CONCEPTUAL MODEL OF MANAGEMENT CHALLENGES OF MICROUNITS IN NILGIRI'S DISTRICT

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ABSTRACT

Microunits are the backbone of nation economy in extending the business units into medium and largescale enterprises. It promotes socio economic growth in various sectors like employment, decreased inequalities, coordinates regional imbalances, providing low-cost materials with minimum investment in standardizing the livelihood of people in rural areas. This paper examines the Management challenges under product related, labour related, raw material related, financial related, R&D related, export related categories in the Nilgiri's district. The discussions and conclusions of this paper will enrich qualitative strategies in all the key result areas in promoting Microunits.

Key Words: Microunits, Entrepreneurship, MSME.

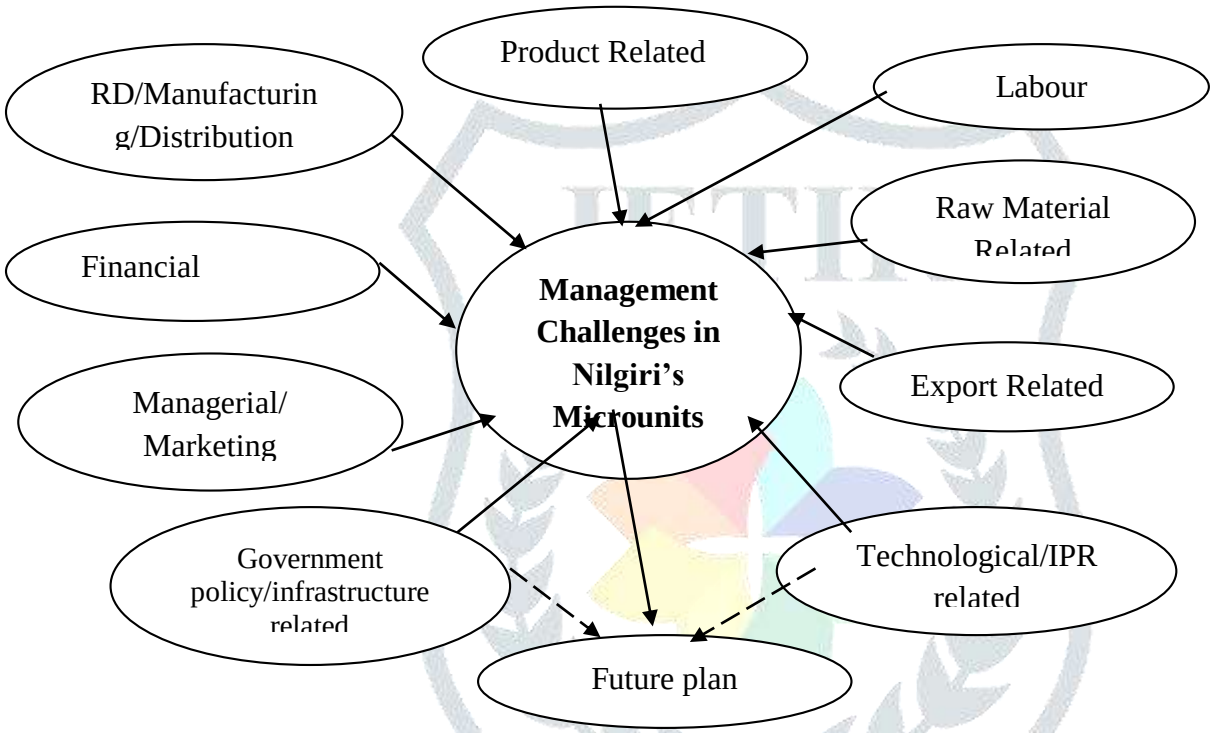
1.0. INTRODUCTION:

Microunits referred to small, self-contained units or modules that perform a specific function or process within a larger scale of production line. Microunits can be of small, modular production cells or workstations that focus on a specific operation that includes assembly, testing and packaging. Microunits can be of small modular reactors or the processing vessels that handle specific chemical reactions or separations in chemical processing. The commencement of economic reforms through trade and industrial liberalization in 1991–1992 signified a new era for Indian industry. The reforms encompassed the elimination of asset threshold limits for large firms, industrial de-licensing, the augmentation of the open general license list, a liberal foreign investment policy, reductions in customs tariffs, among others. These improvements facilitate effortless entry and operational autonomy. Following the liberalization of the Indian economy, the conditions for MSMEs transformed significantly from a protected to a competitive landscape (Singh et al., 2008). Currently, the primary issue for SMEs is achieving sustainable growth and development in highly globalized and competitive marketplaces. Micro, Small, and Medium Enterprises (MSMEs) are gradually developing throughout several sectors of the Indian economy, generating a diverse array of goods and services to meet the demands of both domestic and international markets. MSMEs currently contribute 29% to India's GDP (Dewan, 2019) and account for 33.4% of the nation's manufacturing output (CII, 2019). They account for around 45% of India's overall exports (CII, 2019). The National Sample Survey (2016) conducted by the Ministry of Statistics and Program Implementation indicated that there are 63.385 million unincorporated non-agricultural MSMEs operating in the country. The 63.385 million MSMEs consist of 63.052 million micro-enterprises (99%), 0.331 million small firms (0.52%), and 0.005 million medium enterprises (0.01%). The distribution of MSMEs by state indicates that Uttar Pradesh (14.2%), West Bengal (14%), Tamil Nadu (8%), Maharashtra (8%), and Karnataka (6%) possess the biggest concentrations of MSMEs, correspondingly. The Directorate General of Commercial Intelligence and Statistics (DGCIS) reports that 48.10% of total exports are MSME-related products (PIB, 2019). A substantial portion of Indian MSMEs serves as a vital means of sustenance for millions (Saini, 2014), highlighting Indian MSMEs as a critical issue for policymakers. Despite the implementation of many policy initiatives by the government over the last decades, several issues remain persistent for most MSMEs, such as insufficient financing, market volatility, and competition.

2.0. METHODOLOGY:

The objective of this paper is to Analyze the factors and its impact in determining the management challenges in the microunits of the Nilgiris district using (SEM) Structural Equation Modelling, AMOS. The Nilgiris's district comprises of four rural blocks. They are Ooty, Coonoor, Kotagiri and Gudalur. These blocks consist of plenty of Microunits in the segment of Tea and Coffee. In Food Processing, the value addition of vegetables like Carrot, Cabbage, Potato, Garlic, Cauliflower, Broccoli and Lettuce etc. Fruits like Strawberry, Plums, Peaches, Oranges and Jackfruit etc. The production of Aromatic Oils and Bakeries and Homemade Chocolates were also found in these blocks. In addition to, Embroidery and Sweater Manufacturing Units were there in these blocks. Handicrafts like Toda Embroidery, Kurumba Paintings and Kota Pottery also found. Tourism like Home Stays and Eco-Tourism also there. Green Microunits like Areca, Banana Fiber and Bamboo products are the in these blocks. Organised Retail shops also there in these four blocks.

Conceptual Model of Management Challenges of Microunits in Nigiri's District



As the sampling area is Nilgiris District of Tamil Nadu, the researcher with the help of external force, initially traced the entrepreneurs and the owners of the micro units in that district and finalized with the desired sample size. Since the study involved the known sample, the following assumptions were made for finalizing the sample size. (Margin of error: 5%, Significance level 95% and Proportion of population considered is 50 %(i.e.) 0.5 For finding the sample size, the following formula was used:

$n = z^2 . (p(1-p)/e^2/1+(z^2 . p(1-p)/e^2N$

where n= the desirable sample size

z= standard normal variable at 95% confidence level (i.e.) 1.96

p= proportion or estimated characteristics of the targeted population (1-P)

=q: the difference between the total percentage of population and the estimated characteristics of targeted population. (1-p) =1-0.5=0.5

e- Error and in this study the total error considered is 5% (i.e) 0.05

The required sample size is:

$n= (1.96)^2$ x 0.5 x0.5/0.05x.0.05/1+(($1.96)^2$ x0.5 x0.5)/0.05x0.05x 808

n = 3.84 x0.25/0.0025 / 1+ (3.84 x 0.25)/2.02

n = 3.84 x 100 /1+ (0.96/2.02)

n= 384/(1+0.475)

n= 384/1.475

n= 260

Taking into consideration the non response rate, the researcher has considered the estimated sample size as 300 selected through simple random sampling technique and the questionnaires were distributed among them for gathering the data. But only 278 questionnaires were returned out of which 17 questionnaires were found incomplete and could not be used due to insufficient data and not filled properly. Hence, the accurate sample of the study is 261 with the percentage of 87 %.

The reason for incompletion and unusable may be due to busy schedule and reluctance in filling the questionnaire and in fact some of the respondents have not given due response for the survey.

3.0. ANALYSIS AND DISCUSSION:

This paper focuses its analysis using Structural Equation Modeling, AMOS as discussed. Structural Equation Modeling (SEM) is assorted set of methods being used by the researchers frequently in both observational and experimental research. It has casual connections among the variables which were not observed through any data (latent variables) from any respondents rather used to find the impact of the observed variables on this factor. Through this method, all the measurements and tests could be done simultaneously in one step and it is confirmation method in all research works. To find the correlation and the covariance that exists among the factors considered in a research, structural equation modeling is used as it is the best comprehensive method and gives flexibility to the researchers. Through this method, the imperfect nature could also be computed. This is the method that gives the result through elucidating the multi co linearity and enables the researcher to have a graphical approach. But it needs adequate sample size for betterment of results. The association between the factors could be measured either directly or indirectly or totally through this technique. It is the only multivariate procedure to analyze the applications ranging from simple to complex in nature. The advantage of this technique is management of measurement error. The researcher and audience could easily be able to know the number of observed and unobserved factors and its relationship through the structural equation modeling.This is the study based on the management challenges of micro units located in the Nilgiri's district of Tamil Nadu and here the researcher has endeavored to find the association of various factors that is considered as the challenges for the micro unit and while doing so, the mediating effect of Technical /IPR related challenges along with Government Policy/Infrastructure related challenges was also analyzed in this research. The various factors considered in this study

- F_1 : Product related Challenges (PRC)
- F_2 : R&D/Manufacturing/Distribution related Challenges (RDMC)
- F_3 : Technological /IPR related Challenges (TIRC)

- F_4 : Government Policy/Infrastructure related Challenges (GPIRC)
- F_4 : Finance Related Challenges (FRC)
- F_5: Managerial/Marketing Related Challenges (MMRC)
- F_6: Labour Related Challenges (LRC)
- F_7: Raw Material Related Challenges (RMRC)
- F_8: Export Related Challenges (ERC)
- F_9: Future Plan

The indices pertaining for getting the goodness of fit were calculated through SEM of AMOS and the values obtained through SEM of AMOS pertaining to the above factor was given in Table 3.1 and the path diagram is depicted in Figure 3.1 below:

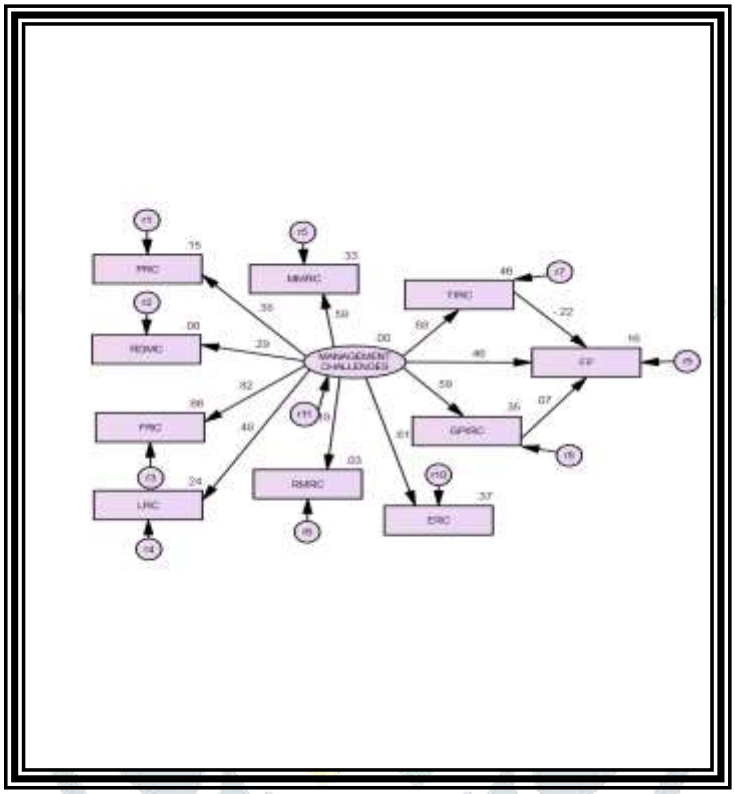


Figure 3.1: Management Challenges of Microunits in Nigiri's District

(Structural Equation Modeling through AMOS)

Table 3.1: Showing the details of Goodness of Fit Indices

Sl. No.	Index	Value	Sl. No.	Index	Value
01.	CMIN (X^2)	81.040	10.	RMR	0.610
02.	Degree of Freedom	33	11.	**SRMR**	0.057
03.	CMIN/Degree of Freedom	2.456	12.	RFI	0.857
04.	GFI	0.938	13.	PRATIO	0.733
05.	AGFI	0.897	14.	PNFI	0.630
06.	NFI	0.858	15.	PCFI	0.667
07.	IFI	0.911	16.	HOELTER (0.05)	153
08.	TLI	0.876	17.	HOELTER (0.01)	176
09.	**CFI**	0.909	18.	**RMSEA**	0.075

Source: Primary Data

The aforementioned result indicated a Chi-Square value (X^2) of 81.040 with 33 degrees of freedom (df). The CMIN/DF ratio was determined to be 2.456, indicating the disparity between observed and expected covariance matrices. The SRMR score, representing the square root of the discrepancy between the residuals of the sample covariance matrix and the predicted covariance model, is determined to be 0.057, indicating a good fit for the study's model. The IFI value is 0.911, and the TLI value is 0.876. The CFI is calculated at 0.909, indicating the model's adequacy in addressing the management difficulties faced by micro units in Nilgiris District. The RMSEA is measured at 0.075, which falls within the recommended range as indicated by Hooper et al. (2008) and Shen et al. (2012), suggesting that the conceptual model of this research demonstrates adequate goodness of fit indices based on data collected from entrepreneurs operating micro units in Nilgiris. The maximum likelihood estimates was also calculated through the structured equation modeling and the result revealed is detailed in Table No.3. 2 below:

Table 3.2: Regression weights (Standardized)

Hypothesis	Critical Path			Estimate	C.R.	Decision of the Hypothesis
H_1	TIRC	<---	Management Challenges	1.687	5.530**	Supported
H_2	GPIRC	<---	Management Challenges	1.543	5.161**	Supported
H_3	LRC	<---	Management Challenges	1.090	4.908**	Supported
H_4	FRC	<---	Management Challenges	3.323	5.649**	Supported
H_5	RDMC	<---	Management Challenges	0.600	3.689**	Supported
H_6	PRC	<---	Management Challenges	0.740	4.567**	Supported
H_7	RMRC	<---	Management Challenges	0.340	2.435**	Supported
H_8	MMRC	<---	Management Challenges	2.277	5.236**	Supported
H_9	FP	<---	Management Challenges	0.517	3.201**	Supported
H_{10}	FP	<---	TIRC	-0.098	-2.438**	Supported
H_{11}	FP	<---	GPIRC	0.032	0.924	Not supported
H_{12}	ERC	<---	Management Challenges	2.070	5.427**	Supported

Source: Primary Data

Table 3.2. represented the output of the SEM of Analysis of modified structures in connection with the estimates through regression weight the path analysis method. The parameter estimate is found significant between all the factors that influencing the management challenges and future plan of the entrepreneurs in the micro units at $p \leq 0.01$ as the value of the critical ration is more than (>) 1.96 except between the factors Government/infrastructural related challenges with the future plan which indicated that there is no significant association between the factors at any level of significance. Also, there noticed a negative impact of Technical/IPR related challenges which revealed that any changes in the technical/IPR challenges in the micro units will have a negative impact on the future plan of the organization. Then, the direct, indirect and the total effects of the factors that influencing the management challenges of micro units in Nilgiri's was analyzed.

Table 3.3: Showing the details of Standardized Direct Effect, Indirect Effect and the Total Effect.

Factors	Direct Effect			Indirect Effect			Total Effect		
	1	2	3	1	2	3	1	2	3
TIRC	0.679	0.000	0.000	0.000	0.000	0.000	0.679	0.000	0.000
GPIRC	0.593	0.000	0.000	0.000	0.000	0.000	0.593	0.000	0.000
ERC	0.612	0.000	0.000	0.000	0.000	0.000	0.612	0.000	0.000
LRC	0.485	0.000	0.000	0.000	0.000	0.000	0.485	0.000	0.000
FRC	0.815	0.000	0.000	0.000	0.000	0.000	0.815	0.000	0.000
RDMC	0.291	0.000	0.000	0.000	0.000	0.000	0.291	0.000	0.000
PRC	0.384	0.000	0.000	0.000	0.000	0.000	0.384	0.000	0.000
RMRC	0.177	0.000	0.000	0.000	0.000	0.000	0.177	0.000	0.000
MMRC	0.576	0.000	0.000	0.000	0.000	0.000	0.576	0.000	0.000
FP	0.464	0.074	-0.219	-0.105	0.000	0.000	0.359	0.074	-0.219

(1- Management Challenges 2- GPIRC 3- TIRC)

In this section the Direct, Indirect and the Total effects under (standardized) for each of the constructs considered in this research were analyzed and shown in Table 3.3. From the result, it is found that there is no negative effect found between the factors that influencing the management challenges but there existed a direct negative effect on the Future plan by the Technical/IPR related challenges but the total effect is found positive (0.359). Among the constructs that influencing management challenges, it is noticed that maximum impact rests with the financial related challenges (0.815) followed by Technical/IPR related challenges (0.679); Export related challenges (0.612); Government policy/infrastructure related challenges (0.593); Managerial/marketing related challenges (0.576); Labour related challenges (0.485); product related challenges (0.384); R&D/Manufacturing /Distribution related challenges (0.291)and the least impact is with the Raw material related challenges (0.177) which implied that individual challenges influencing the total management challenges to the tune from 17.7% to 81.5% (i.e.) unit increase of independent factors increases the dependent factor (i.e.) management challenges from 17.7 percent to 81.5 percent. Also, a unit increase of management challenges increases the future plan of the organization to the tune of 35.9 percent.

Findings of the Structural Equation Modeling

- The CMIN/DF ratio derived from the SEM of AMOS was 2.456, indicating the disparity between the actual and expected covariance matrices. The SRMR score, representing the square root of the discrepancy between the residuals of the sample covariance matrix and the predicted covariance model, is determined to be 0.057, indicating a strong match of the study's model. The IFI value is 0.911, and the TLI value is 0.876. The CFI is measured at 0.909, confirming the model's goodness of fit about management difficulties in the micro units of Nilgiri District. The RMSEA is measured at 0.075, falling within the acceptable range, so confirming that the conceptual model of this research exhibits adequate goodness of fit indices based on data acquired from entrepreneurs operating micro units in Nilgiris.
- The parameter estimate is found significant between all the factors that influencing the management challenges and future plan of the entrepreneurs in the micro units at $p \leq 0.01$ as the value of the critical ration is more than (>) 1.96 except between the factors Government/infrastructural related challenges with the future plan which indicated that there is no significant association between the factors at any level of significance. Also, there noticed a negative impact of Technical/IPR related challenges which revealed that any changes in the technical/IPR challenges in the micro units will have a negative impact on the future plan of the organization.

- It is found that there is no negative effect found between the factors that influencing the management challenges but there existed a direct negative effect on the Future plan by the Technical/IPR related challenges but the total effect is found positive (0.359).
- It is also found that maximum impact rests with the financial related challenges (0.815) followed by Technical/IPR related challenges (0.679); Export related challenges (0.612); Government policy/infrastructure related challenges (0.593); Managerial/marketing related challenges (0.576); Labour related challenges (0.485); product related challenges (0.384); R&D/Manufacturing /Distribution related challenges (0.291)and the least impact is with the Raw material related challenges (0.177) which implied that individual challenges influencing the total management challenges to the tune from 17.7% to 81.5% (i.e.) unit increase of independent factors increases the dependent factor (i.e.) management challenges from 17.7 percent to 81.5 percent. Also, a unit increase of management challenges increases the future plan of the organization to the tune of 35.9 percent.

4.0. CONCLUSION

Micro, Small and Medium enterprises is playing as accelerator for the economic growth of every Nation and providing a sizeable involvement in creating job, innovation, reducing the regional disparities in the Nation. Despite of these positive impact, there are many external and internal factors that affecting the growth of those MSMEs in all the country. The main reason is the prevailing challenges through product, R&D. Manufacturing and distribution, Technical, IPR, Government Policy and infrastructure, finance, managerial and marketing, labour, raw material and export related challenges and hence the entrepreneurs who were engaging in the MSME sector were facing a great challenge in managing those organization. Of all the issues, it is the finance related and Government Policy and procedures made them to enter into a critical situation. The result of this study also confirmed that there was a positive impact of these challenges on the performance of the MSMEs. The one and only remedy in overcoming these challenges is the Government intervention in creating the flexible policies and procedures and implementing a good governance environment. Also, it is mandatory for the fiscal institutions to create a good awareness among the entrepreneurs about their flexible schemes of loan which enable the marketers to have a good future plan for their future endurance and this research recommended the Government to have these strategies to safe guard the MSME entrepreneurs.

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