

Status of use of Internet and Soft Technology in Small Business

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Abstract- The use of internet and soft technology has been predicted to be the new drivers of economic growth for developing countries. The micro small and medium enterprises (MSMEs) sector play a significant role in the economic growth of both developed as well as developing countries. This sector in India represents the most significant share in productive units and employment generation; the current government policy directions address the ways and means of developing the capacities of MSMEs. The motivation for the use of flexible technology is being considered necessary, so this paper deals with determining the critical factors (CF) to promote uses of soft technology particularly in MSMEs. Based on the data collected from 250 representatives of MSMEs, the study results show that small firms make excellent use of email and sharing files through internet and internet networking. However, the use of technology in the advertisement is found low (PPS= 49.05) products and is not found entirely satisfactory. Also, findings implied that more efforts are needed to help and encourage MSMEs in India to speed up the internet and soft technology adoption, particularly the more advanced applications.

Index Terms — *Use of internet, networking, advertisement, small business, MSMEs, India.*

1. INTRODUCTION

The ability to give and obtain information regarding on-going process parameters, design & development, market situation and customer's requirements can make a significant difference in overall organisational performance. In this behalf, Luftman et al. [1] argue that information technology (IT) has shown potential to influence not only technical but also management based outcomes on the path of business excellence. Reid et al. [2] suggest the role of IT in innovation is positive not rather than negative. Primarily, when IT is aligned with other competencies, it facilitates an improved data analysis (online process data), communication (quick and efficient), practical problem-solving. IT promotes fact-based decision making that fosters a higher level of integration with suppliers and customers than previously not possible. Many firms thus initiated the restructuring of business strategies to understand and incorporate IT infrastructure as a resource of information and competitive advantage [3]. The one challenge of implementing IT is to identify the facilities and equipment that are most relevant to the activities on

have knowledge regarding the various functions of the available IT facilities.

In this study, we focus on the level of use and knowledge regarding various IT artefacts used in various small-scale industries. By keeping in mind the ability and availability of IT facilities in small firms, in this study, we considered the following artefacts classified into two groups:

- i. **Group 1 (General purpose)**
 - E-mail;
 - Desktop tools;
 - Sharing files and drivers; and
- ii. **Group 2 (Collective)**
 - Advertising/promoting the business;
 - Video conferences

2. LITERATURE

The Small Scale Industry sector provides a remedy for less developed countries which aspires for higher growth in the face of a shortage of capital, infrastructural bottlenecks, and a dearth of resources. The efficient use of IT artists can improve the working style in small industries. Since the information has become a business tool instead of merely a research network, businesses

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both large and small have seized the opportunity to explore how to use it to become more productive and competitive. One side the experts in the field suggest that IT has allowed firms to assess worldwide customers base, but it is not as simple to use as thought at the first time. The general purpose use of IT artefact includes email, word processing, powerpoint presentations, and spreadsheets to get information, ordinary firm's networks to create firm's-wide connections, shared files and drivers. To support and supplement this general purpose IT artefacts the use of standard IT artefacts (social networking sites, cloud-based files, product lifecycle management applications, video conferencing etc.) has been increased.

According to Wallsten [5], customer information and obtaining specific information for marketing purposes were the most important benefits the IT offered to small businesses. Similarly, IT creates and distributes information and knowledge among different groups of the organisations. In an organisation, it acts as a platform where content is uploaded by a small group of people (managers, engineers, production head etc.) but within a fraction of time made available to a broad audience [7]. For example, sharing of data of the ongoing process, sharing documents regarding the change in the process flow, new project design and developments. According to Kaynak [6], IT create an effective and efficient working environment inside the firms to become competitive in the global market. Although, there is an increasing number of research efforts focusing on the impact of the information technology on existing business models.

However, relatively few focus on how the information technology has affected small businesses. The questions like what the small firms think about the use of IT artefact? Are they thinking IT artefacts are a resource of competitive advantage? The level small firms in India giving importance to IT artefacts need to be answered.

In the following sections, we will first discuss research methodology. Then we present our findings and address current status regarding the use of IT in Indian small businesses. Finally, we will outline conclusions and scope for future research.

3. RESEARCH METHODOLOGY

The research methodology consists of data collection through a survey. The research questionnaire (instrument) was prepared to get information relevant to IT and its use in Indian small business. After preparing instrument, the next step was to identify the sample size

for the survey. This study employed Cochran formula to identify required number of sample size (number of the industry to be surveyed). The research questionnaire was calibrated with five-point Likert scale, and the data obtained were then further used to draw useful conclusions regarding the use of IT in Indian small business. The scale represents the opinion as 1 = not relevant and 5 = very important. Descriptive statistics like pie charts and percent point score (PPS) are used to analyse and represent the data.

In this paper, we just present the results, calculated from 250 responses gathered from survey methodology. The following section presents survey results and discussion.

4. RESULTS AND DISCUSSIONS

4.1.1 Use of Email

Email has widely used the tool as a form of business communication, and overall it is a highly useful communication tool. Email is inexpensive, only requiring an Internet connection that is already present in the business. Although a printout of emails is possible, emails often stay as soft copies because archiving and retrieving email communications is easy to do. As shown in Figure 1, with high PPS score the use of email was found appreciable. It can be seen that around half of the respondents (47%) marked on excellence use of email in business, followed by 42% high.

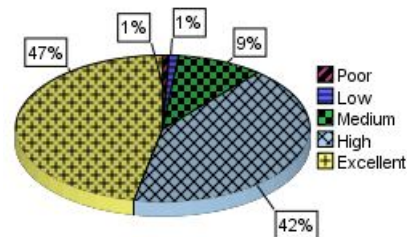


Figure 1. Use of email (PPS = 86.64)

4.1.2 Use of Desktop

The benefits of desktop use include design tools, personal and operation details, preparing spreadsheets, for designing, to design production charts, delivery description, operating machines. The study result observed only 18% of the respondent make excellent use of desktop followed by 30% high. The overall PPS score was found moderately good as PPS = 62.40. Figure 2, presents the status of use of desktop in the studied region.

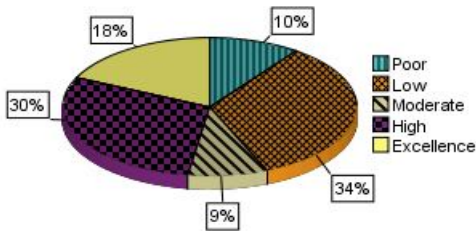


Figure 2. Use of desktop (62.40)

4.1.3 Sharing files and drivers

Sharing files and data through a shared network is designed primarily to enable the assessment of documents, data files, photos, images from any workstation in an organisation. In industry, its typical applications include managing throughput (maximum or minimum rate of production), peak load, response time, vendor queries etc. In this system different combinations of hardware and software response to the various level of demands. Based on the survey results it can be seen that around one third (28%) of respondents shown moderate importance and utilisation of this tool. Only 20% of the firms are taking advantage of this tool. Figure 3 presents the status of advertising in the study region. The overall PPS score was found as 64.48. Figure 3 below shows the status of use of internet and soft technology in sharing files and data.

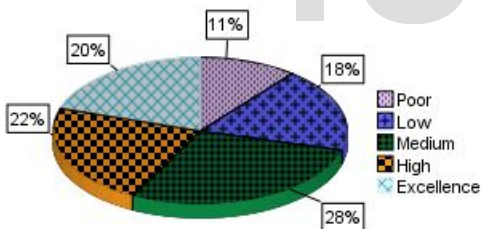


Figure 3. Sharing files and drivers (PPS = 64.48)

4.2.1 Advertising/promoting the business

Firms usually advertise to accomplish different goals including introduction and product promotion, general awareness about product features and importance as well as any after sales shortcoming and finally for getting new customers. In fact, the real need of advertisement is to keep a continuous stream of customers. A strong commitment to advertising provides an internal reinforcement to the sales team. One third (30%) of firms have low investments in advertisement followed by 25% abysmal. Figure 4 shows the presents use of advertising and promotion by small business in the studied region.

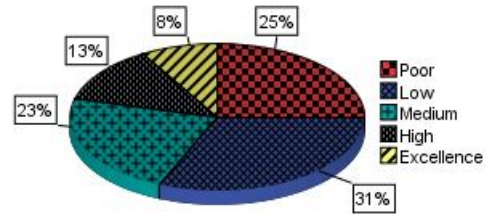


Figure 4. Advertising/promoting of the business (PPS=49.05)

4.2.5 Videoconferencing

The manufacturing industry including aerospace, pharmaceutical, electronics, textiles, food & drink and automotive are increasingly being using video conferencing to bring expertise from another part of the world. Study results found that around 26% of respondents confirmed the excellent use of video conferencing followed by 24% high uses. The overall PPS score was reported as:

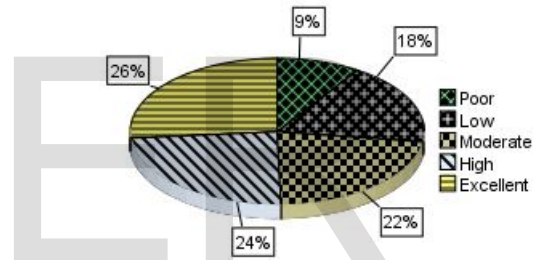


Figure 5. Videos conferencing (PPS = 68.08)

5. CONCLUSIONS AND FUTURE WORK

This study aimed to evaluate the use of internet and soft technology in Indian MSMEs. The results present an overview of the current situation by collecting the data concerning five variables. They are the use of email, use of desktop; sharing files and drives; advertisement/promoting the business through internet and video conferencing. A total of 250 industrial participants from the Northern part of India responded to the structured questionnaire. Based on the PPS score the order uses of these variable is found as (i) Email [PPS= 86.64] (ii) videos conferencing [PPS= 68.06] (iii) sharing files and drivers [PPS= 64.48] (iv) desktop (62.40) and last (v) is advertisement and promotions [PPS= 49.05].

Based on the results it was recommended to improve the utilisation of internet and soft technology in small business. Industries are not advertising their product the

reason may be as maximum respondents were venter of awell-established brand, so need to advertise by themselves. However, the use of email and sharing files with internet and internal networking was found entirely appropriate. The future study could be to identify the barrier of soft technology in small businesses.

Further work may be carried out to establish the relationship between implementing soft technology and set higher goals like productivity, sales volume and market sharing etc.

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