SEEKING NEW APPROACH OF GLOBAL TRANSFORMATION IN IT:A CASE STUDY OF INFORMATION TECHNOLOGY ADOPTION INSMALL FAMILY BUSINESS IN MAHARASHTRA STATE

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Abstract: The study covered five region of Maharashtra state (Konkan region, Pashim Maharashtra region, Khandesh and Northern Maharashtra region, Marathwada and Vidarbha region). The five region were picked using purposive sampling technique in consideration of issues such as regional balance, rural vs. urban areas and population density. The SFBs were selected in each region to participate in the study. A total of 500 respondents were used. This sample was in line with Roscoe (1975) sampling rule that stipulates that a sample size of 30-500 is adequate. Out of the 500 sample, a total of 421 questionnaires were returned, representing 84.2% response rate.

INTRODUCTION

Family businesses (called family-type enterprises) in our society and economy have strong historical presence and widespread presence, as well as vital economic and social contributions. The prevalence of family firms as the most prevalent business structure in the USA has been documented worldwide. Throughout history, families have been critical to the creation and operation of businesses. Families are the most important sources of human capital, social capital, financial capital, and physical capital. Worldwide, from ancient to modern times, and from agricultural and cottage industries to multinational corporations, family ownership is pervasive, Morck and Yeung (2004).

Information and Technologies (ITs) possess the potential to contribute significantly to economic growth. Given their many benefits, small and large businesses are adopting ITs to support their competitiveness, productivity and profitability. However, IT adoption in small family business (SFBs) differs from that of larger organizations because of the specific characteristics of SFBs, such as resources constraints. It is therefore important to understand the theoretical models used to explain IT adoption in SFBs, to better appreciate the key factors that influence the adoption and use of such technologies by these businesses. The

technology innovation literature to explore two of these theoretical models –the diffusion of innovation theory and the technology, organization and environment framework –in proposing an integrated theoretical model of IT adoption by SFBs. This integrated model includes an overarching typology, which classifies some of the key internal and external factors that influence SFBs a sound framework for future search on IT adoption by SFBs in both developed and developing countries.

The contribution of family-type enterprises to the economic development in Maharashtra State is very significant. Undoubtedly, the history of family-type enterprises can be regarded as the evolution of economic development in Maharashtra State. Thus facing the dynamic and keenly competitive environments, we envision the possible trends for the government and personal enterprises to prepare the appropriate strategies. Facing the dynamic and keenly competitive environments, therefore, this study will explore the organizational evolutions in structure and the following appropriate strategies for the family businesses.

Family businesses differ from other firms in terms of ownership, administration and social philosophies, approach to leadership and associations. The involvement of the family is the key defining issue that differentiates family business from non-family business. There are many definitions of a family business. The definitions take into account many aspects, such as family ownership, involvement of the management, strategic control, the main source of income for the family and intergenerational transfers. The European Commission Report also notes that self-employed/one-person enterprises are considered as family businesses in approximately one-third of the countries surveyed.

	Number of firms	**Percentage of firms**
Production-related businesses	**276**	**65.55%**
Metal and engineering products	79	18.7%
Other manufacturing	37	8.9%
Wood-based products	42	9.9%
Construction and construction materials	31	7.3%
Textile products	26	6.2%
Food production	42	9.9%
Publishing and printing	19	4.7%
Trading-related businesses	**79**	**18.7%**
Car retailing	22	5.2%
Technical wholesale	26	6.2%
Other wholesale and retailing	31	7.3%
Service-related businesses	**59**	**14.1%**

Transportation	22	5.2%
Services to business	29	6.8%
Services to consumers	8	2.1%
Conglomerate	**7**	**1.6%**
	421	**100%**

Table no 1: Main businesses of the sample firms

From the above table it analysed that –

- 276(65.55%) respondents are taken from production related business.
- 79 (18.7%) respondents are taken from trading related business.
- 59 (14.1%) respondents are taken from service related business.
- (1.6 %) respondents are taken from Conglomerate business.

Variable	Category	No.	%
Gender	Males	263	62.5
	Females	158	37.5
Total		421	
Age	Less than 30	57	13.5
	31-40	175	41.5
	41-50	109	26.0
	Over 50	80	19.0
Total		421	
Level of education	No schooling	44	10.5
	Primary	204	48.5
	Secondary	145	34.5
	University	28	6.5
Total		421	

Table no 2: Demographics of participants in the study

On the gender of respondents, data collected showed that majority 62.5% were males while females were 37.5%. These findings indicated that most of SFB's workers in Maharashtra state were dominated by males. The data on age shows that majority of respondents were between 31-40 years 41.5%, followed by 41-50 years at 26.0%, over 50 years were 19% and less than 30 years were 13.5%. This data revealed most of age groups were represented in this study. As shown in table no. 2, most of participants had attained primary education.

IT benefit	N	Min	Max	Mean
There is increased customer loyalty	421	1	5	4.36
There is increased profitability	421	1	5	4.43
There is convenience in communication	421	1	5	4.45
There is improved customer relationship	421	1	5	4.43
It has promoted good image for the organization	421	1	5	4.31
It has promoted information sharing	421	1	5	4.21
There is better customer data management using computers	421	1	5	3.87
There is improvement in our business competitiveness	421	1	5	4.04
It has given us a long term competitive advantage	421	1	5	3.67
N	421			

Table No 3 Benefits of adoption of IT in Business

About the benefits of adoption of IT, results in Table no 3 indicate that the respondents strongly agreed that IT was a convenient means of communication in the organizations (Mean=4.45), increased profitability (Mean=4.43), increased customer loyalty (Mean=4.36) and improved customer relationship (Mean=4.43). The respondents also strongly agreed that IT promoted a good image for the organization (Mean=4.31), promoted information sharing (Mean=4.21) and that it helped in the improvement of business competitiveness (Mean=4.04). The results in Table no. 3 also indicate that respondents agreed that IT provided a better way of managing customers' data using computers long (Mean=3 termcompetitive.87) advantage and that (Mean=3.67).

Challenges of IT adoption	N	Min	Max	Mean
Resistance to change by members	421	1	5	4.44
Resistance to change by customers	421	1	5	4.43
Lack of ICT skilled staff	421	1	5	4.28
No support staff training in ICT	421	1	5	4.45
Lacks computers and software	421	1	5	3.23
No policy and guidelines	421	1	5	2.52
Does not have a website	421	1	5	3.42
Not aware about the benefits of IT	421	1	5	4.41
Cost of IT technology is so high	421	1	5	3.23
No IT laws in this country.	421	1	5	3.01
Fear of sharing their information	421	1	5	3.43
No knowledge about IT	421	1	5	4.34
Cannot afford using IT	421	1	5	3.55
Lacks resources for implementing IT	421	1	5	3.21

Table no. 4: Challenges of IT adoption

Descriptive statistics were further used to determine the challenges of adoption of IT in organizations. The data was analyzed using means on a 5 point scale where means close to 5

represented strong agreement, while the means close to 1 represented strong disagreement as seen in above Table no 4.

Results in Table indicate that the respondents strongly agreed that the most hideous challenges to IT adoption were resistance to change by members of staff (Mean=4.44), resistance to change by customers (Mean=4.43), lack of ICT skilled staff in this organization (Mean=4.28) and that their organizations did not support staff training in ICT (Mean=4.45). The respondents also strongly agreed that their clients were not aware about the benefits of IT (Mean=4.41) and also that the clients did not have knowledge about IT (Mean=4.34)

In addition, the respondents agreed that other challenges to IT adoption in the organizations were lack of computers and software for implementing IT (Mean=3.23), lack of a website (Mean=3.42) and the high cost of IT technology (Mean=3.23). The respondents further agreed that their clients were not free in using IT because of fear of sharing their confidential information with others (Mean=3.43). The respondents also advanced other factors hindering IT adoption as clients inability to afford using IT (Mean=3.55).

Barrier	No. of Respondents	%
Cost of technological tools	408	97.0
Lack of technological skills	402	95.5
Uncertainty over business benefits	385	91.5
Technical problems, like breakdowns	370	88.0
Inadequate infrastructure	341	81.0
Limited access to internet	330	78.5
Limited and unreliable sources of power	303	72.0
Negative attitude towards technology	271	64.5
Limited support by government and other agencies	216	51.5

Table no. 5: Barriers to adoption and use of technology by SFB's

On closed ended questions, respondents were asked to identify the barriers that they encountered when adopting and using technology in their businesses. As shown in table, majority of respondents 97.0% indicated that the major barrier to adoption and use of technology by SFB's was cost of technological tools such as computers, printers, mobile phones, internet, projectors, etc. The other barrier was indicated by 95.5% as lack of technological skills, while 91.5% perceived uncertainty over business benefits from adoption and use of technology as main challenged encountered by SFB's.

Technical problems (like breakdowns) were perceived by 88% as a barrier, while 81.0% indicated that inadequate infrastructure and poor maintenance was challenges experienced

during implementation of technology by SFB's. Limited access to internet was viewed by 78.5% as a barrier. These findings were in line with results of study conducted by Ruffling (2012) that concluded that due to breakdowns and poor maintenance of ICT tools, many business people were unable to utilize the full benefits of the technology.

Limited and unreliable source of power (electricity, generators, etc) was perceived by 72.0% as barrier to adoption and use of technology by SFB's in Maharashtra. A report by the Index of Economic Freedom (2014) had the same bearing, where it was reported that in most regions of the country, connections to national electricity grid was not yet realized. Further, respondents felt that negative attitude towards technology (64.5%), was contributing to impediments on adoption and use of technology as well as limited support offered by the government and other agencies 51.5%. OECD (2008) reported that banks were limiting loans advanced to SFB's due to uncertainty of their businesses. This could explain why a number of respondents felt that government and other agencies (like banks) did not support them in terms of adoption and using technology.

CONCLUSION

The study revealed there were barriers that affected smooth adoption and use of technology by SFBs. These barriers were identified as cost of technological tools, lack of technological skills, uncertainty over business benefits from adoption and use of technology, technical problems (like breakdowns), inadequate infrastructure and poor maintenance, limited access to internet, limited and unreliable sources of power, among others. Researches in the recent past explored various dimensions of application of Information Technology in SFBs firms to explore the implications of adopting Information Technology in small firms also.

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