CHAPTER 1

INTRODUCTION
1. INTRODUCTION

Reverse logistics is an issue that has received growing attention, above all other issues, in the last decade, given the confluence of several situations. On the other hand there is a verifiable concern about environmental matters and sustainable development. In this sense, there are several legal regulations that have been passed in a number of countries, Germany being the pioneers with retrieving packaging and electronic devices regulations and Netherlands (with its stringent automobiles laws) however, the effect has quickly spread out all over Europe, USA, Japan and India were among others. India is a new member in this club and it’s focusing on reverse logistics in SME’s. Because in India there is another reason to use reverse logistics in SMEs due to economic reasons and its contribution by means of the returned products, companies stand the possibility of recovering either constituent material (which no longer needs to be purchased in the same quantities) or added-value. Whether the savings comes only from materials purchasing costs or from materials, labor and overhead costs respectively, firm may are increasingly interested in being efficiently involved in market competition to shrink the margins more and more.

SMEs have the special importance to the transition countries (like India) for number of reasons. Firstly, they are able to provide economic benefits beyond the boundary of the individual enterprise in terms of experimentation, learning and adaptability. These characteristics are especially important in economies undergoing radical transformation such as occurred in the formerly centrally planned countries. Secondly, in most transition countries, the SME sector was largely neglected and even discriminated against in the early transition period with emphasis placed on the rapid
privatization of large scale enterprises and not the development of the SME sector. This has arguably resulted in less resources and attention being paid to the needs of SME development.

1.1 CONCEPTUAL FRAME WORK

1.1.1 SME’s

Small and medium enterprise or small and medium-sized enterprise (SMEs, small and medium-sized businesses, SMBs and variations thereof) are companies whose personnel numbers fall below certain limits. The abbreviation "SME" is used in the European Union and by international organizations such as the World Bank, the United Nations and the World Trade Organization (WTO). The term "small and medium businesses" (or "SMBs") is predominantly used in the USA. In most economies, smaller enterprises outnumber large companies by a wide margin. SMEs are said to be responsible for driving innovation and competition in many economic sectors.

1.1.1.1 INDIA

Micro-enterprise

A micro-enterprise is one where the investment in plant and machinery (their original cost excluding land, building and items specified by the Ministry of Small Scale Industries in its notification No. S.O. 1722(E) dated October 5, 2006) does not exceed Rs.25 lakh.
Small enterprise

A small enterprise is one where the investment in plant and machinery (see above) is more than Rs.25 lakh but does not exceed Rs.5 crore.

Medium enterprise

A medium enterprise is one where the investment in plant and machinery (see above) is more than Rs.5 crore but does not exceed Rs.10 crore.

The definition of MSMEs in the service sector is:

- Micro-enterprise: Investment in equipment does not exceed Rs.10 lakh
- Small enterprise: Investment in equipment is more than Rs.10 lakh but does not exceed Rs.2 crore
- Medium enterprise: Investment in equipment is more than Rs.2 crore

The Indian micro- and small-enterprises (MSEs) sector plays a pivotal role in the country's industrial economy. It is estimated that in value, the sector accounts for about 39 percent of manufacturing output and about 33 percent of total exports. In recent years, the MSE sector has consistently registered a higher growth rate than the overall industrial sector. The major advantage of the MSE sector is its employment potential at a low capital cost. According to available statistics, the sector employs an estimated 31 million people in 12.8 million enterprises; labor intensity in the MSE sector is estimated to be nearly four times that of large enterprises
1.1.2 LOGISTICS

According to the council of Logistics Management, USA, logistics management is the “process of planning, implementing and controlling the efficient, cost effective flow and storage of raw materials, in process inventory, finished goods, and related information from point of origin to the point of consumption for the purpose of conforming to customer requirements.

Logistics is the management of the flow of resources, between the point of origin and the point of destination in order to meet the requirements of customers or corporations. Logistics involves the integration of information, transportation, inventory, warehousing, material handling, and packaging, and oftentimes security. Today the complexity of production logistics can be modeled, analyzed, visualized and optimized by plant simulation software. Logistics can involve a wide variety of consumer goods such as food, IT materials, aerospace resources, and defense equipment.

**Logistics: (business definition)** Logistics is defined as a business planning framework for the management of material, service, information and capital flows. It includes the increasingly complex information, communication and control systems required in today's business environment (Logistic Partners Oy, Helsinki, FI, 1996)

**Logistics: (military definition)** The science of planning and carrying out the movement and maintenance of forces.... those aspects of military operations that deal with the design and development, acquisition, storage, movement, distribution, maintenance, evacuation and disposition of material; movement, evacuation, and
hospitalization of personnel; acquisition of construction, maintenance, operation and disposition of facilities; and acquisition of furnishing of services (JCS Pub 1-02 excerpt)

**Logistics:** The procurement, maintenance, distribution, and replacement of personnel and materiel (Webster’s Dictionary).

**Logistics:** The branch of military operations that deals with the procurement, distribution, maintenance, and replacement of materiel and personnel (American Heritage Dictionary)

**Logistics:** the process of planning, implementing, and controlling the efficient, effective flow and storage of goods, services, and related information from point of origin to point of consumption for the purpose of conforming to customer requirements." Note that this definition includes inbound, outbound, internal, and external movements, and return of materials for environmental purposes (council of logistics management, http://www.clm1.org/mission.html, 12 January 2013)

**Logistics:** The process of planning, implementing, and controlling the efficient, cost effective flow and storage of raw materials, in-process inventory, finished goods and related information from point of origin to point of consumption for the purpose of meeting customer requirements. (Reference: Canadian Association of Logistics Management, http://www.calm.org/calm/About CAL Mhtml, 12Feb, 2013)

**Logistics:** Logistics is the science of planning and implementing the acquisition and use of the resources necessary to sustain the operation of a system. (Reference: ECRC

**Logistics**: To perform logistics functions or processes. The act of planning, organizing and managing activities that provide goods or services (The verb "to logist" Eg She logisted the last operation I will logist the next operation. I am logisting the current operation. We logistic the operations the operations are well logisted.) -- (MDC, LogLink / LogisticsWorld, 1997)

**Logistics Functions**: (classical) planning, procurement, transportation, supply, and maintenance (United States Department of Defense DOD)

**Logistics Processes**: (classical) requirements determination, acquisition, distribution, and conservation. -- (United States Department of Defense DOD)

**Business Logistics**: The science of planning, design, and support of business operations of procurement, purchasing, inventory, warehousing, distribution, transportation, customer support, financial and human resources. -- (MDC, Log Link / Logistics World, 1997)

**Cradle-to-Grave**: Logistics planning, design, and support which take in to account logistics support throughout the entire system or product life cycle. -- (MDC, Log Link / Logistics World, 1997)

**Acquisition Logistics**: Acquisition Logistics is everything involved in acquiring logistics support equipment and personnel for a new weapons system. The formal
definition is "the process of systematically identifying, defining, designing, developing, producing, acquiring, delivering, installing, and upgrading logistics support capability requirements through the acquisition process for Air Force systems, subsystems, and equipment. (Reference: Air Force Institute of Technology, Graduate School of Acquisition and Logistics)

**Integrated Logistics Support (ILS) (1)** - ILS is a management function that provides planning, funding, and functioning controls which help to assure that the system meets performance requirements, is developed at a reasonable price, and can be supported throughout its life cycle. (Reference: Air Force Institute of Technology, Graduate School of Acquisition and Logistics)

**Integrated Logistics Support (ILS) (2)** - Encompasses the unified management of the technical logistics elements that plan and develop the support requirements for a system. This can include hardware, software, and the provisioning of training and maintenance resources. (Reference: ECRC University of Scranton / Defense Logistics Agency Included with permission from: HUM - The Government Computer Magazine "Integrated Logistics" December 1993, Walter Cooke)

**Logistics Support Analysis (LSA)** - Simply put, LSA is the iterative process of identifying support requirements for a new system, especially in the early stages of system design. The main goals of LSA are to ensure that the system will perform as intended and to influence the design for supportability and affordability. -- (Reference: Air Force Institute of Technology, Graduate School of Acquisition and Logistics)
1.1.2.1 LOGISTICS VIEW POINT

Inbound logistics is one of the primary processes and it concentrates on purchasing and arranging inbound movement of materials, parts and/or finished inventory from suppliers to manufacturing or assembly plants, warehouses or retail stores.

Outbound logistics is the process related to the storage and movement of the final product and the related information flows from the end of the production line to the end user.

1.1.2.2 LOGISTICS FIELDS

Given the services performed by logisticians, the main fields of logistics can be broken down as follows:

- Procurement Logistics
- Production Logistics
- Distribution Logistics
- After sales Logistics
- Disposal Logistics

**Procurement Logistics** consists of activities such as market research, requirements planning, make or buy decisions, supplier management, ordering, and order controlling. The targets in procurement logistics might be contradictory - maximize the efficiency by concentrating on core competences, outsourcing while maintaining
the autonomy of the company, and minimization of procurement costs while maximizing the security within the supply process.

**Production Logistics** connects procurement to distribution logistics. The main function of production logistics is to use the available production capacities to produce the products needed in distribution logistics. Production logistics activities are related to organizational concepts, layout planning, production planning, and control.

**Distribution Logistics** has, as main tasks, the delivery of the finished products to the customer. It consists of order processing, warehousing, and transportation. Distribution logistics is necessary because the time, place, and quantity of production differ with the time, place, and quantity of consumption.

**Disposal Logistics**' main function is to reduce logistics cost(s), enhance service(s), related to the disposal of waste produced during the operation of a business.

### 1.1.3 REVERSE LOGISTICS

Reverse logistics involves all activities associated with a product or service after the point of sale with the ultimate goal being to optimize or make more efficient aftermarket activities, thus saving money for the firm involved (Rogers and Tibben-Lembke, 1999)

It’s a process of planning, implementing, and controlling the efficient, cost effective flow of raw materials, in-process inventory, finished goods, and related information from the point of consumption to the point of origin for the purpose of recapturing or creating value or proper disposal (Rogers and Tibben-Lembke, 1999, p. 2)
Reverse logistics has become a competitive necessity for several reasons including: increasing trend in customer returns, the increasing use of consignment inventory, shorter product lifecycles, and more demanding customers (Daugherty et al., 2001). Reverse logistics is increasingly being considered as a strategic process that captures value through customer satisfaction and cost control (Richey et al., 2005; Rogers and Tibben-Lembke, 2001). As the volumes of returns increase worldwide, firms are no longer able to ignore the reverse flow of products (Stock et al., 2002). In a retail context, reverse logistics involves the process of handling and the eventual disposition of goods returned from customers (Horvath et al., 2005). As retail margins become narrower, reverse logistics has become a major concern for retail managers due to the costs of storage, loss of current sales, potential recoverable product value, and the importance of both customer and channel partner relations (Daugherty et al., 2005).

When an end customer begins the reverse logistics process, it is usually with a retailer. How well the retailer manages the reverse logistics process may determine its cost savings as well as the customer’s satisfaction with the retail encounter (Horvath et al., 2005).

Reverse logistics from a business logistics perspective the term refers to the role of logistics in product returns, source reduction, recycling, materials substitution, reuse of materials, waste disposal, refurbishing, repair and remanufacturing; from an engineering logistics perspective it is referred to as reverse logistics management and is a systematic business model that applies best logistics engineering and management methodologies across the enterprise in order to profitably close the loop on the supply chain (Stock 1998).
Reverse logistics include the total process of moving goods from their typical destinations to another point for the purpose of capturing value that would be otherwise unavailable or for the proper disposal of product (Ross 1998). Reverse logistics also include product recalls, unsellable items and return distribution for resale, reuse, repair/refurbishing and scrap or salvage potential (Higginson and Libby 1997).

Reverse logistics support often plays a critical role in overall corporate strategy. Like some companies have adopted very liberal returns policies and will accept returned merchandise without question (Dawe 1995). Extremely high volumes of returned product are common in some industries, e.g. return for direct catalogs sales companies can run as high as 20% of sales (Marien 1998). Additionally some products are marketed on a guaranteed sale basis. In effect this means the products are sold on consignment. Buyers can return any unsold items (Melbin 1995).

Reverse logistics is associated with the activities of recycling, repair, reuse and reprocessing, as well as with the tasks of collection, disassembly and the processing of used products, components and/or materials (Kokkinaki et al., 2001). Re-verse logistics is the underlying operational function necessary for extending the life of materials and products and product stewardship, two critical aspects of reducing environmental burden from industrial operations. The motives for returning disposable products from the end consumer to the point of origin may arise for a variety of reasons. Apart from environmental concerns, the most common reasons include defects in the product itself, lack of consumer satisfaction, or surplus stocks at outlets motivated by lower than expected sales (Barsky and Ellinger, 2001). Competitive,
marketing, economic and environmental reasons are all factors that have been identified as relevant for the organizational adoption of reverse logistics activities and functions (Ravi and Shankar, 2005). Despite the business advantages that may be obtained by good management of reverse logistics, many firms are still reluctant or ineffective when carrying out the ‘green practices’ dimensions of reverse logistics. Many organizations consider the barriers confronted when developing these practices to be greater than the advantages that they would obtain as a consequence of their implementation (Rogers and Tibben-Lembke, 2002).

Reverse logistics often focuses on the green or environmental aspects of returns handling, e.g. recycling (Andel, 1997; Byrne and Deeb, 1993; Carter and Ellram, 1998; Marien, 1998; Murphy et al., 1995). Efficient reverse logistics has the potential for significant positive bottom-line economic contributions as well as yielding customer service-related benefits (Rogers and Tibben-Lembke, 1999). One possible explanation for firms giving reverse logistics less attention than it needs or deserves may be the extra work involved, i.e. the physical process often requires “a series of intricate multilayered steps” which involve generating a returns authorization, printing a label, determining appropriate product handling and disposition, and arranging transportation (Norek, 2003). Supply chain networks are developed to speed outbound flow; they often are ill equipped to handle reverse flow. Additionally, reverse flow may involve an entirely different channel. Such differences mean that new approaches are needed (Knemeyer et al., 2002; Pohlen and Farris, 1992; Stock and Lambert, 2001).
Norek (2002) proposed that “(if) returns management receives the appropriate level of thought and attention it can play a critical role in reducing costs and improving customer service”. Perhaps that should be modified to “thought, attention, and resources”. Since reverse logistics is different from standard outbound flows of products, additional resources will be needed to develop efficient returns, resource commitment to reverse logistics should be a priority because of the potential for enhancing performance and because development of reverse logistics offers a strategic way of developing lasting linkages with customers (Tan et al., 2003). Differences in firms’ strategic resources are causally related to differences in product or service attributes and, therefore, to competitive advantage and differences in performance (Conner, 1991; Schulze, 1994). Competing firms constantly struggle to develop comparative advantages in resources that will give them an “edge” in some market segment or segments (Hunt, 2000). Resource-Advantage Theory proposes that, as firms seek to use their resources to gain advantages, it is likely to lead to innovation (Hunt and Morgan, 1996). Simply stated, firms figure out better ways to do things, i.e. innovate. Thus, allocation of sufficient resources is critical to a firms’ success. This is especially important for reverse logistics programs. Reverse flows are different from standard, outbound operations and need special handling that likely require additional resource allocation.

Reverse logistics offers an opportunity for companies to differentiate themselves with customers the handling of the reverse movement becomes part of the corporate image and is often an important criterion for evaluation in vendor selection and subsequent purchase decisions. High quality reverse logistics can promote longer term
relationship, buyers are more likely to repurchase from vendors who do a good job at handling returns. Customer satisfaction ratings can be increase with good reverse handling and corporate profitability can be directly impacted as well. It has been estimated that efficient management of the reverse process can cut as much as 10% from companies total annual logistics cost (Minaham 1998). Even with the potential for such sustentative savings, most reverse logistics programs have been reactive i.e. resulting from government regulation or pressures from environmental groups, rather than proactive attempts to gain economic benefits (Doherty 1996). Many companies have devoted too few resources and too little effort to effectively forecast for and handle reverse logistics (Andel 1997).

Practically all businesses must deal with returns. This may be the result of damaged or defective shipments, incorrect shipments, overstocks, and what are commonly referred to as marketing related returns. Marketing-related returns involve products customers have returned because they changed their minds, didn't like the product, etc. There is yet another kind of return that some companies must routinely handle. For some companies, the reverse supply chain is an integral part of their business; they must regularly bring products back for refurbishing or remanufacturing. For example, Bosch sells power hand tools that have been remanufactured (Guide and Van Wassenhove 2002). By doing so, they reclaim value that would otherwise have been lost. Remanufacturing operations are common in certain industries; they are especially critical in the automobile Industry for handling of returned parts. Thus, the focus of the current research is on the automobile aftermarket industry. Automobile aftermarket industry participants routinely bring back core products such as starters to
remanufacture them and sell the newly reworked products. The industry must also deal with the other types of return previously mentioned such as incorrect shipments and overstocks.

Conventional business wisdom has been that early entrants into a market for a specific product or category of products enjoy an enduring competitive advantage over later entrants (Lambkin 1988). Those early entrants - sometimes referred to as pioneers - have been shown to have a long lived market share advantage (Parry and Bass 1990; Robinson and Fomell 1985). Some researchers have come to believe that the assumed advantage of early entry is not nearly as automatic as has been portrayed. The advantage may be negated by technological and economic uncertainties inherent in new markets and also because of firm’s differential capabilities to exploit opportunities (Aaker and Day 1986; Lambkin 1988; Wensley 1982). Fast followers may be able to successfully take on first movers (Levitt 2001). The fast followers copy (and perhaps improve upon) what has been done by others. Those with early involvement can be at a disadvantage if later entrants free ride on their investments or leverage a change in technology or consumer needs (Gurumurthy, Robinson, and Urban 1995; Liebemian and Montgomery 1998). Apparently, in some instances, later entrants (those not acting first or early) have been able to leap frog over the early competitors. The impact of order of entry may also be industry specific. The extent and nature of early (or late) advantages need to be more fully understood (Golder and Tellis 1993).

Antecedents of reverse logistics capabilities
In their research, Petersen and Kumar (2009) focused on customer buying behavior and they defined the antecedents and consequence of product returns from that perspective. In this research, researcher is interested in the factors that derive influences reverse logistics capabilities and resulting cost savings from the perspective of the manufacturer. Reverse logistics cost savings are the savings that the manufacturer incurs from implementing reverse logistics processes to support their returns policies. In order to understand what factors may influence reverse logistics capabilities and resulting cost savings, we consider specific antecedents. These include elements that are related to the relationship between the retailer and its customers, elements that are internally related to the firm’s reverse logistics resources and its contractual policies with suppliers. Customer orientation and customer opportunism reflect the retailer’s customer-focused intentions and process-driven relationships with its customers, while, resource commitments reflect the managerial, technical, and financial resources that are applied to reverse logistics processes. Contractual arrangements represent the back-end processes with other channel members that involve the development of common goals. Finally, reverse logistics capabilities represent the internal capabilities and processes that the firm deploys to effectively implement its reverse logistics activities.

Reverse logistics capabilities represent the internal processes that the firm uses to effectively implement its reverse logistics activities. These capabilities address several different areas as seen in Table I, however, they are all aspects the use of information to better manage the reverse logistics process. The specific reverse logistics capabilities that are considered include the accuracy and the availability of information
that is used, and the process and timeliness of reverse logistics information. Reverse logistics capabilities also include the internal and external connectivity and usefulness of that information. These capabilities represent a bundle of information-related processes that enable a firm to better manage its reverse logistics activities and are hypothesized to be positively related to reverse logistics cost savings.

Reverse logistics stands for all operations related to the reuse of products and materials. It is "the process of planning, implementing, and controlling the efficient, cost effective flow of raw materials, in-process inventory, finished goods and related information from the point of consumption to the point of origin for the purpose of recapturing value or proper disposal. More precisely, reverse logistics is the process of moving goods from their typical final destination for the purpose of capturing value, or proper disposal. Remanufacturing and refurbishing activities also may be included in the definition of reverse logistics.

The reverse logistics process includes the management and the sale of surplus as well as returned equipment and machines from the hardware leasing business. Normally, logistics deal with events that bring the product towards the customer. In the case of reverse logistics, the resource goes at least one step back in the supply chain. For instance, goods move from the customer to the distributor or to the manufacturer.

Let’s look at an example; a manufacturer produces product ‘A’ which moves through the supply chain network reaching the distributor or customer. Any process or management after the sale of product ‘A’ involves Reverse Logistics. If product A happened to be defective the customer would return the product. The manufacturing
firm would then have to organize shipping of the defective product, testing the product, dismantling, repairing, recycling or disposing the product. Product ‘A’ will travel in reverse through the supply chain network in order to retain any use from the defective product. This is what reverse logistics is about.

1.1.4 VALUE

An economic value is the worth of a good or service as determined by the market. The economic value of a good or service has puzzled economists since the beginning of the discipline. First, economists tried to estimate the value of a good to an individual alone, and extend that definition to goods which can be exchanged. From this analysis came the concepts value in use and value in exchange. Wealth maximization predicts that a person will choose to obtain the good or service in the place where it is cheapest, where the amount given up is the least. Value is linked to price through the mechanism of exchange. When an economist observes an exchange, two important value functions are revealed: those of the buyer and seller. Just as the buyer reveals what he is willing to pay for a certain amount of a good, so too does the seller reveal what it costs him to give up the good.

Additional information about value is obtained by the rate at which transactions occur, telling observers the extent to which the purchase of the good has value over time.

In other words, value is how much a desired object or condition is worth relative to other objects or conditions. Economic values are expressed as "how much" of one desirable condition or commodity will, or would be given up in exchange for some other desired condition or commodity. Among the competing schools of economic
theory there are differing metrics for value assessment and the metrics are the subject of a "Theory of Value." Value theories are a large part of the differences and disagreements between the various schools of economic theory.

The word value has been and still is used for many different meanings. Used in the singular, value is understood as expressing the worth of something. Used in the plural, value is seen as meaning belief and social behavior. Based on existing literature, (Jensen 2005) identified six categories of value: (1) religious values – values as belief system; (2) behavioral values – values as moral and ethics; (3) economic value – value as exchange; (4) use value – value as utility; (5) cultural value – value as meaning and sign; and (6) perception value – value as experience

Exchange value and use value were central in classical economy thinking, since the value of labor was such an important theoretical piece. However, in neo-classical theory it lost that central role. In more recent economic theory, value became again of high interest at the exchange and economic profit discussion level. Exchange value is in general the starting point for most economic thinking. Value gained also importance in management, especially within strategy and marketing, through different disciplines like “Value Management” (Manuel 2012)

Product value can be placed at the relatively objective “use value” or “design value” or at a more subjective “customer value”. “Design value” is expressed under market conditions by the “exchange value”, while “customer value” is decisive on how the demand for potential customers is divided on competing products (Cook 1997). A
customer can gain value in two ways: The value of the offering and the value of the relationship (Ford, Gadde, Hakansson, and Snehota 2002).

The concept of “value” has intrigued many and has created research in many disciplines, from economy to psychology. Value is always related to something that can take a tangible or intangible form, meaning it is connected to human utilization. At its most basic level, “nature” does not apply the concept of value when transforming one element into other, as the sum of all is a constant. However, since life exists, we may find that all living beings were in constant competition with one another, and the concept of value was immediately applied since the very beginning, for instance in choosing the location that could provide an easier survival. Although we may say that natural value is not measured or manipulated by living beings in nature, we have proof that some forms of life in a higher rational stage are able to understand the value of things, as they use them for different kinds of activities and even exchange them for some kind of favor or benefit (Biro 2003).

Since primordial times in the human race, man started to see “value” in things, even if they were taken from nature in its natural form, transformed or not and used by Man. We may consider that it was the understanding of value that drove Man to innovate by creating objects for his own utilization. This primary innovation created the basis for the (human) culture expansion 50,000 years ago, that we may find proof in archeological terms (Shenan 2001). Basically, objects used as tools had a use value, therefore objective and tangible. However, primitive men had also the understanding of subjective and intangible value, namely religious and cultural, like music.
Exchange is at the heart of the value concept in classical economy. The fact that value was related to labor became in classical economics what Smith (1776) named “labor commanded value” or, in other words, how much labor-time is needed to produce any good, and to whom value had two different meanings, one expressing the utility of some particular object, “value in use” and the other, the power that the possession of an object conveys to purchase other goods, “value in exchange”. Based on the utility concept of Hobbes (1588-1679) and using the water and diamonds example, Smith formulated the “paradox of value” concept, stating that the element that has higher value in use has low or no value in exchange and, on the contrary, the element with higher value in exchange has low or no value in use. For Ricardo (1821) value or “innate worth” was the amount of labor needed to produce the commodity and its exchangeable value comes from two different sources: scarcity and quantity of labor required to obtain it. In this line of thought, Keen (2001) claimed that value referred to the innate worth of a commodity, which determines the normal (equilibrium) ratio at which two commodities exchange. Marx (1887) made a clear distinction between “value in use”, use-value or what a product or service provides to the user, “value”, the socially-necessary labor time embodied in it, and “exchange value”, how much labor-time the sale of the commodity can claim. In classical (and Marxist) economics, value of an object or condition is considered as the amount of discomfort or “labor” saved through their consumption or use. George (1908) mentioned that value of a thing in any time and place is the largest amount of exertion that anyone will render in exchange for it; or to make the estimate from the other side, that it is the smallest
amount of exertion for which anyone will part with it in exchange. He also claims that many things having value do not originate in labor.

The meaning of value in marketing literature has not yet achieved consensus between marketing strategy and consumer behavior, and what marketing strategists mean by customer value does not match the meaning of consumer values (Manuel 2012) in consumer behavior research (Peter and Olson 1990; Sheth, Newman and Gross 199; Vinson, Scott and Lamont 1977; Wilkie 1990). In general terms, customer value refers to buyer’s evaluation of product purchase and consumer values refer to people’s valuation on the consumption or possession of products. One view is that customers buy based on value and they determine the value of any product or service by the relation “quality/price”. Ranging the two variables from low to high, Gale identifies four types of value: (1) commodity (low price and low quality) – products with no differentiation and buying decision based on price; (2) the worst value for the customer (high price and low quality) – products that will be disregard as soon as a better alternative is available; (3) unique value (high price and high quality) – top of the scale products with no substitutes or opposition; and (4) Best value for the customer (low price and high quality) – value leaders when aligned with customer preferences.

Theoretical arguments suggest that diversification has both value-enhancing and value-reducing effects. The potential benefits of operating different lines of business within one firm include greater operating efficiency, less incentive to forego positive net present value projects, greater debt capacity, and lower taxes. The potential costs of diversification include the use of increased discretionary resources to undertake
value-decreasing investments, cross-subsidies that allow poor segments to drain resources from better-performing segments, and misalignment of incentives between central and divisional managers (Philip and Eli 1995).

The creation of customer value must be the reason for any firm’s existence and certainly for its success (Slater 1997). Assuming that a firm can be any organization or individual person who has some activity along the value creation chain, the creation of any value proposition may contribute to establish a position of competitive advantage, and to the development of capabilities by the firm focused in understanding customer needs that will deliver the promised value. So we may have firms that develop value propositions, which may deliver the right value to satisfy the customer needs. In microeconomic terms, added value represents the difference between the revenue and the costs of a firm in relation to a product or activity. When transported to macro level, it becomes the contribution for gross domestic product (DGP) and serves as the base for value added tax (VAT) computation. In marketing, added value is understood as how a firm bundles, combines and packages features and benefits that result in a greater customer acceptance in order to create a competitive advantage. One of the most well-known and used models to analyze how firms create value is Porter’s (1885) Value Chain model. The proper utilization of the value chain concept by firms entitles them to increase the selling price (exchange value) of products and, at the same time, reduce internal costs, focusing always on customer satisfaction. In the end, the main objective is to create the right value for the customer, inside an acceptable purchasing boundary price by the same customer, while retaining in house the highest possible created value, translated into monetary terms. For the sake of their own survival, suppliers
need to understand how value can be created through relationships with customers (Walter, Ritter and Gemunden 2001). In order to manage this process, Walter, Ritter and Gemunden propose a model that will lead to what is the supplier perceived value, containing two major variables: (1) direct functions of customer relationship – defined by profit function, volume function and safeguard function; and (2) indirect functions of a customer relationship defined by innovation function, market function, scout function and access function.

1.1.4.1 THE VARIOUS EXPLANATIONS

In neoclassical economics, the value of an object or service is often seen as nothing but the price it would bring in an open and competitive market. This is determined primarily by the demand for the object relative to supply. Many neoclassical economic theories equate the value of a commodity with its price, whether the market is competitive or not. As such, everything is seen as a commodity and if there is no market to set a price then there is no economic value.

In classical economics, the value of an object or condition is the amount of discomfort/labor saved through the consumption or use of an object or condition (Labor Theory of Value). Though exchange value is recognized, economic value is not, in theory, dependent on the existence of a market and price and value are not seen as equal. This is complicated, however, by the efforts of classical economists to connect price and labor value. Karl Marx, for one, saw exchange value as the "form of appearance" [Erscheinungsform] of value, which implies that, although value is
separate from exchange value, it is meaningless without the act of exchange, i.e., without a market.

In this tradition, Steve Keen makes the claim that "value" refers to "the innate worth of a commodity, which determines the normal ('equilibrium') ratio at which two commodities exchange." To Keen and the tradition of David Ricardo, this corresponds to the classical concept of long-run cost-determined prices, what Adam Smith called "natural prices" and Karl Marx called "prices of production." It is part of a cost-of-production theory of value and price. Ricardo, but not Keen, used a "labor theory of price" in which a commodity's "innate worth" was the amount of labor needed to produce it.

"The value of a thing in any given time and place", according to Henry George, "is the largest amount of exertion that anyone will render in exchange for it. But as men always seek to gratify their desires with the least exertion this is the lowest amount for which a similar thing can otherwise be obtained."

In another classical tradition, Marx distinguished between the "value in use" (use-value, what a commodity provides to its buyer), "value" (the socially-necessary labour time it embodies), and "exchange value" (how much labor-time the sale of the commodity can claim, Smith's "labor commanded" value). By most interpretations of his labor theory of value, Marx, like Ricardo, developed a "labor theory of price" where the point of analyzing value was to allow the calculation of relative prices. Others see values as part of his sociopolitical interpretation and critique of capitalism and other societies, and deny that it was intended to serve as a category of economics.
According to a third interpretation, Marx aimed for a theory of the dynamics of price formation, but did not complete it.

In 1860, John Ruskin published a critique of the economic concept of value from a moral point of view. He entitled the volume Unto This Last, and his central point was this: "It is impossible to conclude, of any given mass of acquired wealth, merely by the fact of its existence, whether it signifies good or evil to the nation in the midst of which it exists. Its real value depends on the moral sign attached to it, just as strictly as that of a mathematical quantity depends on the algebraic sign attached to it. Any given accumulation of commercial wealth may be indicative, on the one hand, of faithful industries, progressive energies, and productive ingenuities: or, on the other, it may be indicative of mortal luxury, merciless tyranny, and ruinous chicanery." Gandhi was greatly inspired by Ruskin's book and published a paraphrase of it in 1908.

Economists such as Ludwig von Mises asserted that "value," meaning exchange value, was always the result of subjective value judgments. There was no price of objects or things that could be determined without taking these judgments into account, as manifested by markets. Thus, it was false to say that the economic value of a good was equal to what it cost to produce or to its current replacement cost.

Value in the most basic sense can be referred to as "Real Value" or "Actual Value." This is the measure of worth that is based purely on the utility derived from the consumption of a product or service. Utility derived value allows products or services to be measured on outcome instead of demand or supply theories that have the inherent ability to be manipulated. Illustration: The real value of a book sold to a
student who pays $50.00 at the cash register for the text and who earns no additional income from reading the book is essentially zero. However; the real value of the same text purchased in a thrift shop at a price of $0.25 and provides the reader with an insight that allows him or her to earn $100,000.00 in additional income is $100,000.00 or the extended lifetime value earned by the consumer. This is value calculated by actual measurements of ROI instead of production input and or demand vs. supply.

1.1.4.2 CONNECTED CONCEPTS

The theory of value is closely related to that of allocate efficiency, the quality by which firms produce those goods and services most valued by society. The market value of a machine part, for example, will depend upon a variety of objective facts involving its efficiency versus the efficiency of other types of part or other types of machine to make the kind of products that consumers will value in turn. In such a case, market value has both objective and subjective components.

In philosophy, economic value is a subcategory of a more general philosophical value, as defined in goodness and value theory or in the science of value.

1.1.4.3 VALUE IN THE STUDY

Reverse logistics cost savings are the savings that the retailer incurs from implementing reverse logistics processes to support their returns policies by Jack, Powers and Skinner (2010). In the research that retailer can be replaced by the manufacturer or the company and it’s become the value for the manufacturer and
company that is cost savings from implementing the reverse logistics activities in their organizations.

### 1.1.5 CLAIMING BACK STRATEGIES

A claim (or claims) is a written statement(s). In a utility patent, claims are the part of the patent application where the inventor specifically states what their invention is and what it can do. Claims define the legal scope of a patent and define what can be protected by patent law. You could say that claims define the invention, what it is and what it does.

The "specification" part of a patent application must end with a claim or claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention or discovery. The claim or claims must conform to the invention as set forth in the remainder of the specification and the terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description.

A strategy is a plan of action designed to achieve a specific goal. Strategy is all about gaining (or being prepared to gain) a position of advantage over adversaries or best exploiting emerging possibilities. As there is always an element of uncertainty about future, strategy is more about a set of options ("strategic choices") than a fixed plan. It derives from the Greek "στρατηγία" (strategia), "office of general, command, and generalship".
More liberal returns policies, the increasing use of consignment inventory, shorter product life cycles and more demanding customers translate to more returned product by (Giuntini and Andal, 1995). Firms are being forced to find more efficient ways to reclaim, redistribute and/or dispose of returns by (Daugherty, Autry and Ellinger, 2001). In this research reasons for merchandise returns are considered the claiming back strategies, the different reasons by wholesaler; distributor and customer return their products.

1.2 RATIONALE OF THE STUDY

There are so many studies on the topic of logistics but very few in reverse logistics capabilities, (especially for SMEs) that is why the researcher choose this topic for PhD. In this research the researcher will try to find out the antecedents of the reverse logistics capabilities, value and claiming back strategies of the Gwalior Chambal region SMEs and their effect on each other and the organizations those who are doing reverse logistics activities to check whether it’s giving them any cost saving or adding value for them and to know what are the common reasons by which products will be returned to them and to know the direct effect the reverse logistics capabilities on value and indirect effect of reverse logistics capabilities through claiming back strategies on value so that the SMEs of Gwalior Chambal region inculcate these practices in their respective organizations to do the business in more effective and fruitful manner. At SMEs level none of them or few of them uses 6 sigma standards and because of this majority of them producing defective products in large quantity so they need to have reverse logistics in their organization this study will help them to
access their reverse logistics capabilities, in nature natural raw material are limited and they need to focus on recycling of the defective products because future is only for this, the study will also motivate them to produce quality products and it will also reduce their reverse logistics cost.