



ROLE OF MANAGEMENT IN INTERNATIONALIZATION: ANALYSIS OF MANAGERIAL & FIRM CHARACTERISTICS

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Abstract

Traditionally Exporting has been seen as a way to increase turnover of individual enterprises when Internationalization of SMEs begins with. Exporting, as the traditional way to internationalize, is still very important, but during the last decade, internationalization has become a much more differentiated business activity of crucial importance for achieving competitiveness. Foreign partnerships, foreign investments, subsidiaries and cross border clustering represent viable ways to facilitate exchanges of knowledge and technology and to strengthen international business strategies of SMEs. Such international activities cover both outward (e.g. sales/export) and inward (e.g. import or access to knowledge) activities along the value chain. Exporting firms are also often involved in a range of inward and related activities that interact with each other.

The role of management in technological advancements, quality related with product manufacturing, process capability, application of operational knowledge of the staff, lived in abroad and having people with foreign experience will increase the pace of internationalization. This paper underlines that internationalization consists of a broad range of activities that contribute to the development of enterprises' competitiveness. Competitiveness is the role which can be developed by the management. However, this holistic approach has not been adopted sufficiently by policy measures aiming to encourage internationalization and at increasing firms' competitiveness. Statistical approaches such as, Factor analysis, multiple regression, Man whitney U test and correlation are used for finding the results through SPSS software.

Index Terms : Internationalization, Proactiveness, Management, SMEs

I. Introduction

According to Chelliah *et al.*, (2010) Internationalization is the extent to which a firm is involved in international business. It includes exporting, the presence of foreign subsidiaries, share ownership by foreigners and the appointment of foreigners in the organizational structure (Chelliah, et al, 2010). **Export is considered to be the indicator of internationalization for the study. Managerial characteristics will define the decision of internationalization of a firm.**

II. Review of Literature

Davide Sala, Erdal Yalcin, found the role of management in internationalization of a firm analysed firms' entry decision into the export market. In contrast to previous studies it is possible to control for the effects of management characteristics and human capital variables, besides commonly used firm characteristics.

Knowledge-related Motives. Recent research findings suggest that knowledge assets both push and pull SMEs into international markets. The „push“ dimension pertains to the importance of managers“ previous international experience and related management capacity factors, as observed in studies among Canadian firms, Spanish firms, and Swedish firms. There are also related findings from a number of OECD countries (Canada, Ireland, and Sweden) and non-OECD economies (Chile, India and Indonesia) on the internationalization triggering effects of knowledge aspects, including R&D investment, innovation capabilities, unique product or technology, and language skills; and firm resource base, as indicated by such proxies as size, age, and experience. Search for knowledge assets may also pull SMEs into international markets, as suggested by Kocker and Buhl's findings shows that firms internationalize to obtain missing know-how required to maintain their lead in technological development.

Barriers of internationalization related to management's decision :

Lack of capital requirements and other firm resources and limited access to key infrastructure were also reported by SMEs recently investigated in China, Finland, India, Indonesia, Ireland, Russia, South Africa, Spain, Sweden, and Turkey. Limited information to locate/analyse markets. Inadequate knowledge of overseas market also emerged as a top barrier in a recent study of Australian firms (EFIC, 2008). The speediness of Internationalization will reduce because of Lack of managerial time, skills and knowledge, Difficulties arising from limited managerial knowledge base emerged as a top barrier to SME internationalization in several recent surveys. Other studies that alluded to the intensity of managers“ perceptual/psychological barriers to internationalization include Crick (2007) and Vivekanandan and Rajendran (2006). The foregoing analysis points to the continuing criticality of barriers such as limited firm resources, managers“ misperceptions and lack of international market-related knowledge in impacting SME internationalization. These barriers are largely internal as they mainly reflect the limitations of the investigated firms in regard to the key resources and capabilities they need to internationalize or further their activities thereof

III. Research Methodology

The research was conducted among the Pump and Motor manufacturers of Coimbatore district. South India. From the database of 272 (both organized and unorganised sector) exporting firms from the same business line, 143 firms were chosen based on simple random sampling method. The researchers have adopted both qualitative and quantitative design of research. A well structured questionnaire was used to collect the data from the respondents. The respondents are Entrepreneurs of the firm, Marketing Heads and Export Managers. The research was carried out through an in depth interview with the respondents and a mail survey method also was adopted. The data was collected during March – June 2014. The article tries to bring out various export related knowledge factors required for the internationalization process of a firm and the analysis was done with the use of SPSS software.

The sample cover the member companies of EEPC (Engineering export Promotion council) and SIEMA (Southern India Engineering Manufacturers Association). The geographical spread of the sample covered the whole of Coimbatore. The exporters who were interviewed and included for the study are the marketing heads and the owner founders of these companies. From the interview questionnaire, exporters were asked to respond for the incidence of problems and barriers faced in exporting. An ordered five point Likert scale required the respondents to indicate one option best

aligned with their views and to rate their perception on the incidence of various barriers they encounter. Responses were obtained on a five point scale ranging from “to a great extent”(5) to a little extent (1). Freidman test was applied for finding the differences in mean scores and chi-square was applied to test the hypotheses.

This paper aims to focus on the determinants influencing the internationalization of small and medium-sized enterprises (SMEs) in India. The objective is to investigate and evaluate the business environment and, then, examine the importance of developing and promoting entrepreneurship to allow SMEs in India to develop a competitive position in the international marketplace. It is proposed that the primary method for fostering or promoting the growth of entrepreneurship is through the utilization of technology.

Design, methodology & approach - An overview is provided of the current economic situation facing SMEs in India. Then factors necessary for the expansion of the business are discussed, along with the challenges of overcoming the resource gaps identified. The importance of fostering entrepreneurship is presented. The current state of technology is then evaluated. The paper concludes with an assessment of challenges and implications for future expansion.

Value- This paper integrates entrepreneurship, resource-based view and internationalization of SMEs in India, specifically focusing on the use of technology.

This paper defines four different profiles which reflect the nature and level of a firm's technological involvement in exporting and foreign sales. It is also possible to characterize a firm's export marketing strategy along a reactive-proactive continuum. Technology profiles and marketing strategies are then linked together to suggest the optimal approach to developing overseas markets for a given type of firm. A number of essential requirements for successful export marketing are also described. It is suggested that success requires a combination of innovation, adaptation, and an appropriately selected marketing strategy.

Pump Industry in Coimbatore

Coimbatore was a hub of textile industry, mainly cotton, in early twentieth century. Although, man has been using pumps of some type or the other for 4000 years, electricity driven pump was first manufactured in India in Coimbatore in 1930. By 1959, all the major pump designs were introduced into commercial products. The industry has grown rapidly in the region.

At present there are about 450 manufactures of pump sets in Coimbatore and the cluster accounts for nearly 48% of the pump sets manufactured in India. Submersible pump sets account for the major share of the pumps (about 65%) produced in the cluster followed by pump sets for domestic applications. Most of the pumps manufacturers in the cluster concentrate on high volume centrifugal and submersible segments. Hence there are relatively few manufacturers in the cluster producing specialised pumps like concrete volute pumps (for hydro power applications), drainage pumps, sewage pumps, split casing centrifugal pumps and vertical turbine pumps. Most of the submersible pump sets manufactured in Coimbatore use gun metal or SS impeller since they have better corrosion resistance properties. Plastic impellers are also used especially for smaller clear water pump sets.

The leading pump set manufactures in the cluster are the following:

1. Aquasub Engineering
2. Texmo/Tarro pumps
3. CRI Pumps
4. Mahendra Pumps
5. Suguna Pumps
6. Best Engineers
7. Perfect Engineers
8. Deccan pumps
9. Sharp Pumps
10. V-Guard
11. Rievera pumps

Some of the above mentioned manufacturers are OEM suppliers to reputed brands like Crompton, KSB, Grundfos etc. Almost all the manufacturers are producing centrifugal pumps for high head and low discharge. Axial flow pump typically have efficiencies upto 92%. Production of industrial axial flow pumps for low head and high discharge is not common in Coimbatore. Other positive displacement pumps, particularly rotary types, used for niche applications, peristaltic, progressing cavity and rotary lobe pumps are also not produced in the cluster. The high development cost of specialised pumps for industrial use and dominance of large pump manufacturers like Mather & Platt, Kirlosker, Jyoti, Worthington and KSB in this segment have been the major deterrence to their production in the cluster. The pump industry in Coimbatore needs to move beyond small sized centrifugal pumps to higher value added production of industrial pump sets.

SELECTION OF VARIABLES –MANAGERIAL CHARECTERISTICS

1. Demographic Factors
2. Industry & Management Know how
3. International outlook
4. Risk Taking ability & innovativeness.
5. Role of Management in international involvement.

Finding the relationship with Demographic factors and Performance of the firm considering the following factors.

1. Firm Size
2. Foreign sales growth
3. International intervention
4. Total sales growth

Formulation of Hypothesis

H₀ (1)- There is no relationship between **age of the firm and firm specific advantages** in proving managerial characteristics are important for the success of internationalization of a firm.

H₀ (2) There is no relationship between **Driving forces of internationalization and the speed of internationalization** in proving managerial characteristics are important for the success of internationalization of a firm.

H₀ (3) There is no significant difference between . gender in involving while decision making and in performing the specific role of management in internationalization process.

IV. DEMOGRAPHIC VARIABLES

- ★ The **Age group** of the respondents : 60.8% of the respondents belong to the age group of 40-50 years.
- ★ **Gender** : 90.9% of the respondents were male and 9.1% were female respondents.
- ★ **Education**: 85.3% respondents are professionals from the category of having technical education/ professional qualification. The remaining 14.7% respondents belong to the category of graduates.
- ★ The **designation** of the respondents of the study includes, 58% Entrepreneurs, 28.7% Export managers, 4.9% Marketing managers and 8.4% Vice Presidents.
- ★ 81 of the total respondents are having more than 20 years of **International experience** (ie.,56.6%) and remaining 25.9% have 10-20 years of international experience.
- ★ **Age of the firm** : 118 firms out of 143 are having business operations for more than 10 years having domestic business at the beginning and started their international operations later.
- ★ The **Pace of Internationalizing** their firms : 38 companies have taken nearly 20 years and 40 companies have taken 6-10 years. This shows the firm's incremental process in stepping into the international markets. SMEs are sensitive to risks and uncertainties when they stretch abroad. Hence careful and incremental steps were followed to reduce the risks.

- ★ **Location of the Unit** : 119 firms are located in the urban area of Coimbatore city and 24 firms are located in the semi urban area of the Coimbatore district.
- ★ **Number of Employees** : 68 SME units have more than 50 employees, 54 firms are having 16-50 employees and 21 firms have less than 15 employees which are relatively small size SME units.
- ★ **Turnover of the Company**: 129 firms are having more than Rs.50 lakh business turnover. This shows that the selected Industry is based on an annual sales turnover of Rs.1- 4 crore business. 14 firms are still smaller in size with lesser than Rs. 50 lakh annual sales turn over.
- ★ **SMEs** :It is found that 52% of Small sized firms and 48% of medium sized firms were considered for the research based on turnover and number of employees.
- ★ **Form of business** : 61 firms are Private limited companies; 55 are sole trading firms promoted by Individual technocrats and 16 partnership companies have participated in this study. Four larger firms and 6 International firms were also the respondents for the study. The INVs (International Ventures) and its subsidiaries such as Grunfos pumps, KSB Pumps, Chansubha Pumps, Egger Pumps, Sehra Pumps from Mumbai and Rossi Gear Motors(India) etc. operating in Coimbatore were few of the respondents.
- ★ **Products Manufactured** : In the total sample size of 143 manufacturing firms 47 firms belong to the firms manufacturing pumps and 29 firms exclusively manufacture motors and 67 companies belong to both Motors and Pump manufacturers (e.g the renowned International brand owners of Texmo, Aquasub, Sharp, Suguna Pumps, CRI Pumps, Mahendra Pumps etc).
- ★ **Target Market** : 134 (93%) firms are involved in both national and international markets. Hence it shows the Firms' involvement in International markets. 6 firms which were not in exporting business currently but were exporting earlier, due to
- ★ various reasons, its exports division is not effectively carried out and hence have withdrawn from foreign exports(eg. Best Pumps). Few firms have their concentration in only domestic markets and 3 firms exclusively concentrate mainly in the International markets.
- ★ **EEPC Membership**: 74 companies are the registered EEPC member companies. The rest of the sample 69 firms belong to the un organized sector of exporting business. The EEPC membership benefits the company in obtaining relevant information about various foreign markets and products from time to time. The council or the board keeps its members informed about the emerging trends and opportunities and threats in international markets. At the same time, RCMC (Registration cum Membership certificate) also fetch some benefits to the exporting firms. E.g Chansuba Pumps and Sehra Pumps are the RCMC holders
- ★ **No. of countries exported** : 118 companies are exporting to more than 10 countries. 17 firms are having 6-10 foreign customers / clients.
- ★ **Reasons for Internationalizing** : 44 companies have internationalized for the reason to have 'Increase in profits', 46 have opted due to 'Owner's interest' in entering international markets and 22 have suggested that 'market expansion' is the main reason for international activities

S.No	Company Characteristics	Findings
1	Number Of SME	75 Small Firms 68 Medium Firms
2	Total Annual Sales Turnover	48% Of The Firms Are Having More Than 5 Crore Business
3	Experience In The International Markets	81 Respondents Are Having 10-20 Years Of Experience In International Markets
4	Product Characteristics	57- Modified Their Products 50-Customised 6-New Innovation
5	Initial Entry	70 Firms Export To Indian Sub Continents
6	Mode Of Entry	76.2% - Entered Only Through Exporting
7	Motives	88% Of The Firms With Proactive Motive Of Internationalization

Table No 4.1 Demographic characteristics

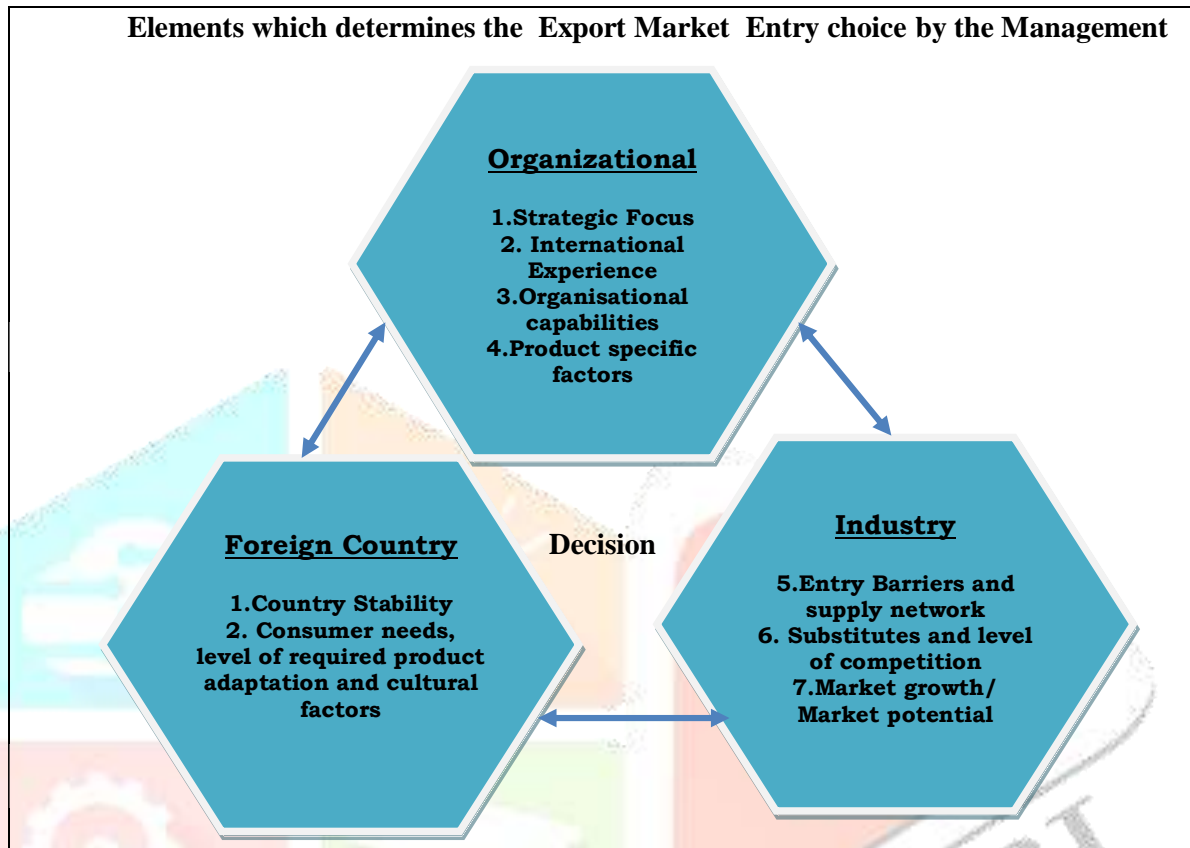
IV. Entrepreneurship in Internationalization

The proactiveness of the Entrepreneur : The importance of International Entrepreneurship theory of Internationalization results in performance and growth of the company. Entrepreneurial vision is the vision of creating something unique. Entrepreneurial visions are conceived by entrepreneurial type, visionary change agents who some times ignore small details in their grand design. They need to be supported by good implementers who can work out the implications of great visions and follow up on these details. The rapid globalization of world markets has encouraged companies of all sizes and national origins to expand internationally.

The proactive nature of Entrepreneurs benefit the company in cross border activities. To benefit from their international expansion companies need to foster Entrepreneurship throughout their operations. The study discusses and identifies the several challenges companies encounter as they attempt to promote Entrepreneurship and it discusses ways executives can creatively address them. The study shows how managing these challenges can encourage organizational learning of new skills, there by giving companies' new competencies that allow them to profit from expanding their international operations.

International Entrepreneurship is the study of cross border activities and entrepreneurial behavior focuses on how actors discover enact, analyse and exploit opportunities in the creation of new goods and services. According to McDougall and Oviatt's (2000), International entrepreneurship is a "combination of innovative, proactive and risk seeking behavior that crosses national borders and is intended to create value in organizations." International experience of the founder(s) or manager(s) increases the pace of foreign market entry, by quickening its steps. Managers with extensive foreign experience are found much more frequently in exporting SMEs, than in non-internationalized SMEs. The findings provide evidence that managers with prior international experience drive SMEs into international business more successfully or that SMEs with international aspirations tend to employ managers with international experience. The findings seem to indicate that an international mindset and experience of the managers is likely to promote the international activities of an SME. At times bold steps are necessary to increase the pace of internationalization process.

The following figure explains about the relationship between organisational decisions with foreign market entry and with industry factors which will play a significant role in speeding up of internationalization process. Speediness is directly linked to entrepreneurial interventions and strategic decisions the SMEs take.



Source : <http://marloesvisser.weebly.com/uploads/2/4/8/6/24861427/847318.png?484>

V. Analytical Views

5.1 Management's Role in Internationalization

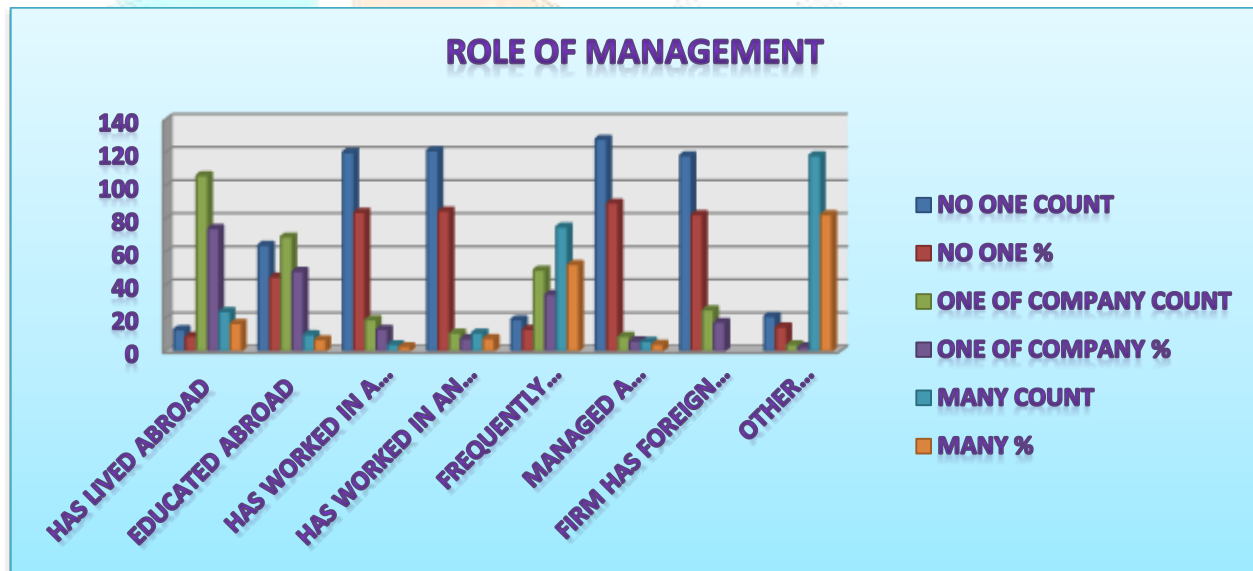
The role played by the Entrepreneur or Management is crucial in the rapidness of internationalizing. Several factors influence in taking decisions for entering foreign markets. It is shown in the below table 5.1.

Table no.5.1

Role of Management in Internationalization Process

Factors	No one		One of company		Many	
	Count	%	Count	%	Count	%
Has lived abroad	13	9.09	106	74.13	24	16.78
Educated abroad	64	44.76	69	48.25	10	6.99
has worked in a company on international assignments	120	83.92	19	13.29	4	2.80
has worked in an MNC	121	84.62	11	7.69	11	7.69
Frequently traveled abroad	19	13.29	49	34.27	75	52.45
Managed a subsidiary of a company	128	89.51	9	6.29	6	4.20
Firm has foreign directors	118	82.52	25	17.48		
Other international experiences	21	14.69	4	2.80	118	82.52

(Source Primary data)



From the above table no.5.1, it is observed that in 106 companies, at least one person had lived abroad and in 69 companies the management member has been educated abroad. In 75 companies the members have frequently made business visits to several foreign countries, comparatively it was found that the management members have minimum international exposure, enabling to operate in foreign countries. On the other hand, even if one or a few have international experience in a company, it has helped them enter foreign markets with less difficulty.

5.2 Finding the relationship between age of the Firm and Firm Specific advantages

Correlations of age of the firm & firm specific advantages

5.2 Table of Correlations

		1	2	3	4	5
1.Age of the Business	Pearson Correlation	1	.013	-.083	-.028	-.069
	Sig. (2-tailed)		.876	.325	.738	.414
	N		143	143	143	143
2.Quick to change and adapt to customer requirements	Pearson Correlation		1	.135	.041	.152
	Sig. (2-tailed)			.107	.624	.069
	N			143	143	143
3.Growing through creative activities	Pearson Correlation			1	.349(**)	.338(**)
	Sig. (2-tailed)				.000	.000
	N				143	143
4.Effective handling of business	Pearson Correlation				1	.698(**)
	Sig. (2-tailed)					.000
	N					143
5.Possessing of required experiential knowledge.	Pearson Correlation					1
	Sig. (2-tailed)					
	N					

** Correlation is significant at the 0.01 level (2-tailed). Source : Primary Data

a. Effective handling of business by the management through adapting creativity

From the above correlation table 5.2, it is evident that, Growing through creative activities (Products, services, Technology, quality, absorption and utilization of technology) is having a positive correlation with effective handling of business by the management. The correlation value is 0.349 and the p value is less than 0 ($P > 0.000$) at 0.01 level and it is showing a significant relationship at 34%. Hence it can be noted that an exporting firm will grow through creative activities and effective handling of business is necessary.

b. Effective handling of business with possessing of experiential knowledge

From the above correlation table, it is evident that, effective handling of business by the management is correlated with possessing of required experiential knowledge, which is having a positive correlation with effective handling of business by the management. The correlation value is 0.698 and the p value is less than 0 ($P > 0.000$) at 0.01 level and it is showing a significant relationship at 69%. The effect value for "r" is also very strong which is nearing the value 7. Hence it can be noted that the management of an exporting firm will possess experiential knowledge for effective functioning.

c. Possessing experiential knowledge and adaptation of creative activities in technology, product & Services (Growth & Experiential knowledge)

From the above correlation table, it is evident that, Growing through creative activities (Products, services, Technology, quality, absorption and utilization of technology) is having a positive correlation with possessing experiential knowledge by the management. The correlation value is 0.338 and the p value is less than 0 ($P > 0.000$) at 0.01 level and it is showing a significant relationship at 33%. The effect value for "r" is also medium which

is nearing the value 3. Hence it can be noted that the management of an exporting firm will possess experiential knowledge for adapting creative activities.

5.3 Mann-Whitney U test.

Gender is considered for conducting Mann-Whitney U test in knowing the importance of role of management from Gender perspective (decision making, usage of experiential knowledge, responding towards competition, etc)

Table 5.3 Ranks

Variables	Gender	N	Mean Rank	Sum of Ranks	Z value	P Value
1.Degree of product performance requirements specified by the customer	Male	130	74.31	9660.00	-2.430	0.015*
	Female	13	48.92	636.00		
	Total	143				
2.Degree of competition in the customers country market	Male	130	73.78	9591.00	-1.822	0.068*
	Female	13	54.23	705.00		
	Total	143				
3.Globalisation of business activity and competition is the push strategy	Male	130	72.92	9480.00	-0.905	0.366
	Female	13	62.77	816.00		
	Total	143				
4.Global presence is important in product markets is essential for competitiveness	Male	130	72.79	9463.00	-0.783	0.433
	Female	13	64.08	833.00		
	Total	143				
5.Export intensity for internationalization	Male	130	72.64	9443.00	-0.644	0.520
	Female	13	65.62	853.00		
	Total	143				
6.Degree of usage of experiential knowledge	Male	130	72.81	9465.50	-0.841	0.400
	Female	13	63.88	830.50		
	Total	143				
7.Domestic Market is very competitive	Male	130	73.18	9513.00	-1.134	0.257
	Female	13	60.23	783.00		
	Total	143				

Table 5.3.1 Test Statistics(a)

	B5_1	B5_2	B5_3	B5_4	B5_5	B5_6	B5_7
Mann-Whitney U	545.000	614.000	725.000	742.000	762.000	739.500	692.000
Wilcoxon W	636.000	705.000	816.000	833.000	853.000	830.500	783.000
Z	-2.430	-1.822	-.905	-.783	-.644	-.841	-1.134
Asymp. Sig. (2-tailed)	.015*	.068	.366	.433	.520	.400	.257

a Grouping Variable: Gender

1.As revealed by the results in Table 8, there is a significant difference between the gender attitudes in taking decisions and possessing of experiential knowledge. In responding to the product performance requirements according to the customer's

expectations, is statistically significant for Gender- Male and the differences in the experimental group ($U=545, Z=2.430, p=.000<.005$). For these group of employees/ management, the sum of ranks of the Gender- male is 9660 and for female it is found to be 636, Given the sum of ranks for the difference scores, the observed difference is in favor of Gender - male, or in other words. . On the basis of the results obtained in the analyses, it could be argued that by the male group in taking decisions is said to be significant. The difference is significant since $p = 0.01$.

All the other factors are not showing any significant difference in making managerial decisions towards internationalization since the P value is greater than 0.05. ($P > 0.05$). Hence it can be concluded that, irrespective of gender in involving while decision making and in performing the specific role of management does not show any significant difference.

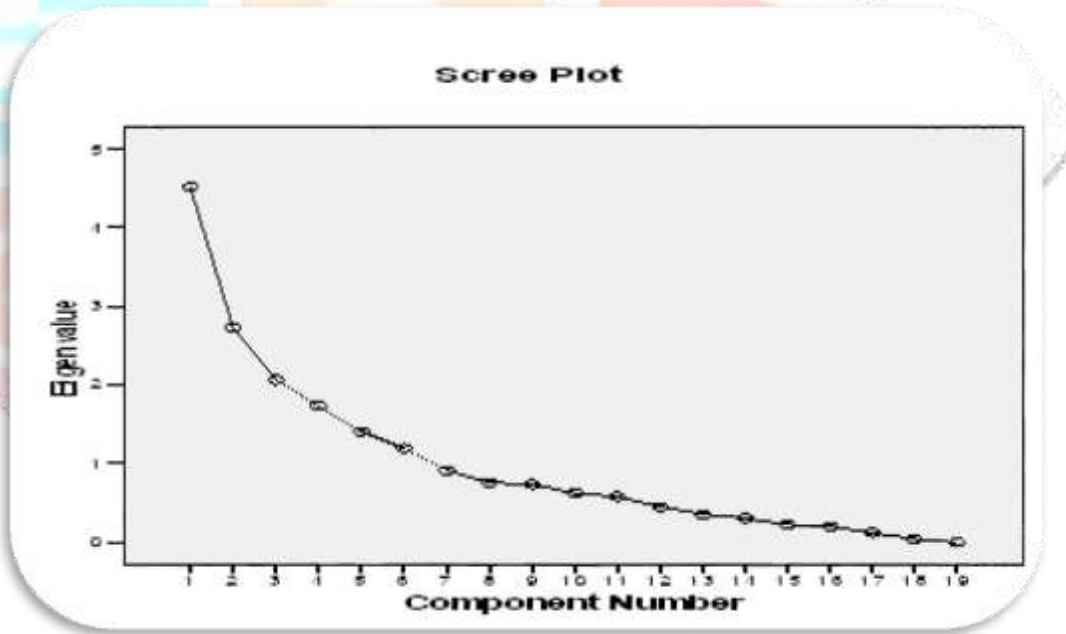
5.4 FACTOR ANALYSIS : Finding the leading factors of Managerial characteristics.

Communalities

Extraction Method: Principal Component Analysis.

Total Variance Explained

Extraction Method: Principal Component Analysis.



5.4.1 KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.564
Bartlett's Test of Sphericity	Approx. Chi-Square	739.809
	df	91
	Sig.	.000

(The Bartlett's value shows the p value is 0 and it is significant .

From the above table 5.4.1, it reveals that the probability test of Measure of Sampling Adequacy (MSA) for the selected variables is 0.564, which is above the threshold probability value of 0.5. Since the variables selected falls within the acceptable level, MSA supports the decision to perform the factor analysis on the sample data. The variables

in all three theories has been the inputs in the data collection instrument administered on the motor and pump industries. These variables were analysed using Factor Analysis for the purpose of identifying the key variables unanimously applicable to all SMEs. The table 5.4.2 exhibits the extraction of the factors under study.

Table 5.4.2 Communalities

		Initial	Extraction
A2_1	Age of the Business	1.000	.707
A2_2	Year of Establishment	1.000	.838
A2_3	Year of Internationalizations(first export consignment)	1.000	.765
A2_4	Location of the Unit	1.000	.685
A2_5	No. of Employees	1.000	.565
A2_6	Total annual Sales turnover	1.000	.538
A2_7	Form of business	1.000	.832
A2_8	Products manufactured	1.000	.647
A2_9.1	Type of Pumps / Motors Exported by your company	1.000	.634
A2_9.2	Type of Motors	1.000	.658
A2_10	Target market	1.000	.717
A2_11	EEPC membership	1.000	.754
A2_12	Do you hold RCMC Licence?	1.000	.744
A2_13	No. of countries exported	1.000	.656

Extraction Method: Principal Component Analysis.

Table 5.4.3 Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.421	24.438	24.438	3.421	24.438	24.438
2	1.936	13.831	38.270	1.936	13.831	38.270
3	1.636	11.683	49.952	1.636	11.683	49.952
4	1.451	10.365	60.317	1.451	10.365	60.317
5	1.297	9.267	69.584	1.297	9.267	69.584
6	.902	6.444	76.028			
7	.827	5.909	81.937			
8	.688	4.913	86.850			
9	.495	3.533	90.383			
10	.441	3.148	93.530			
11	.314	2.243	95.773			
12	.284	2.028	97.801			
13	.207	1.477	99.277			
14	.101	.723	100.000			

Extraction Method: Principal Component Analysis.

Communality is the amount of variance, an original variable sharing with all other variables, under analysis. A higher value of initial communalities are suitable for factor analysis. Extraction communalities are the variances with the factors. Higher extraction communalities represent the variables which is shown in above Table 5.4.3

Factorial Influences:

The Table 5.4.3, contains information regarding the 14 factors selected for the study and their related explanatory power as expressed by their Eigen values. All the total 13 factors have got 1 as the initial Eigen value and account for a total variance of 69.584-% (threshold value 60%). Out of 14 factors, only 5 factors were retained and considered for analysis, which represent 69.584% of the variance explained through inter-correlation between the variables extracted. The remaining 8 factors are considered having insignificant inter-relationship constituting of minor importance for the study. Hence they are non-explanatory factors and so undefined, for the purpose of analysis of these variables.

Table 5.4.4 Component Matrix(a)

	Component				
	1	2	3	4	5
A2_1	.697	-.231	.350	-.195	-.086
A2_2	-.719	.474	.152	.096	.253
A2_3	-.725	.334	.093	.195	.286
A2_4	-.138	.698	-.113	-.180	-.365
A2_5	.490	.316	.250	.014	.404
A2_6	.470	.227	.362	-.354	-.097
A2_7	.434	.090	-.659	-.260	.365
A2_8	.014	-.524	-.508	.339	-.006
A2_9.1	.229	.106	.549	.512	.086
A2_9.2	.320	.067	-.177	.659	.293
A2_10	.035	.046	-.033	.393	-.747
A2_11	-.602	-.433	.121	-.410	.148
A2_12	-.290	-.645	.478	.076	.097
A2_13	.789	.066	.077	.028	.150

Extraction Method: Principal Component Analysis.
a 5 components extracted.

[Extraction Method: Principal Component Analysis.
Rotation Method : Varimax with Kaiser Normalization;
E.F. – Explanatory Factor]

Table 5.4.5 Identification of new factors

No	Variables	% of variance	Name of the factor
1	1.Age of the Business 2.No. of Employees 3.Total annual Sales turnover 4.No. of countries exported	24.438	Company Specific Characteristics
2	1.Year of Establishment 2.Year of Internationalizations(first export consignment) 3.Location of the Unit	13.831	Firm Establishment factors
3	1.Type of Pumps / Motors Exported by your company 2.Holding RCMC License	11.683	Management's decision on Product specific characteristics
4	1.Products manufactured 2.Target Market	10.365	Market characteristics
5	1. Form of business 2..EEPC membership	9.267	Business Characteristics

Company characteristics, Establishment factors, Product, Market/ Foreign market and Business are the most important and leading factors in defining the managerial characteristics. Out of the leading factors identified, it

posits that from the table 5.4.5, the company characteristics with 24.438% of variance and firm establishment factors with 13.831% of variance which proves that the role of management is the deciding factor for internationalization. Management's decision on product specific characteristics shows 11.683% of variance and Market characteristics is with 10.365% variance. The last factor is the business characteristics of form of business and becoming the member association of EEPC is 9.267% variance.

5.5 Finding the relationship with Driving forces of internationalization and the speed of internationalization. (Correlation)

Descriptive Statistics

	Mean	Std. Deviation	N
Driving forces	1.07	.387	143
speed of the internationalization process	1.76	.619	143

Correlations

		B23	B13
Pearson Correlation	speed of internationalization.	1.000	.600
	Driving forces	.600	1.000
Sig. (1-tailed)	B23	.	.000
	B13	.000	.

Variables Entered/Removed(b)

(source : Primary Data)

From the above correlation table, it is evident that, Growing through creative activities (Products, services, Technology, quality, absorption and utilization of technology) is having a positive correlation with effective handling of business by the management. The correlation value is 0.600 and the p value is less than 0 ($P > 0.000$) at 0.01 level and it is showing a significant relationship at 60% and the effect size is also 6 which is very strong. Hence it can be noted that an exporting firm will grow through creative activities and effective handling of business is necessary.

5.6 Regression :

Finding the impact of relationship with Driving forces of internationalization and the speed of internationalization.

Simple regression to find out the impact of (Speed of internationalization process) SIP on (Entrepreneurial driving force) - EDF

Independent variable – B 13 (Speed of internationalization process) SIP

Model Summary(b) Table 5.6.1.1

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.600(a)	.361	.356	.311	.361	79.518	1	141	.000	1.567

a Predictors: (Constant), B13- SIP

b Dependent Variable: B23 – EDF

Coefficients(a) Table 5.6.1.2

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	.411	.078		5.239	.000
	B13	.376	.042	.600	8.917	.000

a Dependent Variable: B23 (entrepreneurial driving force)

Table 5.6.1.3**Regression Results**

Multiple R value	R ² value	f value	p value
0.600	0.356	0.361	0.000**

From the above table 5.6.1.2, R value is 0.600 which measures the degree of relationship between the actual values and the predicted values of the adjustment. Because the predicted values are obtained as a linear combination of SIP(X_1) and EDF (X_2), the coefficient value of 0.600 indicates that the relationship between adjustment and the two independent variables is quite strong and positive.

The Coefficient of Determination R-square measures the goodness-of-fit of the estimated Sample Regression Plane (SRP) in terms of the proportion of the variation in the dependent variables explained by the fitted sample regression equation. Thus, the value of **R square is 0.356** simply means that about 35% of the variation in adjustment is explained by the estimated SRP that uses SIP & EDF as the independent variables and R square value is significant at 1 % level.

Model- II**Table 5.6.2.1 Finding the impact of speed of internationalization process with differences in exporting firms.**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
2	.336(a)	.113	.106	.585	.113	17.897	1	141	.000	1.423

a Predictors: (Constant), B21

b Dependent Variable: B13

Coefficients(a) Table 5.6.2.2

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	1.195	.141		8.464	.000
	B21	.187	.044	.336	4.231	.000

a Dependent Variable: B13

Combined Results of Model I & Model II table 5.6.2.3

Model	Dependant variable	Independent variable	R ² change	F value	Significance
1	Speed of Internationalization	Entrepreneurial driving forces	0.600	79.518	.000
2.	Speed of internationalization process	Differences in exporting firms.	0.336	17.897	.000

Results of simple regression :

From above results it posits that,

From the above table 5.6.12 (a) based on the unstandardized co-efficient, the simple regression equation can be formulated. The simple regression equation is,

$Y_1 = 0.411 + 0.376X_1$ where the coefficient of X_1 is 0.376 represents the partial effect of depression on Adjustment, holding SIP as constant. The estimated positive sign implies that such effect is positive that adjustment score would increase by 0.376 for every unit increase in depression and this coefficient value is significant at 1% level. Hence it is concluded that the EDF is required for SIP (speed if international process) which perfectly fit into validation of these two variables in international marketing.

From the above table 5.6.2.2 (a) based on the unstandardized co-efficient, the simple regression equation can be formulated. The simple regression equation is,

$Y_2 = 1.195 + 0.187X_1$ where the coefficient of X_1 is 0.187 represents the partial effect of depression on Adjustment, holding differences in exporting firm as constant. The estimated positive sign implies that such effect is positive that adjustment score would increase by 0.187 for every unit increase in depression and this coefficient value is significant at 1% level.

Hence it is concluded that SIP (speed in international process) is required for the differences in exporting firms which perfectly fit into validation of these two variables in international marketing.

Multiple Regression-I**Table 5.6.3.1 Finding the impact of speed of internationalization process with Strategic orientation of entrepreneurial activities**

Variables	Mean	Std. Deviation	N
B13 dependant variable (speed of internationalization process)	1.76	.619	143
B23B_1 - responding to competitors initiation	1.89	1.737	143
B23B_2 – initiator of new product and new business	2.38	1.347	143
B23B_3 –Handling competitive pressures	2.33	1.326	143
B23B_4- Risk taking projects	1.91	1.353	143
B23B_5 cautious VS audacious approach	2.11	1.284	143
B23B_6 – maximizing the possibility of exploiting the potential opportunities	2.20	2.812	143
B23B_7 –characterizing the external business environment	2.43	2.982	143

Table 5.6.3.2 Model Summary(b)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	Sig. F Change	df1	df2	
1	.529(a)	.280	.243	.539	.280	7.505	7	135	.000	1.346

a Predictors: (Constant), B23B_7, B23B_1, B23B_5, B23B_6, B23B_4, B23B_2, B23B_3

b Dependent Variable: B13 (SIP- speed of internationalization process)

Results

R Value - 0.529	F value - 7.505	Significance – 0.000
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From the above table 5.6.3.2, R value is 0.529 which measures the degree of relationship between the actual values and the predicted values of the adjustment. Because the predicted values are obtained as a linear combination of Speed of internationalization process is dependent on ESO (Entrepreneurial strategic orientation) and , the coefficient value of 0.529 indicates that the relationship between SIP and the independent variables is quite strong and positive.

The Coefficient of Determination R-square measures the goodness-of-fit of the estimated Sample Regression Plane (SRP) in terms of the proportion of the variation in the dependent variables explained by the fitted sample regression equation. Thus, the value of **R square is 0.280** simply means that about 28% of the variation in EDO is explained by the estimated SRP that uses SIP & EDO as the independent variables and R square value is significant at 1 % level.

Results Table 5.6.3.3 Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.		Results
		B	Std. Error	Beta		B	Std. Error	
3	(Constant)	1.284	.107		12.033	.000	Significant	
	B23B_1	.120	.032	.336	3.797	.000	significant	
	B23B_2	.050	.047	.109	1.057	.293	NS	
	B23B_3	-.145	.049	-.311	-2.936	.004	significant	
	B23B_4	.053	.045	.116	1.177	.241	NS	
	B23B_5	.189	.059	.393	3.221	.002	significant	
	B23B_6	-.055	.019	-.251	-2.937	.004	Significant	
	B23B_7	.035	.017	.166	2.044	.043	Significant	

a Dependent Variable: B13

NS : not significant since P value is higher than 0.05 (P > 0.05)

From the above table 5.6.3.3 (a) based on the unstandardized co-efficient, the multiple regression equation can be formulated. The multiple regression equation is,

$$Y = 1.284 + 0.120X_1 + 0.050X_2 + (-0.145X_3) + 0.53X_4 + (-0.189X_5) + (-0.055X_6) + 0.035X_7$$

where the coefficient of X_1 is 0.120 represents the partial effect of depression on Adjustment, holding SIP-Speed of Internationalization process as constant. The estimated positive sign implies that such effect is positive that adjustment score would increase by 0.120 for every unit increase in **responses to competitors initiation** and this coefficient value is significant at 1% level. The coefficient of X_2 is 0.050 which represents the partial effect of SIP on **initiator of new product and new business** holding SIP as constant.

The estimated positive sign implies that such effect is positive that adjustment score would increase by -0.145 for every unit increase in SIP in Handling competitive pressures in international marketing and this coefficient value is not significant at 5% level.

Variables X_5 (cautious VS audacious approach), X_6 (maximizing the possibility of exploiting the potential opportunities), X_7 (characterizing the external business environment) shows a significant value of less than 0.05 and the result is significant.

Hence it is concluded that SIP – Speed in internationalization process is required with **Strategic orientation of entrepreneurial activities** which perfectly fit into Speed of Internationalization and strategic orientation in international marketing.

VI. Analytical Findings

The following are the analytical findings of the study using correlation, multiple regression, Factor analysis and **Manwhitney U test** for proving the hypotheses which are formulated for the research.

1. Gender is not the factor in deciding the speed of international process. Hence Wilcoxon and Manwhitney U test also proves that irrespective of gender in involving while decision making and in performing the specific role of management does not show any significant difference.

Correlation

2. Speed of internationalization process and the driving forces towards internationalization are related and the results are significant and the null hypothesis is rejected.

Simple Regression

- It is found out that t SIP (speed in international process) is required for the differences in exporting firms which perfectly fit into validation of these two variables in international marketing.

Multiple Regression

- It is found out that SIP – Speed in internationalization process is required with **Strategic orientation of entrepreneurial activities** which perfectly fit into Speed of Internationalization process and strategic orientation in international marketing.

VI. Managerial Findings & Recommendations

Information is provided concerning the current situation for SMEs in India and the challenges encountered as they face a business environment that is becoming more competitive. Several factors are identified that must be addressed before the SME can achieve international growth, specifically the utilization of technology. Special attention is given to the gaps in infrastructure that could enable a more efficient use of resources and the impact of entrepreneurship on the economic growth of the SME.

- ✍ **Management's International Experience:** 106 companies had at least one person hailed from a foreign country in the Management board and 69 firms had at least one person who had been graduated or post graduated in a foreign nation and in 75 firms, the members has made frequent business visits to foreign countries. Thus it shows that the management members of these firms have very least international exposure enabling to operate effectively in foreign countries. On the other hand, it is found that at least one or a few need to have international experience in a company before venturing into their international business
- ✍ **Time & Role of Management:** The findings in this report point to three elements as crucial for developing holistic policy measures with regard to internationalization: Firstly, SMEs' managers often have limited time and management skills. A policy measure should consider providing some practical tasks to support the manager, especially in the case of SMEs with low international experience.
- ✍ **Increased Market commitment & reduced uncertainties :** Previous studies indicate that SMEs often need specific, targeted support. Such 'customized' support comprises, for instance, assistance in identifying an appropriate foreign business partner for a joint venture or collaboration. Moreover, recent studies indicate that SMEs' awareness of support measures is low due to the measures' traditional focus on export activities which will reduce the uncertainties. The studies suggest that policy measures, in order to be effective, need to focus on the experience of the entrepreneur and on developing their skills (cognitive, risk taking, experiential knowledge) in a broad sense.

Finally, this paper emphasis to say that internationalization is more than just exporting which involves more tacit knowledge and experience of the management concerned. Policy measures, whether general or company-specific, need to encompass all the different approaches to internationalization and the support to include a wide range of international activities.

VII. Managerial implications & Conclusion

Practical implications- Advancements in information technology and improvements in communication infrastructure have resulted in opportunities for SMEs to participate in global markets in both developing and developed countries. Since, governmental reform in 1991, SMEs in India have been faced with new competitive intensity. Improvements in resource utilization make it possible to sell a variety of products and services from anywhere in the world, around the clock. This paper calls attention to ways in which Indian SMEs can become competitive.

Water fall approach on market selection is followed by the select SMEs and concentration on one particular market while taking a decision on foreign market entry. Step by step, slow and incremental, gradual acquisition of market knowledge are the main decisions. Products are based on the foreign specifications which indicates the increased market commitment. It is evident that, more involvement of the management will increase the pace of internationalization. Risk reduction and market uncertainties are faced with cautious approach by the sample chosen which is the indicator of the Uppsala model. Research

hypotheses are proved that, rings in the water, slow and medium pace of internationalization, uncertainties are faced with cautious approach are associated with the role of management in internationalization.

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