Scope of the system

The scope of E-manufacturing would cover the entire set of operations from purchasing to delivery of goods. The process starts with an e-order booked by the customer online by visiting the company’s website. A document Sales order would be generated online. The sales department would check & verify the details of the sales order and it would be confirmed.

Confirmed sales order would be processed into Master Production Schedule. The sales order would be blown into the Bill of Material in which all parts requirements would be generated with the help of Product master & Material master. Material master would have an indicator for Make / Buy. The online e-purchase order would be generated for material to ‘Buy Materials’ and an e-production order would be generated for Shopfloor Manufacturing to ‘Make Goods’.

Once production order is completed, Goods would be stocked at the Finished Goods Store and relevant information would be sent to the Sales Person. An Online e-invoice would be generated and would be emailed to the customer along with dispatch details.

Thus, E-Manufacting would bring information transparency between Customers, Production & Suppliers. Paperless office & Quick Communication would be the added benefits. With the help of better control on Inventory Management & Cost Control of Procurement, Production & Dispatch, organization would maximize their profits.

Present System

Stage 1: Complete Functional Independence:

Where each business functions such as production or distribution does their own thing in complete isolation from the other business functions.

Production

Purchasing

Material Control

Sales

Distribution

Proposed System:

Achieving an integrated Supply chain.

Stage 2: Functional Integration to reduce the communication gap between different functions we are suggesting functional integration.

Distribution Management

Production Management

Material Management

Stage 3: Internal Integration

We would establish and implement end to end planning frame work within the internal functions.

Distribution Management

Production Management

Material Management

Stage 4: External Integration

Now we are planning to establish true supply chain integration, in that the concept of linkage and coordination is achieved in internal organization is now extended upstream towards suppliers and downstream towards customers.

Internal Supply Chain

Suppliers

Customers

Disadvantages of present Systems:

1. Communication gap between different elements of supply chain.

2. Every department working in isolation having different goals altogether

3. Inventory pileup

4. Improper use of resources

5. Time delays in order and distribution

Advantages of proposed Systems over present System:

1. Better communication between different elements of supply chain.

2. Better control over business due to uniform organizational goal.

3. Reduced stocks and inventories.

4. Reduced the cycle time and increased productivity.

5. Improved time efficiency.

6. Indirect Cost Saving

Fact – finding Techniques:

1. **Interview**:

**Question**: How can I order Goods Quickly?

**Answer**: E-order Login is the solution to your problem. As customer, you have to register with us then you can access our company’s website and book order for the product required by you.

**Question**: How can I get a confirmation of the order from You?

**Answer**: Once you book order on our website, Our sales department would verify the feasibility of your order and confirm the same and email a copy of the sales order to you/

**Question**: How do I start with the production?

**Answer**: A confirmed sales order would be fed to Master Production Schedule, which would generate the material requirements of Make/Buy parts

**Question**: How Can I get the Purchase order from you?

**Answer**: When Sales order is fed to the Master Production Schedule, material requirement to buy the material would be generated & e-purchase orders would be sent to you.

**Question**: How can I reduce purchase cost of the Material?

**Answer**: E-procurement is the optimum solution to reduce purchasing cost of organization. As supplier, you have to register with us to access our Company’s website & get the required information about Purchasing Goods.

**Question**: How would get information on dispatch of Ordered Goods?

**Answer**: Once Production order is processed and closed, material would be stocked at finished goods stores & sales department would generate e-invoice and would be emailed to you.

**Question:** How to reduce Money lock in inventory?

**Answer**: Master production Schedule would generate the material requirement, sequence of Flow of Material & minimum inventory required. This will help in reduction of inventory carrying costs.

**Question**: How will I be able to maximize profit of the organization?

**Answer**: E-manufacturing would help in reduction of purchasing cost, inventory carrying costs & selling cost. It would also reduce the time required for communication by the effective use of web-based systems. Thus, Savings in Cost & Time would maximize profit of the organization.

1. **Observation**:

Thus, we come to understand that integration between all elements of supply chain management is necessary for the smooth functioning of the enterprise.

Therefore, by implementing the E-manufacturing module of ERP system will ensure smooth functioning of the enterprise and will result in less hard work and optimization of resources for the owner and enterprise.