CHAPTER 16

SHARED MODE OF TRANSPORTATION (SMT) & CENTRALIZED PRODUCT UTILITY SYSTEM (CPUS)

16.1 Introduction
The transportation is all about the logistics In Supply Chain & Management. Even without the interference of Technology the transportation system is running smoothly. The optimization theory provokes ICT to make things more feasible. An example can be taken up to explain it. Say the commodities are shipped to any specific place. The retailers are entitled to receive all the commodities. At the end ie. at the point of recovery of goods all retailers are suppose to ship all the defective products all together. The shipping mode of the transportation will collect all the defective products and ship to manufacturing or production unit or collection centre. There is always been possibilities that many vacancy is there in shipping.
It is also observed that those entire product which are declared as non reusable can be utilized further. The concept can be implemented with centralized product utility system (CPUS). The domain is identified as training centre. The concept is non-reusable product especially electronics equipments can be sent to training centre for further learning on product.
It will also promote study and qualitative analysis on product once it is declared as dump. The field visit performed at retail store Malaike Appliances Pvt. Ltd, Reliance corporate Park RGTIL Mumbai and Zenith InfoTech, Mumbai it was observed there is no such kind of actions are being taken up. So it is advisable to do so. Even in the government sector the product which is of no use is supposed to be dump at some remote place. eg if in a government office any electric bulb gets fused the bulb gets broken, demolished, destroy or dump whichever is easy to do. Ideally the fused bulb should sent to some training institute where students will learn internal structure of the bulb.
Another example is from corporate. Even in case of a personal computer, if its declared as out dated it is normally dumped. In the country like India where thousands of technical training institute are in demand and could not take a shape due to lack of infrastructure this concept can be implemented.
16.2 The Concept: Shared Mode of Transportation (SMT)
This is the place where the concept can be utilized. The shipping and utility in training centre can be done with coordination among various organizations. The reverse logistic vehicle which is carrying all the defective products can be coordinated with many organizations. This is suggested with the reason for not being available for all the time. The vehicle is well equipped with the GPRS/ GPS system. This will help all organizations to trace the entire respective product at any point of time. A. Share mode of Transportation All small/Medium organizations who share chain of Dealer-Distributor-Manufacturer or even part of it may opt for common transportation to reduce the cost in transportation. There is no as such common policy by any government which can encourage it so if it works certainly significant cost will be reduced.

![Diagram of the supply chain](image)

**Figure 16.1 Proposed Model for the product used for learning**

Market for Defective or low quality products In the RL process all those products which are to be sent for recycle/Servicing/re-engineering/dumping can be segregated at the site. The dumping product can be dumped at the site itself. Utilization for such products can be for the educational or training institutes. The availability of educational institute in any area where people live will be traced out. This model will generate revenue also. An organizational policy may encourage it.

16.3 Advantages
This mode of transportation deals with great coordination with all the organization promoting reverse logistics. Individual company needs not manage its individual transportation scheme.

- It would be on the basis of pay and pool.
- There would be centralized monitoring system to observe all the locations of the product.
• The individual organization will be benefitted with the terms of being free from hiring vehicle or driver.
• Since the process is outsourced so no overhead of monitoring or controlling.

16.4 Centralized product utility system (CPUS)

As it is obvious that dump or non-reusable products can further be utilized without dumping it and it may further generate revenues as well. Most importantly the role of ICT is to justify as well. First of all a centralized system is to be created which will coordinate for demographic area and the dump products to be collected and to be sent to training centre.

Following steps can be followed to carry out the above concept.

16.4.1 Categorization of Product

First of all the product is be selected to be utilized for this. Care has been taken for the consumption of the product in that demographic area. The system is very much interested in the technology which is used in the product. The categorization also made on the basis of condition of the product too. Say 5 pieces of a product A are received. It is possible that status of all the products is different. Then in this case we categorize on the basis of working condition of the product then the there would be series of A1,A2,A3,A4 and A5.

16.4.2 Identification of the Organization

Secondly the concerned organization or even individual is to be selected for the fetch of the product. In that demographic area all related organization would be selected for supply.

16.4.3 Need of Institute

It is also important to know the need of the institute. Because this would be the deciding factor for the creation of the centralized product utility system. It will also decide the requirement of quantity of product and mode of supply. Ideally in the country like India in 10 Sq KM at least 1 training centre is needed to run.

16.4.4 The methodology

The centralized product utility system (CPUS) is required to be established at very first stage. All the product recovery departments of concerned organizations will be registered with CPUS. The CPUS will identify the demographic locations of all such organizations so that logistics can be made optimal. Next step would be to identify the number of training institutes to set up in those demographic locations and their needs in term of infrastructure. Since this institute will run on the basis of no profit philosophy so every reused items can be utilized here and further
infrastructure will never be a problem. Now after set up the training institute all the institute will be registered with the CPUS. CPUS will monitor the status of dump and non reusable items to be sent to the institute. This will encourage the technical learning rate to pull up.

![Diagram showing the utility of the product with labels: Product Recovery Department, Training Institute, Centralized Product Utility System, Hiring HR from demographic area.]

Figure 16.2 Utility of the product

16.5 Conclusion
The implementation of CPUS should be initiated by government itself but unfortunately it is not being done due to lack of will power of the government. The biggest advantage is to reduce the unnecessary transportation of dump or non reusable items. It also engage the man power of rural/urban people to avoid all nonsense. Employability is another major achievement which comes out from this implementation.