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# Human Resource Planning: A Vehicle towards Achieving an Effective Supply Chain Management through Manpower

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#### **ABSTRACT**

'It is not the strongest or the most intelligent who will survive but those who can best manage change'. – Charles Darwin

The Darwinian ethic saying 'survival of the fittest' gives a clear picture of manpower and its right place at the right time and so is the need of supply chain function in present scenario. In this context, human resource planning is of vital importance to an organisation to understand the skill inventory, demand forecasting for employees, identification of gaps and so on. A proper and systematic maintenance of HRP will reduce the major issues of workforce in supply chain management. A socially responsible supply chain must ensure that the right human resource is being used for the work allocated to it. An internally developed manpower is a major step towards building an ethically organisation. This paper shall discuss how the people-related risks in supply chain can be minimised by the proper implementation of human resource planning or manpower planning function.

**KEYWORDS:** Human resource planning, Skill inventory, Supply chain

#### INTRODUCTION

Supply chain management involves all the activities that are directly or indirectly related with producing and delivering a product or service. In the other way, we can understand it as the functions involved in receiving and filling a customer request. During all the major functions of supply chain like distribution, marketing, finance, operations, customer service and others, there comes in picture a silent but vital role of human resources.

Various researches have been done in the areas which have taken human resource management as one of the key factors in determining the proper functioning of supply chain. Understanding that the manpower is involved in all the functions of SC, there is a need to analyse how a proper functioning of human resource

planning can result in minimizing the workforce-related issues and thus contributing towards a proper supply chain function. Human resource planning is the process by which management ascertains how an organisation should move from its current manpower position to its coveted manpower position. It encompasses all the activities related with the skills present and skills required in future.

#### LITERATURE REVIEW

Marwah *et al.* (2013) have studied and identified that for an organisation to build its competitive advantage; the personal competencies of the employees are potentially valuable. They also studied that a firm must have human resource capabilities to implement new strategies and for achieving this, HR programmes have to be in place.

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Lengnick-Hall *et al.* (2013) suggest that competitive advantage can be achieved through the proper and systematic benefits of shared HR practices that improve overall supply chain performance. In order to achieve this, some core HR practices should be implemented coherently across organisations in the supply chain. These practices may include selection, training and performance management.

Another study has also found that functions like sourcing, manufacturing, customer service and retailing involve logistics in their planning and scheduling for optimisation of supply chain, but their core operations are dependent upon the functioning of HR (Jurcevic *et al.*, 2009).

According to Sweeney (2013), where investment in companies is made on the supply chain facilitators like technology, information and measurement systems, people should not be overlooked as they are central to successful cooperative innovations to materialise all.

In order to build a human capital-based organisation and to achieve competitive advantage, it is crucial to possess and maintain a competent workforce (Pfeffer, 1994).

# HUMAN RESOURCE PLANNING – IT'S MAPPING ON SCM

Human resource planning is of utmost importance but often neglected function in many organisations. At one place, HRP focuses doing manpower/workforce analysis which includes the analysis of demographic employment data and the internal trends in relation to the workforce, it also does the gap analysis and further on that basis identifies the HR priorities for the attainment of organisation goals. These priorities include the core functions of human resource namely, recruitment and selection, competency identification, training and development, retention and career development and so on.

All supply chains need a competent and skilled workforce, therefore making the system obligatory to have a full-fledged and comprehensive human resource planning system in order to meet any contingencies in the manpower requirements and performances. Supply chain involves a mix of capabilities as it is a bridging function which deals with various disciplines in the corporate world. The need arises to be strategic and proactive to meet any sort of talent crisis.

The process involved in human resource planning provides a solution to the workforce related issues in supply chain system.

# **Maintaining Skill Inventory**

Skill inventory is a list of basic information on all employees, which can be used as a source of quick reference to evaluate the information and skills of the employees within a company. Desired job attributes in modern age supply chain are tedious than before (Sutherland, 2014). The success of supply chain can only be ensured, if the industry possesses proactive & innovative approach of human resources who are equipped with strong technical knowledge and great human ethics. Qualities like flexible approach, responsiveness to the sudden unplanned changes in business strategy due to external factors, ability to reschedule the priorities of task with multitasking approach will play decisive role in success of supply chain operations (Heyns Rose, 2012). These conditions call for a multi-talented professional – who understands finance, marketing, economics and also different languages (Sutherland, 2014). HRP not only identifies but also applies new approaches to meet these evolved needs.

Supply chain sector is dealing with shortage of skilled human resources, when there is big gap between the availability and demand of manpower. Free trade, market fluctuations, different regulations across boundaries, cross-functional areas, are few significant points for scarcity of talent in supply chain human resource management. There are various means via which organisation can ensure good strength of talented workforce; however, organisations would have to be more proactive in their approach for hiring, developing and retaining the supply chain executives (Cottrill, 2010).

In view of effective operation of modern supply chain elements, an effective human resource is most important for its success. Besides domain-specific knowledge and attributes, it is important that supply chain leader should have path breaking approach & clear vision and action plan of getting the various supply chain functions streamlined & ensure smooth coordination among various key elements, processes and manpower. The supply chain leader should be well versed with strong technical expertise equipped with strong interpersonal skills so that he can coordinate the supply chain activities ensuring the optimum output and performance of the supply chain (LCL White Paper, 2011).

Some human skill sets that are important for an effective supply chain are as follows:

- Human and organisation skill
- Problem and conflict solving approach
- SC experience & have sound expertise of various functions
- Strong technical implementation skills
- Flexible and able to overcome technical constraint
- Identify opportunities/create opportunities
- Understand bottlenecks, analyse cause and effects
- Job attraction and retention
- Moving with technology/ technology management
- Education and training
- Succession and career planning
- Promotion/career growth
- Cohesiveness in human chain/ collaboration
- Compensation package
- Task management
- Adaptation
- Creative and imaginative mind
- Structured reasoning
- Autonomy
- Delegation

- Broad mind
- Human and motivational competences
- Communication
- Customer awareness

The main challenge which the HR has to deal with problem of finding and recruiting work force with good desired skills in supply chain positions. The short fall of experienced professionals in area of supply chain means that mostly new recruits not having proper knowledge of supply chain are hired and trained in the skills required for SC positions (LCL White Paper, 2011).

### **Demand Forecasting**

'If we didn't have that information, we would be hiring the right people for the wrong jobs'. – Sheila Feldman, Vice President of Human Resources at ConocoPhillips.

Optimisation of resources and effective integration of elements '4 M' i.e. Man, machine, material, manufacturing process is key to the success of any organisation. Out of these elements most crucial element is manpower or the human resources which the organisation is having, to fulfil the objectives and goal of the supply chain of company. Forecasting is a major tool through which the organisation can predict the requirement of the professionals that will be needed in the supply chain operations. Demand forecasting gives the organisation a bird eye view of present and future forecast of the manpower in the supply chain area with a clear picture of the various skill sets that are needed, the skill gaps in present employees, reasons for the skill gap and possible resources, training needs and areas from where the talent can be hired.

By anticipating the manpower to be recruited by having the required skill set, the organisation can plan its supply chain configuration in terms of human resources. This planning is crucial for the company to enable them to sustain in global competitive world (Sutanto, 2000). Despite high unemployment, it can be difficult for the organisation to find supply chain personnel with the right skill set. Hence the organisations need to take up long-term strategic approach to develop these

personnels. It involves determining the number and kind of people the organisation will require in future. For this purpose factors like consideration of budget constraints; turnover due to resignation, terminations, transfer; retirement, technology up gradation and others are taken into account (Noe, 2012).

Accordingly, based on the forecasting the organisation can identify the areas where it needs to focus on, during the recruitment process in terms of attributes and qualities which company is looking in its present and future employees to be associated with supply chain. On the critical performance analysis of current state of their professionals on basis of knowledge, attributes and other domain expertise, training needs can be identified for the present employees working in other sections of the company, who can be groomed to work with supply chain operations after training. Also initial startup training programmes can be designed for the future newly recruited staff so as to enable them to become effective supply chain professionals. A proper and effective HR policy related to salary perks, and incentives career advancements can be designed to attract the best talent available in the industry/ educational institutes to choose their carrier in supply chain. Also efforts and policies should be made to retain the existing talent in supply chain area.

Few important points which an organisation should focus on while forecasting's its supply chain professional needs can be

- Company business plans over next 5 to 10 years,
- Revenue model of the company,
- Company business expansion/withdrawal plan in certain product line or demographic regions,

Identifying operations, areas process where there is shortage of skilled manpower over the time horizon, like warehouse, inventory analysts, logistics analysts, planners and so on.

#### **Growth Rate of Industry**

Challenges/threats company is facing from fellow rival companies and market.

As identified in CLSC Report (2005), the demand of manpower in supply chain is mainly governed by these three key factors:

- 1. Generation of new opportunities
- 2. Aging employees and attrition rate
- 3. Turnover

# **Generation of New Opportunities**

Organisation should identify areas and operations where the opportunities will be created and manpower will be needed. Such factors should be taken into consideration. Few important factors that should be kept in mind are

- 1. Automation and Technology up gradation over next few years.
- 2. Identifying supply chain areas where skilled manpower be needed.
- 3. Identifying jobs that are expected to increase or decrease in coming years.
- 4. Identify openings currently which are tough to fill (i.e. current unmet demand).
- 5. Identify crucial positions in supply chain.

#### Aging Employees and Attrition Rate

Rate of attrition due to retirement of supply chain professional is an important factor which is usually over looked. So the companies should have forecasting of the human resource needed, resulting due to retirement of the employees.

#### Turn Over

An organisation should also focus on the trend and rate of national turnover of the professionals, particularly who are inclined for private and government sector jobs, so that accordingly action plan should be forecasted and identification of targeted demographics regions, educational institutes, universities and training centres can be done.

#### Gap Analysis

Once the entire organisation's skills are assessed and

demand forecasting is done, the next step leads to stitch up the existing gaps. Technology transformations, new product lines, cultural interchanges are some of the decent reasons to create gaps in manpower requirements. Supply chain industry is amply drenched with such grounds of gaps. It calls for answering the aspects like (1) is the organisation ready for the shortages to be addressed or (2) are the succession plans ready for vital positions? Moreover, supply chain's low profile in particular can be difficult to overcome in sectors where the function is dominated by dominant marketing and sales departments (Cottrill, 2010). Just-in-time philosophy for staff hiring often imposes problems in times of peaks in demand. Supply chain industry also suffers with lack of succession planning and right skill sets (KPMG, 2012). The commonly refereed positions have been at managerial level, like project managers, functional managers, general managers and others along with the people with supervisory and analyst functions (Jurcevic et al., 2009).

Without a quantified understanding of the exact areas of talent gaps across the business, an organisations risk neglecting the issue of manpower entirely (Russell Reynold Associates, 2014). With the increasing globalisation, supply chain talent should possess a substantial understanding of global supply chain management practices and business cultures (Centro Banamex, 2014).

# Chalking out Employment Plan – Being Ready to Meet the Requisites

This stage entails the strategies to meet the shortcomings in the supply chain management in the human resource areas.

#### Training and Development Programmes

For any organisation to get a competitive advantage, it must develop a long-term strategic approach. Therefore, a holistic training and development programme is required which comprises people at all levels, based on learning outcomes and continuum (KPMG, 2012). The top management generally

overlooks the investment part in people. The senior management must utilise their position to allocate the resources for training so that the trained workforce can provide more output (Fawcett *et al.*, 2005). In order to be apt to the changes for the supply chain workforce, technical development courses are must have (Jurcevic *et al.*, 2009).

To be apt with the changing scenario, technical development courses are must have for the supply chain workforce. The organisations with best practices in HR consider training as a strategic requirement rather than as a discretionary budget item (Gowen and Tallon, 2003). It is necessary that the employees should have the skill and competencies to convert supply chain planning in to actions, like forming and developing team, allocation of budget and infrastructure and so on (Lan and Unhelkar, 2005). Also the employee should be trained on various quality tools which are involved at each step up manufacturing.

### Organisation Culture as SCM Enabler

A successful formulation and execution of supply chain strategy should consider deeply held cultural traits and impalpable behaviour response pattern of supply chain participants (Roh *et al.*, 2008). A participatory work environment is always valued and can be furthered by senior management (Fawcett *et al.*, 2005). Such environment empowers people to experiment, take risks and solve problems and learn life – long (Fawcett *et al.*, 2005). Any practice will be successful with the existence and implementation of a corporate culture (Gowen and Tallon, 2003). The culture of company should focus on quality and getting the activity right from the very beginning to the last point of the sales.

# Career Planning/Workforce Development

An employee today seeks growth in the organisation with an appealing career prospects. Lack of career growth has been cited as one of the major reasons for leaving the jobs in supply chain sector (CLSC Report, 2005). Devising a career path for the employees is an important retention strategy in this particular sector where career advancement is not so visible. Job

rotation and providing new projects can serve as a step ahead towards this achievement.

Corporate giants like IBM and Intel serve as models when establishment of career path comes in discussion (Cottril, 2010). Career development plans further helps in succession planning process also by involving lateral movement in the organisation (Newfoundland and Labrador, 2008).

#### **CONCLUSION**

While the supply chain industry is experiencing tremendous technology innovation and growth, it is also facing serious crisis of talented and skilled workforce mainly due to the absence of an effective human resource planning. By rethinking conventional approaches, recruitment, skill development and effective planning, few companies are overcoming this crisis. A prerequisite for an effective supply chain is to have a good pool of human resources. For this purpose, creating efficient manpower by a well-structured human resource planning system is very important and first step for the success of supply chain in any organisation. An efficient human resource planning provides a very agile and comprehensive solution to manpower need of supply chain system. In a nutshell,

we can say that staffing solution through human resource planning gives in-depth sight to focus on various skills that needs to be taken into account while doing the hiring process and identifying the training needs of supply chain professionals.

It is also important and advisable to the education institutes and training providers to keep the pace with supply chain industry and groom the youth with these skills so that the youngsters have better probability of getting hired by the industry and make their career in supply chain industry. A well-executed supply chain powered by efficient human resource planning, contributes to the society and mankind in an effective manner, as it offers working opportunity to diversified range of skilled, semi-skilled professionals ranging from logistics, warehousing, sales, planning and manufacturing sector. Industry needs to put a proper human resource planning for grooming supply chain professionals, so that they can withstand the challenges of complex business model. It is impossible to say exactly what the future will bring, but the importance of human resource planning and human skills discussed in this paper will give the supply chain professionals who choose to use them, a defining edge in today's rapid changing global business.

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