

Human Resource Risk Management in Small and Medium Enterprises

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Abstract: Supply Chain Management (SCM) is the network involving the management of flow of goods in a supply chain which involves the movement of raw materials from the supplier to the consumer via manufacturer. SCM is defined as a set of organizations that involves in the flows of products and services to its customers. SCM improves efficiency in the overall performance of an enterprise or an organization. It is all about effectively selecting the right supplier and governing the management of goods involved within an organization. Human Resource refers to the individuals or workforce working within an organization responsible for performing the tasks given to them for achieving goals and objectives of the organization. The Human Resource Management (HRM) is the management of Human Resource (HR) that emphasizes employee performance to the maximum. This research paper mainly focuses on framing of conceptual model having independent variable as employee skills and training, employee potential and involvement, employee benefits and supply chain performance as dependent variable. Each of these factors has their own items to which a value is assigned with 5 point liker scale. The questionnaire was circulated to 110 Small and Medium Enterprises (SMEs) involved in manufacturing engineering components spread across different industrial estates located in and around Chennai, India. 56 responses were received and data was analyzed by Confirmatory Factor Analysis (CFA) and regression analysis using Statistical Package for Social Science (SPSS). This brings out the relationship between the three HR factors and measure of performance (SCP).

Key words: Human Resource Management (HRM) • Human Resource risk (HRR) • Supply Chain Management (SCM) • Supply Chain Performance (SCP) • Small and Medium Enterprise (SME)

INTRODUCTION

In today's competitive world, it is quite necessary to have effective and efficient process of manufacturing that most global enterprises focus on reducing the cost of raw materials and labor to yield higher revenue by neglecting various risks involved. Supply chain management is the study or analysis of oversight of materials, information and finances as they move in a process from supplier to manufacturer to wholesaler to retailer to consumer. Supply chain is a set of approaches which efficiently utilizes to integrate suppliers, manufacturers, warehouses and stores so that product is produced and distributed at the right quantities, to the right locations and at the right time to minimize overall costs while satisfying service level requirements [1].

Nowadays, the management's challenges are increasingly formed from a complex network of suppliers

that can do threaten the business and the creation of new opportunities for agency management. Supply chain performance can be increased by reducing errors. Human risk is one prime risk that reduces the overall performance of the enterprise. Human resource is generally focused on increasing the productivity of the enterprise. Human resource can be classified into different sections of working class. Each of these sections have its own issues. Manufacturing enterprises are generally categorized as small and medium enterprises which come across various human resource risks. Human resource risk and management interface allows us to better understand on how they are interrelated. Management is responsible to hire workers who play a crucial role in the enterprise. It is quite essential to look in the perspective of the working class to better understand the various issues faced by them. Human resource management is the dealing with or controlling of working class as a resource.

Literature Review: SCM has strategic role to play as high competitive pressures have led enterprises to use supply chain management as a competitive weapon to enhance performance [2]. As per the Supply Chain Management Council, the supply chain management (SCM) refers to planning, execution and management of all activities that are associated with procurement, production, distribution and coordination among supply chain members [3]. This process involves organizations trying to produce the final products with better quality and the least costs by standardization and improving their own internal processes to increase their competitive power [4].

Human resource management practices must be proactively applied to the emerging supply chain market as they play a key role [5]. In recent years, many organizations and researchers investigate the value of HR functions such as selection, development and retention of employees. Researchers in this field have been conducted to understand the relationship between supply chain performance and human resource [6]. From the lower level of the hierarchy which involves hiring, firing and payroll, it has seen stages where Union relations/avoidance, employee satisfaction and legal compliance have served as dominant areas of emphasis and expertise and that these areas are to be focused upon [7]. It described that direct and indirect effects that incur in supply chain management have a major impact on human resource activities [8].

Risk is a situation in danger and managing it is the key to success in any enterprise. Enterprise risk management (ERM) is a relatively new discipline which focuses on identifying, analyzing, monitoring and controlling all major risk classes like credit, market, liquidity, operational risk classes and solving this to have efficient system [9]. Both external factors like the legal and regulatory environment and the overall labor market and internal factors like organizational design and personnel management practice) contribute highly to increasing risk associated with production dependent on hired labor [10]. The impact on small changes in the environment of the working class show major difference in supply operations and working [11].

The increasing numbers of research studies on supply chain disruptions resulting from economic and political instability, volatile market dynamics, natural disasters or human actions, have shown that risk issues are becoming the new norm in supply chain operations [12].

Research Methodology

Conceptual Model for Human Resource Risk (HRR):

This conceptual model was designed based on the literature review and experts opinion from small and medium enterprises. The Employee skills and training (ET), Employee potential and involvement (EP) and Employee benefits (EB) fall into independent variables under which each have 4, 5 and 6 items respectively. Supply chain performance is taken as dependent variables. This model is illustrated in Fig. 1.

Employee Skills and Training (ET): Training was defined as systematic process that intends to help the working employees to enhance their knowledge and skills and to develop positive behavior through learning experience that is expected to help employees achieve greater performance [13]. The Management is responsible to provide training programs about self-monitoring and skills to improve the personality characteristics of employees through appropriate channels which in turn enhances the value of the enterprise in many ways [14].

Employee Potential and Involvement (EI): Strategic ways for retaining top talent in the organization is by helping high potential employees have cross functional job for job and work related satisfaction, involvement in decision making, encouraging their ideas and helping them implement them, help in career development moves, skill building through effective and relevant training [15]. Practices such as employee's involvement and participation at work and more frequent use of these practices ensures organizational commitment and job satisfaction among the employees [16].

Employee Benefits (EB): Benefits are elements of reward that are provided for remuneration, in addition to various forms of monetary reward which internally motivates them to work [17]. It can also be explained that employee benefits are an essential part of the effective functioning of the employer incentive program so that they can have a significant impact on whether the employee will continue working in the company or whether the candidate accepts an offer of employment [18].

Research Hypothesis:

H1: There is a significant difference between the factors

H2: There is a significant influence of ET on SCP

H3: There is a significant influence of EI on SCP

H4: There is a significant influence of EB on SCP

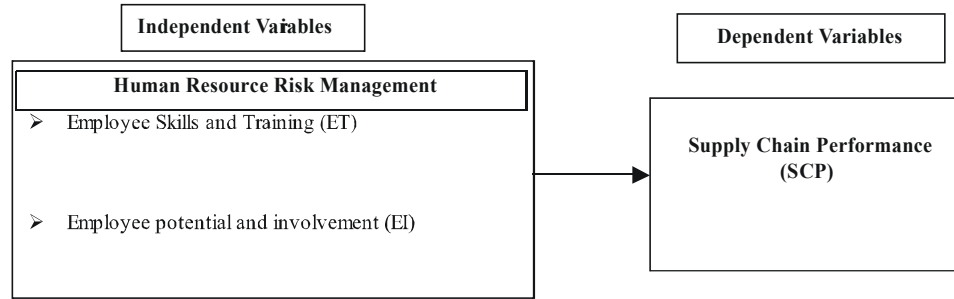


Fig. 1: Human Resource Risk

Questionnaire Development: In this research, the investigation was adopted to analyses various HR risk factors in SMEs. From the detailed literature review, the preliminary questionnaire was prepared. The questionnaire was designed with 5 point likert scale and choices ranged from very low to very high. The pilot study was conducted in 10 SMEs to validate the content of questionnaire (Content validity) related to the existing problems in SMEs. Further, it was validated by supply chain academicians and consultants (Face Validity) and the final Questionnaire was prepared by incorporating all the inputs given by experts.

Data Collection: Data collection is the process involving the collection of data with suitable variables and values to validate them in an established systematic fashion, which then enables one to answer relevant questions and evaluate outcomes. For this research paper, the authors have approached around 110 companies out of which 56 have responded with proper data. The designations of the people who have responded are as follows: Proprietary, Managing Director, Chief Executive Officer, Senior Manager and Managers of various organizations. Data analysis values are assigned with range of 1 to 5 values wherein 5 considered as the high value and 1 the least value in the Table 1 and Fig. 1.

Reliability and Validity: The questionnaire was analyzed for the reliability by SPSS software. The cronbach's alpha value resulted between 0.585 and 0.719. The Durbin Watson value ranged from 1.7 to 2.2 showing that the factors do not have multi-collinearity. The Kaiser-Merger-Olkin (KMO) test gives the value more than 0.6 and also the correlation of elements within the respective factors ranging from 0.698 to 0.868 shows the convergent validity and correlation between the factors which lie between 0.254 and 0.324 confirms the discriminant validity.

Data Analysis:

Descriptive Statistics for Independent Variable: The descriptive statistics of each item of all three constructs are displayed in the form of mean and standard deviation are shown in Table 1 and Fig. 2.

Table 1: Statistics for Independent Variable

Constructs	Item No.	Mean	Standard Deviation
Employee Skills and Training (ET)	1	3.21	1.09
	2	3.43	1.00
	3	3.73	1.07
	4	4.00	1.13
Employee potential and involvement (EI)	1	3.01	0.98
	2	3.07	1.21
	3	3.00	1.17
	4	3.48	1.17
	5	3.62	1.01
Employee Benefits (EB)	1	3.30	1.15
	2	2.82	1.12
	3	3.48	0.81
	4	3.38	1.22
	5	3.19	1.39

Table 2: Statistics for Dependent Variable

Construct	Item no.	Mean	Standard Deviation
Supply Chain Performance (SCP)	1	2.30	0.711
	2	3.07	0.911
	3	2.76	1.000
	4	2.60	0.801
	5	3.32	0.811
	6	3.07	0.709

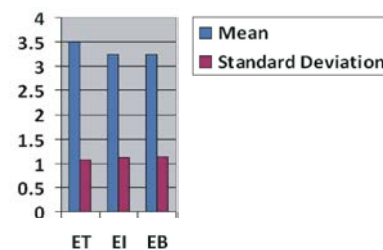


Fig. 2: Standard Deviation

Table 3: Correlation analysis of IVs and DV

	ET	EI	EB	SCP
ET	1			
EI	0.595	1		
EB	0.533	0.807	1	
SCP	0.572	0.559	0.422	1

Table 4: Factor analysis

	Items	Factor Loading	Eliminated Items	Cronbach's Alpha	F	P
ET	ET1	0.791	NIL	0.692	8.419	0.000
	ET2	0.632				
	ET3	0.691				
	ET4	0.765				
EI	EI1	0.761	EI2	0.764	6.575	0.000
	EI3	0.780				
	EI4	0.874				
	EI5	0.890				
EB	EB1	0.718	EB2, EB3	0.547	3.176	0.015
	EB4	0.808				
	EB5	0.907				
SCP	SP2	0.738	SP1, SP5	0.522	13.33	0.000
	SP3	0.713				
	SP4	0.500				
	SP6	0.742				

Descriptive Statistics for Dependent Variable: The descriptive statistics of each items of SCP is displayed in the form of mean and standard deviation is shown in Table 2.

Correlation analysis of IVs and DV: The degree of association between the constructs of IVs and DV are analysed by correlation and displayed in the Table 3.

Factor Analysis: The CFA is used for factorizing the items of each construct and measure of performance. The factor loadings of each items, eliminated items, cronbach's alpha value, F test value and its significance in terms of P are shown in the Table 4.

Regression Analysis: The regression model is formulated such a way that ET, EI and EB as an IVs and SCP as DV. The relationship was analyzed and represented as an Eq. 1. The outcome of ANOVA are represented as the value of $p < 0.000$, $F=12.21$, R^2 value is 0.409 and Adj. R^2 value is 0.375 are proving the model is fit.

$$SCP = 1.18 + 0.288 (EI) - 0.080 (EB) + 0.282 (ET) \quad (1)$$

Findings and Conclusion: The objective of the research is to identify the HR risk factors with respective items and analysis of relationship between the factors and measure of performance by formulating hypothesis. The regression analysis confirming that the hypothesis H2 and H4 are

more significant and ET and EI are more influencing factors to improve the SCP. The H3 is not significant and proved that there is no influence of EB on SCP. The correlation analysis is proved that the H1 is significant and there is a moderate difference between the factors. This research concludes that employee skills and training, employee potential and involvement are most essential factors to improve the supply chain performance or SME performance.

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