Towards Establishing the Hierarchical Inter-Relationships amongst the Governing Criteria behind Family Businesses

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ABSTRACT
Present paper tries to explore the various criteria for the success and failure of family businesses in world . It thereafter, tries to study the inter-relationships amongst them using ISM methodology.

Keywords
Family businesses; ISM methodology; Entrepreneurship; familial entrepreneurship

1. INTRODUCTION
Founded on the joint family principle of ownership and management , contribution of family businesses has been marked by the entrepreneurial capitalism [1]. entrepreneurship is a determining factor of economic development [2]. entrepreneurship not only contributes to the economic and social growth of a nation, but also stimulates the development of knowledge and technological change [3], competitiveness and innovation [4]. Entrepreneurial intention is closely linked to business world. Present work tries to explore the various criteria behind the success and failure of family businesses. It thereafter, tries to study the inter-relationships amongst them using ISM methodology. The paper is arranged as follows : Section 2 studies the various criteria . Section 3 study the ISM methodology . Section 4 studies the case example. Section 5 presents the conclusions.

2. LITERATURE REVIEW ON SUCCESS FACTORS AND CHALLENGES TO FAMILY BUSINESSES

2.1 Literature review on success factors to family businesses

2.1.1 High levels of self-efficacy [HLSE] : Specifically, this factor is studied by [5],[6] to perform the entrepreneurial activities.

2.1.2 Risk taking capability [RTC] : Risk propensity or risk taking capabilities are studied by [7].

2.1.3 Tolerance to ambiguity and uncertainty [TAU] : this success factor is largely studied by[7], metacognitive abilities and individual abilities [8,9] as well as creativity [10].

2.1.4 Role of culture [RoC] : [5] studied the role of culture as psychological, acting at the individual level.

2.1.5 Culture with respect to Business contexts [CBC] : This factor is studied by researchers such as [11]; in context of Islamic [12]; Mohd Rhouse *et al.,* 2016), and Middle Eastern cultures [15]; [13],[14].

2.1.6 Individual choice [IC] : According to the researchers such as [16],[17],[18], possibility of being able to inherit the family business does not make it a desirable choice.

2.1.7 Strength of family expectations [SFE] : The performance of those who enter the family business is better when perceived family responsibility as strong, this result highlights the strength of family expectations in positively influencing members' performance [[19].

2.1.8 Involvement of family [IoF] : Based on data from 228 entrepreneurs, [20] found that the active involvement of the family creates a common destiny among members that favors resilience for an entrepreneur, compared to the owners of non-family businesses.

2.1.9 Intention of members [IoM]: factors that influence the intentions of the members of the next generation to undertake an entrepreneurial career also considers the behaviors of their parents [21] and their children [18].

2.1.10 Parental role models [PRM] : Parental role models increased the likelihood of individuals becoming self-employed [22]. Urbano *et al*. (2011), instead, established that individuals with the same ethnicity can act as a model, encouraging other individuals in the community to create new businesses. Pablo-Lerchundi *et al*. (2015) showed that the profession carried out by parents influences the entrepreneurial intentions of students.

2.1.11 Professional role models [PRRM] : [23] Laviolette *et al*. (2012), [24],[25],[26][18], [29] found that role models has positive influence provided that such models are positively perceived by individuals.

2.1.12 Structural and emotional family support [SFS] : from [25], [28] , it emerged that university support, structural support and emotional support of the family are important factors that influence the entrepreneurial intention of students.

2.1.13 Visibility and exposure [V&E] : The perks of being in a family business are the visibility and exposure that one gets into every aspect of running the company. Another benefit is the ease in taking risky decisions.

2.1.14 Known for ethics [KFE] : Most of the family run businesses are known for the ethics that they follow and

it naturally creates a legacy for the coming generation to continue.

2.2 Key challenges to family businesses [30-33]

2.2.1 Miscellaneous issues [MI] : The key areas where family run firms continue to face unique challenges are Family Wealth Management, Managing Family Relationships and Professionalization.

2.2.2 Communication problems [CP] : Relationship between parents and children or among siblings has a tendency to deteriorate due to communication problems. Family problems may spill over into the workplace. There may be times when the interests of a family member conflict with the interests of the business.

2.2.3 In ability to adapt to increasing competition [IIC] : One of the popular myths about family businesses is that they are unable to adapt easily to increasing competition and technological progress. But as the new generation steps in, the family businesses subsequently have the advantage of entrepreneurial spirit and flexibility.

2.2.4 managing growth [MG] : First and second generation of family owners in India now face a vastly different business landscape to when they first started but they are also taking centre stage in the global economy, at the heart of a region that has tremendous room for development and growth.

2.2.5 Professionalising the business and the family [PB&F] : As Indian family businesses continue to establish greater presence globally and grow to a certain size, they also face more intense competitive pressures, rising costs and the impact of global mega trends. Yet for any family business to take advantage of the opportunity to grow in today's globalized world, the challenge is to identify ways in which to do that as effectively as they can.

2.2.6 Acquiring talent and skills [ATS] : Attracting and retaining talent continues to weigh on the minds of family owners as they compete for the right skills and a strong talent pool needed to drive their business.

2.2.7 Managing succession/Grooming the next generation of business leaders [MS] : As Indian family businesses are generally facing only their first or second transition, the process may be new to them. And for those taking over the family business, expectations and plans of the succession process can pose some worry – how will their parents adapt, how they will measure up and overall being able to manage the process successfully by ensuring their parents still feel involved and able to contribute.

2.2.8 Managing conflicts [MC] : Between generations, there can be gaps in communication and credibility. The collision of expectations and the lack of communication can be emotionally-charged but more importantly, harm relationships between key family members which eventually affects the business.

2.2.9 Non participative family members [NPFM] : Every family-owned business have some members who are actively involved in the business but there are stake holders who are not actively part of the business like mother, sisters, uncles, aunts, in-laws etc. These people are interested only in dividends and earnings and not in the growth of the business they are unable to comprehend the problems of operating a business.

2.2.10 **Family emotions [Fe]** : Emotional outbursts are many in family-owned businesses and the quarrels and ill feelings of relatives have a way of spreading out to include non-family employees. It is believed by many business thinkers that emotions are very essential to operate a business. But these emotions and passion have to be related to business.

2.2.11 **Human Resource [HR]:** In family business the family has to be always accommodated first with jobs. In some cases, family members and relatives can demoralize the organization by their dealings with other employees. Untalented family members should be put in jobs where they will have minimum contact with other employees, out of the mainstream of decision making.

2.2.12 **Retaining non family professionals [RNFP]:** It is a big challenge in some family-owned companies to retain non family professionals. Family-owned businesses have not been able to keep the morale of their non-family professionals very high this has affected their growth aspects .

2.2.13 **Fair to all approach [FTA]:** Family in India have always prided themselves in being fair to all in the family. Open decision-making and procedures that ensure fairness in evaluating and rewarding both family and non-family employees are essential tools in avoiding tensions and raising the reputation of company.

2.2.14 **Succession Planning [SP]** : Succession planning is almost absent in family-owned business in India even in the biggest private sector company in India like Reliance. The split in the company was not amicable and resulted in a loss to the investors wealth and Reliance slipped from its position in the Forbes List.

3. INTERPRETIVE STRUCTURAL MODELLING METHODOLOGY

Suggested by Warfield [34], ISM works with the following steps: It starts with identifying the relevant elements and pair-wise establishing the contextual relationship amongst them. Thereafter, a structural self-interaction matrix (SSIM) may be developed between two variables i.e. *i and j* establishing a *"Lead to"* relationship between criteria. Four symbols *viz.* V, A , X & O are used for establishing the relationships. After that, a level partition matrix can be obtained based on establishing the precedence relationships and arranging the elements in a topological order. A *Mic-Mac* analysis is performed categorizing the variables in to autonomous, dependent, driver and linkage category. Finally, a diagraph can be obtained.

4. CASE EXAMPLE

14 success factors viz. High levels of self-efficacy [HLSE] ; Building of risk taking capability [BRTC]; Tolerance to ambiguity, and uncertainty [TAU]; Role of culture [RoC] ; Culture with respect to Business contexts [CBC]; Individual choice [IC]; Strength of family expectations [SFE]; Involvement of family [IoF]; Intention of members [IoM]; Parental role models [PRM]; Professional role models [PRRM] ; Structural and emotional family support [SFS] ; Visibility and exposure [V&E] ; Known for ethics / Positive building of ethics [KFE] and 14 challenges *viz.*

Miscellaneous issues [MI] ; Communication problems [CP] ; In ability to adapt to increasing competition [IIC] ; Managing growth [MG] ; Professionalising the business and the family [PB&F]; Acquiring talent and skills [ATS] ; Managing succession/Grooming the next generation of business leaders [MS] ; Managing conflicts [MC]; Non participative family members [NPFM] ; Family emotions [FE] ; Human Resource [HR]; Retaining non family professionals [RNFP]; Fair to all approach [FTA]; Succession Planning [SP] ; Leadership succession [LS] described in section 2 above have been identified through literature survey over search engines such as google scholar exploring published articles available in Research gate , academia.edu etc.   These criteria are studied further for possible inter-relationships amongst them using ISM methodology below.

4.1 Construction of Structural self-interaction Matrix (SSIM)

This matrix gives the pair-wise relationship between two variables *i.e. i and j* based on VAXO. SSIM has been presented below in Fig 1 between the various success factors behind family businesses .

4.2 Construction of Initial Reachability Matrix and final reachability matrix

The SSIM has been converted in to a binary matrix called the initial reachability matrix shown in fig. 2 by substituting V, A, X, O by 1 or 0 as per the case. After incorporating the transitivity, the final reachability matrix is shown below in the Fig 3.

S. No.	Barriers	1	2	3	4	5	6	7	8	9	10	11	12	13	14
		HLSE	BRTC	TAU	RoC	CBC	IC	SFE	IoF	IoM	PRM	PRRM	SFS	V&E	KFE
1	HLSE	1	1	1	0	0	1	0	0	0	0	0	0	1	1
2	BRTC	0	1	1	0	0	0	0	0	0	0	0	0	0	0
3	TAU	0	1	1	0	0	0	0	0	0	0	0	0	0	0
4	RoC	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5	CBC	1	1	1	1	1	0	0	0	0	0	0	0	0	0
6	IC	1	1	1	0	1	1	1	1	1	1	1	1	1	1
7	SFE	1	1	1	0	1	1	1	1	1	1	1	1	1	1
8	IoF	1	1	1	0	1	1	1	1	0	0	0	1	1	1
9	IoM	1	1	1	0	1	1	1	1	1	0	0	0	0	0
10	PRM	1	1	1	0	1	1	1	1	1	1	1	1	1	1
11	PRRM	1	1	1	0	1	1	1	1	1	1	1	1	1	1
12	SFS	1	1	1	0	1	1	1	1	1	0	0	1	1	1
13	V&E	0	1	1	0	1	1	1	1	1	0	0	0	1	0
14	KFE	1	1	1	0	1	1	1	1	1	0	0	0	1	1

Fig 1: SSIM matrix for pair wise relationship amongst success factors

S. No.	Barriers	1	2	3	4	5	6	7	8	9	10	11	12	13	14	D.P
		HLSE	BRTC	TAU	RoC	CBC	IC	SFE	IoF	IoM	PRM	PRRM	SFS	V&E	KFE	
1	HLSE	1	1	1	0	1	1	1	1	1	1	1	1	1	1	13
2	BRTC	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
3	TAU	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
4	RoC	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14
5	CBC	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14
6	IC	1	1	1	0	1	1	1	1	1	1	1	1	1	1	13
7	SFE	1	1	1	0	1	1	1	1	1	1	1	1	1	1	13
8	IoF	1	1	1	1	1	1	1	1	1	0	0	1	1	1	11
9	IoM	1	1	1	0	1	1	1	1	1	1	1	1	1	1	13
10	PRM	1	1	1	0	1	1	1	1	1	1	1	1	1	1	13
11	PRRM	1	1	1	0	1	1	1	1	1	1	1	1	1	1	13
12	SFS	1	1	1	1	1	1	1	1	1	0	0	1	1	1	12
13	V&E	0	1	1	1	1	1	1	1	1	1	1	1	1	1	13
14	KFE	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14
	De.P	11	14	14	6	12	12	12	12	12	10	10	12	12	12	

Fig 2: Initial reachability matrix

S. No.	Barriers	1	2	3	4	5	6	7	8	9	10	11	12	13	14
		HLSE	BRTC	TAU	RoC	CBC	IC	SFE	IoF	IoM	PRM	PRRM	SFS	V&E	KFE
1	HLSE		V	V	A	A	X	A	A	A	A	A	A	V	X
2	BRTC			X	A	A	A	A	A	A	A	A	A	A	A
3	TAU				A	A	A	A	A	A	A	A	A	A	A
4	RoC					X	V	V	V	V	V	V	V	V	V
5	CBC						A	A	A	A	A	A	A	A	A
6	IC							X	X	X	X	X	X	X	X
7	SFE								X	X	X	X	X	X	X
8	IoF									A	A	A	X	V	V
9	IoM										A	A	A	A	A
10	PRM											X	V	V	V
11	PRRM												V	V	V
12	SFS													V	V
13	V&E														A
14	KFE														

Fig 3 : Final reachability matrix

D.P : Driving power ; De.P : Dependence power

4.3 Level Partition

From the final reachability matrix, reachability and final antecedent set for each factor are found. The elements for which the reachability and intersection sets are same are the top-level element in the ISM hierarchy. After the identification of top level element, it is separated out from the other elements and the process continues for next level of elements. Reachability set, antecedent set, intersection set along with different level for elements have been shown below in table 1.

Table 1: Iteration I

S. No.	Reachability set	Antecedent set	Intersection set	Level
1.	2,3	1,2,3,4,5,6,7,8,9,10,11,12,13,14	2,3	
2.	2,3,5,6,7,8,9,12,13,14	1,4,5,6,7,8,9,10,11,12,13,14	5,6,7,8,9,12,13,14	I
3.	1,2,3,5,6,7,8,9,12,13,14	1,4,5,6,7,8,9,10,11,12,14	1,5,6,7,8,9,14	
4.	1,2,3,5,6,7,8,9,10,11,13,14	1,4,5,6,7,9,10,11,14	1,5,6,7,9,10,11,14	
5.	1,2,3,4,5,6,7,8,9,10,11,13,14	4,5,14	4,5,14	

Table 2: Iteration II

S. No.	Reachability set	Antecedent set	Intersection set	Level
2.	5,6,7,8,9,12,13,14	1,4,5,6,7,8,9,10,11,12,13,14	5,6,7,8,9,12,13,14	
3.	1,5,6,7,8,9,12,13,14	1,4,5,6,7,8,9,10,11,12,14	1,5,6,7,8,9,14	II
4.	1,5,6,7,8,9,10,11,13,14	1,4,5,6,7,9,10,11,14	1,5,6,7,9,10,11,14	
5.	1,4,5,6,7,8,9,10,11,13,14	4,5,14	4,5,14	

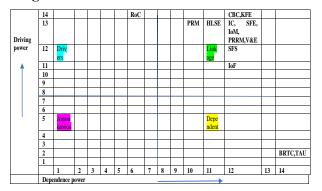**Table 3: Iteration III**

S. No.	Reachability set	Antecedent set	Intersection set	Level
3.	1	1,4	1	
4.	1,10,11	1,4,10,11	1,10,11	III
5.	1,4,10	4	4	

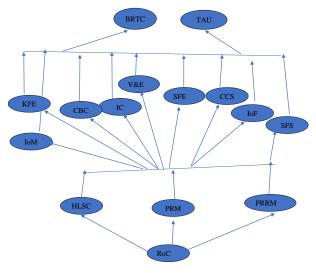**Table 4: Iteration IV**

S. No.	Reachability set	Antecedent set	Intersection set	Level
5.	4	4	4	IV

4.5 Dependence Power- Driving Power Diagram

4.5   ISM Diagraph for the hierarchical relationship amongst the governing criteria [success factors] amongst the familial businesses

5. CONCLUSIONS

Present research explores the various success factors as well as challenges behind the running of family businesses in countries like India. thereafter, it tries to explore the inter-relationships amongst them using ism methodology . the research could be further extended to include decision making techniques such s structural equation modelling or TISM .

6. ACKNOWLEDGEMENTS

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