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INDUSTRIAL SICKNESS IN INDIAN LARGER TEXTILE ENTERPRISES IN UNITED ANDHRA PRADESH: AN EMPIRICAL STUDY

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Abstract
Industrial sickness has been a related factor of industrial development of a state in particular and a country in general. The experiences of the highly industrialized countries well exemplify that along with industrial development. At the same time, these developed economies also have the ability to absorb the economic disturbances brought about by the closure of the industrial unit. Industrial sickness is continuously on increase now has assumed alarming proportions. In this context, the study has taken as conceptualized across the terrain of Andhra Pradesh and encompassed the classification, identification and underlying of the internal and external aspects that drive the industrial sickness across the larger registered companies. The study is to identify the causal relationships across the constituent variables and established the significant cross factor impact as influencing the current state of industrial sickness across the larger enterprises in textile sector.

Key Words: Industrial Sickness, Internal Mismanagement, External Influences, Bankruptcy, Industrial mismanagement etc.

1. Background to Problem

Business survival is a great challenge in the global competitiveness across the emerging economies. In Indian perspective as a developing economy, it is not distant from global observations and phenomenon. Various traditional industries like the textile manufacturing is facing tremendous downturn and manufacturing units across the geography of India has been facing the risk of closure, bankruptcy as well as decline in performance. A lot of studies have been conducted yet a major section of the existing research emphasizes the qualitative treatment and non-empirical emphasis on the problem at large. The more preference is towards the identification of the probability of turning sick yet no research has been conducted on the cross factor impact as well as the role of a broad range of controllable and uncontrollable factors in shaping the phenomenon. The existing research focuses on the case study method which includes validate the inter factorial linkages in numerical terms. Hence the study of the phenomenon with empirical basis makes sense. A lot has been said and explored with regard to the MSME Act, BIFR guidelines as well as the gross NPAs, yet no focus in the existing research has ever been on the contextual and the controllable aspects of industrial closure and failure. The problem of Industrial Sickness is a dangerous in the context of developing economies that creates confusion to decide on the priorities with

regard to product development, product based market access as well as financial viability of the business entity. The sustainability of revenue inflows and generation of economic profit is viewed as essential for organizational renewal and composite growth. Low productivity as well as less ability to generate substantial revenues from the business has been largely observed as a leading to state of sickness or firm based industrial sickness. The industrial firms in developing economy faces tremendous internal and external pressures with regard to resource based usage, mismanagement and challenges from across the economic environment in sustaining the business and consistent generation of revenues. The resource based perspective visualizes the problem as involving the resource based dependencies on external environment as well as ensuring valuable and scarcity of the above-mentioned resources. The "strategic industry factors" regards the problem as involving the dimension of the assets and their usage that is central to the occurrence of the problem. The industrial units in Andhra Pradesh and Telangana have been witnessing the down trend in terms of economic performance, economic viability as well as sustenance of competitiveness in short and long terms propositions. The "Industrial Sickness" as an aspect of firm based decision making is not getting the research attention that it deserves. The problem of industrial sickness needs to be viewed from the wholesome perspective that effectively addresses the issue of corporate performance decline as well as seek practical solutions that could solve the crisis the industry is facing. A study on world class manufacturing practices highlighted the crucial impact of the host of factors that are vital for economic renewal and economic viability of the industrial projects. Hence the study defines the problem as

"Seeking the identification, classification and analysis of the "factors" that contribute towards the industrial firm based sickness across larger registered firms in United Andhra Pradesh".

2. Construct Determination and Literature:

The study assumes the crucial role of the contextual elements (BELAK, Duh,Belak, 2015) and the social construction of the phenomenon. The phenomenon of industrial closure and sickness does not thrives in the vacuum (NADKARNI, Barr, 2008) yet is shaped and impacted by the decisions that are intra organizational (AUGIER, 2009) and involve top management (ZUCKERMAN, 1979) as well as managerial perceptions of the problems and environment that they faced regularly. The managerial intentions (BOBOCEL, Meyer, 1994) and probabilities and expectations and opinions with regard to organizational change management (BELAK, Duh,Belak, 2015) are other aspects of the same problem (ZYGLIDOPOULOS, DeMartino,Reid, 2006). The managerial bias in decision making can also not be sidelined in the study of the aforesaid problem. The managerial intentions (ARCHICHVILI, Cardozo,Ray, 2003) with regard to evolving with market, seeking causal ambiguity (AMBROSINI, 2003) of the resources and the ambidexterity of the firm are widely regarded as core determinants of the measures that either lead to sickness or prevent the firm from the threat of sickness. A study on business failure (AMBURGEY, Kelly,Barnett, 1993) across European enterprises highlighted the crucial role of the three aspects: environment, resources and management in the strategies that seek to revive or restructure the organizational ambitions to survive and sustain the competitiveness (BAZERMAN, 1990) and the market based pressures. Khelil and Smida in their seminal research underlined the role of the multiple dimensions of the perceived contextual environment, perceived primacy of the economic resources and the respective motivations of the management and the entrepreneur; as shaping the efforts that either lead to sickness or ensure timely survival and revival of the aforesaid business enterprise (CHENG, Goh,Kim, 2015). Hence

the study posits itself in the Khelil's framework and espouses the managerial perceptions of intra organizational problems related with resources (human, financial, marketing and production) as one core aspect of the problem under study. The second set of variables are been clubbed as contextual environmental impacts and influences (KING, Zeithaml, 2001).

The firms across the industry (BARNEY, Wright,Ketchen, 2001) cannot evade the cross impact from the resources (BARNEY, Wright,Ketchen, 2001), managerial mismanagements (ADOMAKO, Danso, 2015) and the contextual environmental elements (CHITTITHAWORN, Islam, 2011). The construct of "enterprise based sickness and revival behavior" is been interpreted as involving the aspects of the subsets of "factors" or "variables", operationalized with aid of the following mentioned three scales:

The "internal mismanagement" scale seeks to quantify the perceptions of the all levels of management and the decision makers with regard to the controllable "internal mismanagement" by the managerial class across the functional areas of "marketing", "human resource", "production" and "finance" as well as the related "corporate planning focus". These set of factors are more or so internal and manageable in short and long term perspective.

The "external environmental and influences" scale captures the perceptions of the managers with regard to the industry structure, market dynamics, technology management, governmental support and the institutional pressures on the working of the enterprise and the subsequent decision making at the level of the firm. The factors that correspond to the contextual environmental influences in form of "access to critical resources", "industry structure related problems", "problems emerging from the market based dynamism", "problems emerging from the technology management", "problems with mobilization of government support" as well as" problems associated with coping under pressures".

The outcomes scale captures the "inertia faced across the firm and managerial intentions", "causal ambiguity of firm and extent of distinctiveness of competitiveness" and the "perceived ability of the firm to survive". The factors related to the" inertia for change management", "extent of erosion of competitiveness" and "firm based liquidity" and "sickness risk". Such factors summarize the outcomes and the obvious inclinations of the enterprise in recovering; signify the prospects for revival and rehabilitation. The existing studies justify the role of change management intentions as critical to survival and revival. In similar stance, the organizational abilities to control the ongoing erosion of enterprise based erosion of competitiveness is crucial for survival and restructuring of the business organization., Similarly the ability to maintain liquidity is largely seen as related to the ability to meet fixed and variable expenses and hence survive. The opposite of the outcomes is the freedom from sickness and state of recoverability of the business.

These variables were shortlisted after an extensive review of existing literature (CHITTITHAWORN, Islam, 2011) and the variables denote the different aspects of the contextual (AUGIER, 2009), resource driven (BARNEY, Wright,Ketchen, 2001) and the management driven influences (ZUCKERMAN, 1979) that seem to collectively shape the enterprise based prospects (COAD, Tamvada, 2008) for overcoming sickness and ensure the strategic restructuring and revival of the aforesaid enterprise. The "revival" and "industrial sickness" as well as "industrial rehabilitation" cannot be measured so we insisted on the managerial cognition literature that advocates the crucial role of the managers, managerial perceptions and

the managerial viewpoints (CHENG, Goh,Kim, 2015) with regard to resources, contextual elements and the top management as determining the survival or sickness or revival and rehabilitation orientation of the enterprises under study. The research recognizes the incidence of the impact of the relationship between managerial perceptions and organizational competitiveness, on the organizational behavior in short and long term perspective.

Such an organizational behavior (SONWALKAR, Soni, 2017) can exhibit itself as either surviving the crisis or failing to survive the crisis and hence the need for revival and rehabilitation. The survival or sickness behavior of the enterprise depends to a larger extent on the ability of the incumbent enterprise to adapt, to change and sustain the competitiveness within the pressures from resources and contextual environmental factors. The research hence regards the sickness or survival of the organization as an outcome of the managerial cognition of the mismanagements, inertia towards change, managerial perceptions of resource access, perceptions of industry structure related problems, perceptions of technology related problems along with the managerial perceptions of the problems associated with the market uncertainty, government support as well as the coping with pressures from across the environment in which the enterprise operates. Thus our "enterprise based sickness and revival behavior" construct is conceptualized as involving the aspects of:

- Workforce perceptions of mismanagements(across human resources, production, marketing, finance and corporate planning focus)
- Workforce perceptions of contextual elements(resource dependencies and access problems, technology management problems, market uncertainty, industry structure problems, government support related problems, coping problems)
- Managerial perceptions of firm based inertia and erosion of competitiveness

3. Objective of the Study:

In literal terms, the study aims at developing an understanding of the forces that are shaping the ground level stress and sickness across the state prospect and across the specific industry type. The study seeks to identify and analyze the impact of the identified "internal" factors on the phenomenon of industrial sickness in an industry in state perspective. At the same time the study seeks to understand and analyze the impact of the identified "external" factors on the phenomenon of industrial sickness in an industry. This classification as internal and external has its roots in the existing literature and there are a host of studies that identify the factors as either internal or external. The study seeks to identify the selective course of action or strategies for regional firm based resilience and countering the firm based organizational decline.

4. Research Methodology

The study relies on the seven point likert scaling based measurement instrument to capture the primary data from across the managers in the effected units and enterprises from across the state of Andhra Pradesh in southern India. The sample(n=251) comprises the employees who actively participates in the decision making with regard to the aspects that affect and shape the organizational ability to survive or run into failure in short or long term perspective. The choice of such units and firms was made on the basis of the information accessed from across the BIFR as well as the other viable sources like the banks and state industry departments. The study further leverages the SPSS and AMOS based statistical platforms for subsequent data analysis and data interpretation. The research faced the limitations of time and resource, non-presence of support from government authorities and lack of access to governmental databases,

limited geographic area by consideration, limited to one or few industry segments and clusters. The research also suffers from non-coverage of the other related and associated industry types, industry segments and entrepreneurial ventures which are also under the threat of being sick declaration.

a) Measures

The firms across the industry cannot evade the cross impact from the resources, managerial mismanagements and the contextual environmental elements. The study leveraged the pre validated scales for the measurement and quantification of the factors. The construct of "industrial sickness and revival" is been interpreted as involving the aspects of the subsets of "factors" or "variables":

- The factors that are related to controllable internal mismanagement by the managerial class across the functional areas of marketing, human resource, production and finance as well as the related corporate planning focus. These set of factors are more or so internal and manageable in short and long term perspective
- The factors that correspond to the contextual environmental influences in form of access to critical resources, industry structure related problems, problems emerging from the market based dynamism, problems emerging from the technology management, problems with mobilization of government support as well as problems associated with coping under pressures.
- The factors related to the change management, extent of erosion of competitiveness and firm based liquidity and sickness risk. Such factors summarize the outcomes and the obvious inclinations of the enterprise in recovering; signify the prospects for revival and rehabilitation. The existing studies vindicate the role of change management intentions as critical to survival and revival. In similar stance, the organizational abilities to control the ongoing erosion of enterprise based erosion of competitiveness is crucial for survival and restructuring of the business organization. Similarly the ability to maintain liquidity is largely seen as related to the ability to meet fixed and variable expenses and hence survive. The opposite of the outcomes is the sickness and state of non-recoverability of the business.

b. Analysis

The exploratory factor analysis (COSTELLO, Osborne, 2005) was conducted across SPSS and the three separate pattern matrices were generated for the three sub scale elements. The study relied on the SPSS based PCA technique (principal component analysis) for arriving at the following mentioned pattern matrices and sub scale based factor loadings. Nearly all the factor loadings were observed to be greater than 0.5 and such loadings were retained and considered for subsequent research and analysis. The following mentioned illustrations detail on the pattern matrices for the three broader aspects or the scales and the respective factor loadings as achieved. The overall scale based cronbach alpha (scale based reliability) for each scale bad measure was greater than 0.5 and near about 0.9 which signifies satisfactory and acceptable reliability index. In similar stance, the associated KMO and Bartlett's tests also showed respective satisfactory measure.

For Internal Mismanagement

Pattern Matrix[a,b]

		Component				
		1	2	3	4	5
Factor One: Human Resource Related Problems	During problem solving sessions, we never make an effort to get all team member's opinions and ideas before making a decision				.846	
	Manufacturing engineers are seldom involved to a greater extent before introduction of new products				.813	
	Problem solving teams have never helped improved manufacturing processes at this plant				.915	
	Employee teams are discouraged to try to solve their problems as much as possible				.864	
	Direct labor employees are never involved to a greater extent before introducing new products or making product changes				.802	
	Employees are never cross trained at this plant so that they can fill in for others if necessary				1.032	
Factor Two: Financial Problems	No attempts have been made by management to lower the cost of funds		.962			
	The high input costs are impacting adaptation ability		.943			
	The firm based management rarely cares about the reduction in raw material cost		.986			
	The firm is experiencing high cost of debt due to escalation of project costs and non-operationalization of asset restructuring		.890			
	The firm is experiencing inadequate capitalization		.857			
	The organization based restructuring is being undertaken marginally		.952			
Factor Three: Marketing	The firm never undertakes consistent reassessment of product mix					.650
	We never test and develop any new ideas over the course of new product development					.846

Factor Four : Production Related Problems	The firm operates in segments which exhibit poor market demand					.838
	The firm does not rely on market driven market strategy					.926
	The production lines are more a function of internal concerns or politics than real market needs	.883				
	The firm never restructures the processes and layout to obtain process focus and streamlining	.890				
	Pace of production is not directly linked with rate of customer demand	.920				
	The plant rarely undergoes preventive maintenance	.894				
	The management rarely promotes the use of new process technology	.911				
	Shop floor employees rarely lead product/process improvement efforts	.895				
Factor Five: Corporate Planning	The firm is infusing funds in none core business activities			.972		
	The leaders in this firm seek to enhance their own self until it harms the system			.914		
	The firm's ability to predict internal or external, changes that could threaten its survival was perceived as limited and conservative			.855		
	The firm was rendered vulnerable in sense that it lacked the capabilities to sustain competitiveness			.928		

Extraction Method: Principal Component Analysis.
Rotation Method: Oblimin with Kaiser Normalization.
a. Rotation converged in 6 iterations.

For External Dependencies

Factor One: Industry Structure	PIS1	In our industry, the competitive moves form one firm have noticeable effects on the other competing firms and thus incite retaliation and counter moves	.994				
	PIS2	There exists a small number of suppliers who contribute to a large proportion of our industry's inputs	.944				
	PIS3	The supplier's product can affect the final quality of this industry's product	.774				
	PIS4	The suppliers to our industry can raise their prices or threaten to reduce quality	.967				
	PIS5	New firms entering the industry must spend a large amount of capital on risky and unrecoverable marketing ,R&D	.887				
Factor Two: Technology Management	TM2	We place lower emphasis on the R&D activities					.621
	TM3	We select the most out dated technology in our industry					.880
	TM4	We are often one of the last to detect technological developments that may potentially affect our business					.864
Factor Three: Government Problems	GOV 1	Government technology development institutes rarely played a role in helping us identify this opportunity/technology				.959	
	GOV 2	No provision of level playing field with fiscal and non fiscal incentives for small sector promotion, trade agreements, export promotion and tax holidays and duty rationalization				.842	
	GOV 4	No subsidy for asset acquisition, purchase of raw materials and skill enhancement of labor				.842	
Factor Four: Resource	RA1	…it has been difficult to acquire the necessary resources			.889		

Access Problems	RA2	…it has been costly to acquire the necessary resources			.844		
	RA3	…it required a lot of "learning by doing" to develop it			.935		
Factor Four: Market Uncertainty	MU2	In our market customers frequently demand completely new products/services		.929			
	MU3	In the market we operate in, changes happen continuously		.966			
	MU4	Technological changes in our industry are unpredictable		.936			
	MU5	We have insufficient information about our competitors		.912			
	MU6	Information that we need concerning our market, we are never bound to get		.908			

For Outcomes based scale

Pattern Matrix[a,b]

			Component				
			1	2	3	4	5
Factor One: Inertia to Change	INR3	Even though it knows that this is not the best way of doing things		.947			
	INR4	Even though it is not the most efficient way of doing things		.974			
	INR5	Simply because it is what we have done always		.985			
	INR6	Simply because we have done so regularly in the past		.971			
	INR7	Because strategic changes are difficult to implement in the organization		.940			
	INR8	Because lots of efforts have gone into its optimization		.880			

Factor Two: Erosion of Competitiveness	ERC1	Competitors do comprehend the competencies that lead to the firm's advantage	.959				
	ERC2	Competitors do understand how basic resources were put together to create the firm's current competencies	.946				
	ERC3	Competitors could learn how to effectively duplicate this competence by analyzing the firm news and reports	.801				
	ERC4	Our firm does fail at blocking competitor's competitive intelligence gathering attempts about the firm	.817				
	ERC5	Competitors do comprehend the competencies that lead to the firm's advantage	.854				
	ERC6	The firm has no necessary skills to implement newly acquired knowledge	.850				
	ERC7	Competitors do comprehend the competencies that lead to the firm's advantage	.774				
Factor Three: Coping	COPR4	Several of the management got together to press for a selective set of decisions although the rest were less sure					.766
	COPR5	There is always a dispute about the decisions we finally took last quarter					.492
Factor Four: Ability to	GenSter1	The unit pays the obligations with difficulty as cash position is rarely monitored				1.011	

Pay	GenSter2	The unit is unable to meet operating costs				.942	
	GenSter3	The unit is unable to pay for acquiring the essential inputs				.759	
Factor Five: Failure Risk	ProfCom 1	The firm rarely generates a relatively higher return on assets than our competitors do			.974		
	ProfCom 2	The firm has no cost advantage compared to major competitor			.955		
	ProfCom 3	The return on investment of firm has degraded over the past years			.977		

Extraction Method: Principal Component Analysis.
Rotation Method: Oblimin with Kaiser Normalization.
a. Rotation converged in 6 iterations.

Upon subsequent analysis, the AMOS based modeling was carried out to estimate the cross factor causal relationships. The model as achieved is illustrated here.

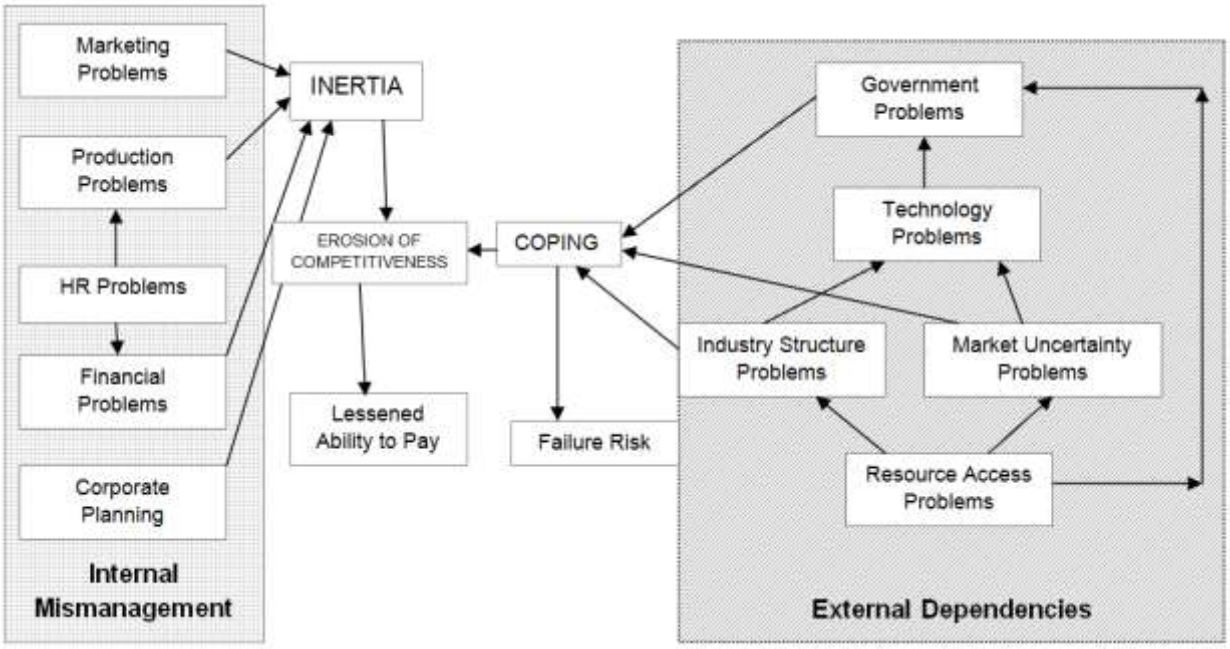

Figure I: AMOS Based Model for Factor Causal Relationship

The observed AMOS based causal variable modeling yielded these estimates and cross factor based relationships. The subsequent modeling across the AMOS platform reported a NFI index of 0.519, RFI index of 0.494, CFI measure of 0.567. The associated PRATIO in model fit was calculated as 0.952 which

in turn symbolized good parsimony fit achievement. The RMSEA index measure of 0.171 portrays the lower scope for error and respective measure of CMIN index of 5.4 upholds the fit properties. The reported AMOS based modeling depicted satisfactory model fit across the three considered sub scale elements of internal mismanagement", "external dependencies" and the "outcomes" in terms of "erosion of competitiveness", "inertia to change", "lessened ability to pay" and the associated "failure risk".

			Regression Estimate
Perceived Industry Structure (PIS)	<---	Resource Access Problems (RA)	.747
Market Uncertainty (MU)	<---	Resource Access Problems (RA)	.353
Technology Management(TM)	<---	Perceived Industry Structure (PIS)	.420
Technology Management(TM)	<---	Market Uncertainty (MU)	.381
Government Problems (GOV)	<---	Technology Management(TM)	.192
Production Problems (PROD)	<---	Human Resource Problems (HR)	.130
Marketing Problems(MARK)	<---	Human Resource Problems (HR)	.320
Financial Problems (FIN)	<---	Human Resource Problems (HR)	.330
Financial Problems (FIN)	<---	Corporate Planning Problems (CP)	.175
Government Problems (GOV)	<---	Resource Access Problems (RA)	.696
Production Problems (PROD)	<---	Resource Access Problems (RA)	1.040
Inertia to change (INR)	<---	Financial Problems (FIN)	.090
Inertia to change (INR)	<---	Corporate Planning Problems (CP)	.752
Inertia to change (INR)	<---	Marketing Problems(MARK)	.173
Coping with Pressure (COPR)	<---	Government Problems (GOV)	.240
Coping with Pressure (COPR)	<---	Market Uncertainty (MU)	.235
Inertia to change (INR)	<---	Production Problems (PROD)	.079
Coping with Pressure (COPR)	<---	Resource Access Problems (RA)	.478
Inertia to change (INR)	<---	Human Resource Problems (HR)	.096
Erosion of Competitiveness (ERC)	<---	Coping with Pressure (COPR)	.634
Erosion of Competitiveness (ERC)	<---	Perceived Industry Structure (PIS)	.332
Erosion of Competitiveness (ERC)	<---	Inertia to change (INR)	.156
Failure Risk (FR)	<---	Erosion of Competitiveness (ERC)	.107
Ability to Pay (AP)	<---	Inertia to change (INR)	.291

The research based outcomes thus vindicated the construct "enterprise based sickness and revival behavior" as involving the aspects of:

- **Workforce perceptions of mismanagements –Scale One-**(across human resources, production, marketing, finance and corporate planning focus)
- **Workforce perceptions of contextual elements-Scale Two-**(resource dependencies and access problems, technology management problems, market uncertainty, industry structure problems, government support related problems, coping problems)
- **Workforce perceptions of firm based inertia and erosion of competitiveness-Scale Three**

5. Findings

The causal modeling across variables vindicated the existence of the relationship across the internal mismanagements across the larger enterprises. As per the observed regression estimates, the human resource problems were observed to stimulate the problems related with the marketing, production and appropriate financial management in the larger enterprises in Andhra Pradesh geographic region. In a similar stance, the observed regression weights across the external dependencies of the larger enterprises pointed towards the incidence of the resource access problems as instigating the industry structure based perceptions and problems, as instigating the problems associated with the market related uncertainty, technology management as well as problems with regard to governmental support. These two aspects- internal mismanagement and external dependencies; were observed to in turn been observed as leading to firm based inertia, erosion of competitiveness and problems with regard to coping up with pressures which was subsequently observed to impact the enterprise based ability to pay, being liquid as well as survival risk.

6. Conclusions

The phenomenon of industrial closure and sickness does not thrives in the vacuum yet is shaped and impacted by the decisions that are intra organizational and involve top management as well as managerial perceptions of the problems and environment that they faced regularly. The managerial intentions and probabilities and expectations and opinions with regard to organizational change management are other aspects of the same problem.

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