	1.93	2.83	2.83	2.83
	N	30	30	30	30	30	30	30
Sports Goods	Mean	3.28	3.42	3.10	2.08	3.34	3.18	3.06
	N	50	50	50	50	50	50	50
Bicycle Components	Mean	3.56	3.45	2.78	2.53	3.01	2.60	2.58
	N	60	60	60	60	60	60	60
Total	Mean	3.37	3.45	2.85	2.24	3.09	2.85	2.80
	N	140	140	140	140	140	140	140

As per Table 1, all the obstacles are having a little higher mean score and hence deserve attention but in terms of individual factor the highest belief in all the three sectors, i.e., cutting tools, sports goods and bicycle components is that the computerized MkIS can solve all the management problems of planning and control of the business (Mean = 3.45) followed by that MkIS is conceived as a data processing and not as an information processing system (Mean = 3.37) and thirdly that MkIS is an impersonal system Mean = 3.09).

TABLE 2

ANOVA of Hindrance Factors for three sectors

		Sum of Squares	Df	Mean Square	F	Sig.
HF1	Between Groups	3.956	2	1.978	1.726	.182
	Within Groups	156.980	137	1.146		
	Total	160.936	139			
HF2	Between Groups	.246	2	.123	.142	.867
	Within Groups	118.497	137	.865		
	Total	118.743	139			
HF3	Between Groups	5.800	2	2.900	2.047	.133
	Within Groups	194.050	137	1.416		
	Total	199.850	139			
HF4	Between Groups	9.263	2	4.631	4.004	.020
	Within Groups	158.480	137	1.157		
	Total	167.743	139			
HF5	Between Groups	5.423	2	2.711	2.806	.064
	Within Groups	132.370	137	.966		
	Total	137.793	139			
HF6	Between Groups	9.196	2	4.598	4.567	.012
	Within Groups	137.947	137	1.007		
	Total	147.143	139			
HF7	Between Groups	6.223	2	3.111	3.011	.050
	Within Groups	141.570	137	1.033		
	Total	3.956	2	1.978	1.726	.182

As per Table 2, the ANOVA results highlight that there is a significant difference between the three sectors of the firm viz. cutting tools, sports goods and bicycle components in case of the following three hindrance factors of MkIS:

(a) Adequate attention is not given to the quality control aspects of the inputs of MkIS,
(b) The MkIS does not give perfect information to all the users in the organization and
(c) Underestimating the complexity in the business systems.

V. CONCLUSIONS

As per the Figure 3, top three hindrance factors each of MkIS in three sectors viz. cutting tools, sports goods and bicycle components have been taken with highest means respectively for highlighting the scenario of weakness of MkIS in SMEs of Punjab.

Efforts have to be made by this sector if it wants to survive in the present day world of competition. Further, though activities like management training programs, maintain of database, improvement in functional evidence etc. have to be provided by SMEs to make the success of MkIS.
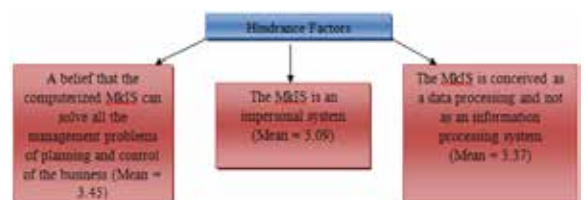

Fig 3. Top three hindrance factors of MkIS each in three sectors

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