

# An Approach for Supply Chain Managing of Small and Big Size Business

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**Abstract**— In every business there are requirements of the assets and resources. So, the supply chain managing links properly these areas to each other to make the efficiency. These resources can be financial, intangible and physical resources. If the resources are not available for the organization at the time when it require then it might be the reason for degrade of that business. The study of the relevant resources is very necessary, that take a role in the literature of business management. The intellectual capital is the aspect of impalpable assets, and its relational capacity promote the efficiency and profitability of the business. The intellectual capital known as the effort or work that a member put into the organization as intangible resources. These resources include knowledge resources like copyright, patents, trademarks and other human's ideas and experiments. So we can say that intellectual capital is the collection of all resources like relational capital, supply chain managing, structural and human, these are the resources that set the organizational competitive value.

**Keywords**;business; resources; supply chain managing, intellectual capital;organization.

## 1. Introduction

Supply chain management is a technology-driven collaboration between a retailer and its wholesale and manufacturing distribution channel partners. While many facets of managing a supply chain are similar for a small business, the scope and steps involved are often less complex than they are in a large organization. The Intellectual capital known as the exertion or work that a part put into the association as immaterial assets. These assets incorporate information assets like copyright, licenses, trademarks and other human's thoughts and examinations. So we can say that scholarly capital is the gathering of all assets like social capital, basic and human [1], these are the assets that set the authoritative aggressive worth. It is the value of human capital, rational capital and structural capital that relate to its relationship [2]. In a company Intellectual capital is combination of everything. It refers to as single component [3]. In the context of academia the intangible resources value is not shown in balance sheet of a company [4]. National level intellectual capital known as national intangible capital [5].

The knowledge of an organization or a company that exists on within the organization or outside the organization is the part of Intellectual capital. Combination of knowledge is refers to as Intellectual capital [6].

Several knowledge based methods and products has intangible nature, this nature when combine in the organization, this increase the role of intellectual capital in the management of business. With the combination of all three intellectual capital like Human, Structural and Relational Capital, it can create, shape and update intellectual capital. And it needs a strategic creation [7]. In this way the value of intellectual capital in an organization developed through a rising and outgoing process. This process based on change in strategies, development and purchasing capabilities [8]. Intellectual capital management is organizing through process of multiple stages and manages by evolving logic. The Intellectual capital management is the cycle of 4 inter-related sets of methods:

1. Strategic Alignment
2. Exploration and Exploitation
3. Measurement
4. Reporting of intellectual capitals [9].

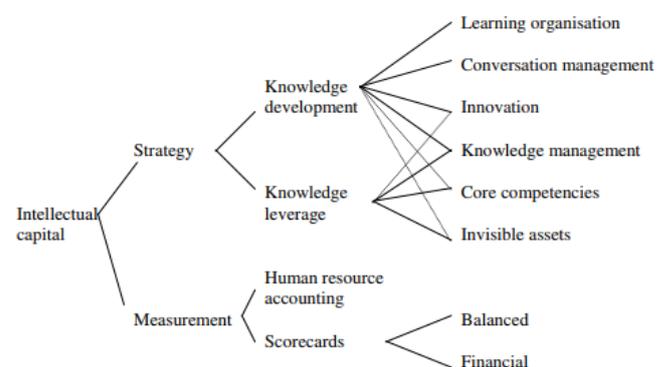


Figure 1. Conceptual Roots of Intellectual Capital

## 2. Literature Survey

In the year of 2005, Jacob Ben-Simchon reprobated that intellectual capital known as the non-physical resources, assets of an association and bridgment of non-substantial resources, just as its licenses, verifiable learning of its individuals, and their system of accomplices and contracts. in

the year of 1997 Stewart described that intellectual capital is the bundled helpful information' and in the year 2000 Sullivan stated as 'learning that can be changed over into benefit', in [10] define as the 'whole of information' of its individuals and useful interpretation of this information into process, trademarks and brands.

In [11] described intellectual capital as ownership of learning, client relations, hierarchical innovation, connected understanding, expert aptitudes that furnish an organization with a focused edge in the outside world. In [12] composed a book, "Intellectual Capital: The New Wealth of Organizations", it depicted the three noteworthy components of scholarly capital named structural, human and customer capital. The Intellectual capital known as the effort or work that a section put into the relationship as irrelevant resources. These advantages consolidate data resources like copyright, licenses, trademarks and other human's musings and assessments. So we can say that academic capital is the get-together of all benefits like social capital, fundamental and human

In [13] depicted about intellectual capital that it is the mainstays of things to come of any undertaking; it show that an organization is working efficiently or not. Any endeavor that does not put resources into imperceptible capital can't in any way, shape or form create the energy of development.

### 3. Supply Chain Management (SCM) in SMEs

Supply chain management in SMEs is an approach that helps the organization to function in a more agile and cost effective manner by integrating the processes of various partners at all three levels – strategic, tactical, and operational. Even though globalization has increased pressure on some SMEs to continually reduce their prices against their quality and services, SCM can improve the performance of SMEs and increase their profitability by enhancing their ability to obtain supplies of the right quality, at the right time, and at the most favored prices. Some researches describe that there are three main components of intellectual capital. They consisted of human capital, external capital and internal capital. As stated above basically there are three main elements of intellectual capital:

1. Human capital
2. Supply chain managing
3. Relational or customer capital

The intellectual capital that belongs to education, training, skills, experience, knowledge and value of a system is known as human capital. It also relate to characteristics of the individual that work for the increment of the organization.

The second element intellectual capital is the Customer or Relational Capital. It is also known as External Capital or Relationship Capital. All the subjects that externally belong to the organization are come in to the category of Relational

Capital. Suppliers, clients and partners are come in to this type of capital. It provide the relationships between suppliers and customers, also do the work related to brand names and trademarks [14].

The third element is Structural Capital. It is also known as internal or Organizational Capital. In this type of capital all the things come which leave behind when employee go home at night. The proceeds, database, intellectual property, culture, information systems and policies are the examples of Structural Capital. In this way the knowledge integrated in process and structure of organization.

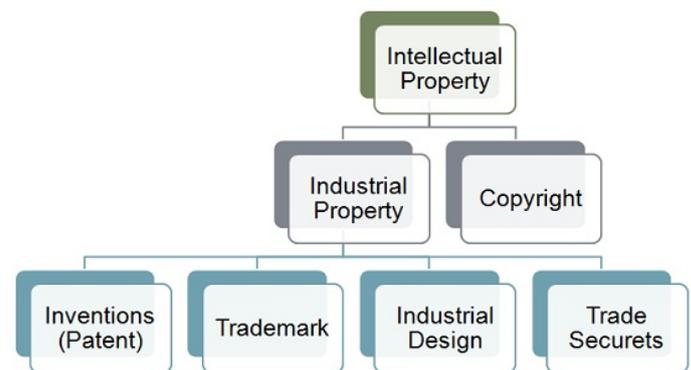
The table 1 shows the framework of Intellectual Capital according to the development.

**Table 1.** Classification and framework of Intellectual Capital

Developed by	Framework	Classification
Kaplan & Norton (1992)	The Balanced Scorecard	Internal processes perspective Customer perspective Learning & growth perspective Financial perspective
Haanes and Lowendahl (1997)	Classification of Resources	Competence Relational
Lowendahl (1997)	Classification of Resources	Competence Relational
Sveiby (1997)	The Intangible Asset Monitor	Internal structure External structure Competence of personnel
Edvinsson & Malone (1997)	Skandia Value Scheme	Human capital Structural capital
Petrash (1996)	Value Platform	Human capital Customer capital Organisational capital
Danish Confederation of Trade Unions (1999)	3 Categories of "Knowledge"	People Systems Market

### 4. Classification of Intellectual Property

Intellectual Property is classified into two parts:



**Figure 2.** Intellectual property classification

1. **Industrial Property:** this type of Industrial Property includes trademark, designs, service mark and patent for any innovations. The properly that has to be protect on the basis of intellectual property laws are come in this type of property. The parts of Industrial Property are given below:

a. **Trademark:** Trademark alludes to an ascertainable sign, image or a word deciding the wellspring of a specific item. It is utilized to manage the cost of security to the imprint proprietor, by encouraging confined rights to utilize

it. When it recognizes the specialist co-op, it is called as an administration mark. When enlisted, the trademark is ensured for an unequivocal period, after which it very well may be recharged by paying an expense.

b. **Design:** It can also know mechanical plan or industrial design. It is basically belongs to the stylish highlights of a framework or product. It makes the product more stylish and presentable in this way these lines build its business esteem.

c. **Inter-supply chain collaboration:** Multi-divisional companies typically operate multiple supply chain management systems to handle multiple plants and distribution channels. Value chains are being made into multiple-path, multiple-node value Webs. An extended SCM system can allow traditional, tightly linked systems to share information across channels and provide new opportunities for optimization across multiple, external supply chains

d. **Trade Secrets:** As it is apparent from the name, it is the delicate business data which gives an aggressive edge to the firm.

2. **Copyright:** Copyright shows that the creator or inventor of a product or a work gets the specific right related to that work. It is prevent others from duplicating the It covers a wide assortment of educating works, for example, books, lyrics and plays, movies, show and melodic work and imaginative manifestations, for example sketches, models, photos and a lot more [15].

## 5. Indicators of Intellectual Capital

Indicator of intellectual capital is known as the measurement of the several objects like customer loyalty, quality processes, employee satisfaction etc. There are many Intellectual capital indicators are analyzed and determined. Some of them are shown below [16]:

### 1. Human Resources

This type of indicators measure human capital in organization and also indicates the development of the resources. To evaluate the turn over, creativity and employee competency it include many indexes. The example of human resources is shown in table 2 [17-19].

**Table 2.** Human Resource Indicators

Indicator	Method of Measurement
Seniority	Average number of years of employment in the company and /or position.
Education	Number of employees with education from school or university qualification.
Education costs	Annual cost of internal and external courses (including on-the-job training).
Employee satisfaction	Measured based on a questionnaire designed to collect information about job satisfaction, the work environment and company policy.
Value-added per employee	Profit plus pay / Number of employees

Source: Danish Trade and Industry Development Council (1997)

### 2. Customer and supply chain

How the customer assesses the value of the company is indicate in customer indicators. Sharing of market, customer

support and cost are measures. The customer indicators are shown in table 3.

**Table 3.** Indicators of customers

Indicator	Method of Measurement
Distribution of turnover by markets, customer and products	The percentage distribution by products, customer and markets.
Marketing	Total expenses for marketing of the company's products. Total expenses for marketing / Total turnover
Customers per employee	Number of customers / Number of employees
Customer satisfaction	Measured based on a questionnaire investigating the motivation, helpfulness and reliability of staff.
Repeat business	Share of turnover related to existing customers. Share of customers with X years business with the company.

### 3. Technology

In this context it is show that how the technology can use effectively. Use of technology and how much technology is using by the employee is measured. The indicators of technologies are shown in table 4.

**Table 4.** Indicators of technology

Indicator	Method of Measurement
Total IT investment	Cost of purchasing and servicing of hardware and software.
IT literacy	Number of employees with IT-related education and literacy.
Number of IT work stations	Number of supported work stations. Number of PC work stations / Number of employees

### 4. Processes

The task of the process is to measure error ratio, quality, workload and time. The table 5 shows some indicators which include these elements.

**Table 5.** Indicators of process

Indicator	Method of Measurement
Cost per process	Distribution of total cost per process.
Staff distribution by processes	Distribution of employees by processes.
Investment in offices and workshops	Total expenses for upgrading of equipment.
Lead time	Number of working days from commencing production to completion.
Product development time	Length of time from the product idea phase to the completion of its development.
Quality	Measured by means of a questionnaire inquiring whether the product fulfilled a reasonable expectation of quality.
Error rate	Number of production errors / Total production.
Customer response time	Length of time between receiving an order to its delivery.
Reputation of the company	Various parties' assessment of the company's production methods, employee relations, contribution to society etc. measured using a questionnaire.

Small companies naturally have less money to invest in supply chain management processes and software as well.

Software is used to integrate inventory data between an inventory seller and buyer. A small business often invests much less in technology infrastructure to manage data integration with suppliers. While all businesses need to control inventory costs, this point is especially true for small companies with less margin for error. Meeting customer demand but avoiding holding excess inventory is critical. Thus, close relationships and dependability of partners is necessary.

## 6. Conclusion

The challenges for adopting SCM practices in SMEs are primarily based on the reasons that these organizations are relatively opportunistic and in contact with relatively few rivals; more cash focused, short term and instill better communications and incentives for exploiting internal knowledge restricts the application of supply chain practices in SMEs. Intellectual capital is the pillars of things to happen to any endeavor based on the supply chain. Along these lines the estimation of scholarly capital in an association created through a rising and active procedure. This procedure dependent on change in systems, improvement and obtaining abilities. Scholarly capital administration is sorting out through procedure of numerous stages and oversees by advancing logic. The learning of an association or an organization that exists on inside the association or outside the association is the piece of Intellectual capital. Mix of learning is alludes to as Intellectual capital. Adoption of SCM by first-tier and second-tier SMEs can help to consolidate the component level requirements of their customers or LEs at few stages and in turn it can help to boost the profit of their own and overall supply chain.

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