

## What is Production?

Production is the conversion of raw materials into goods which meet a customer's needs. For example, this could be a block of wood made into a pencil holder. The Operations Department has considerable influence on the profitability and success of the company. The more efficient and effective the production process, the more competitive and profitable the company will be. Production is efficient and effective when it is providing goods of the right quality, at the right price, at the right time.

## The importance of your role in the company

In a Young Enterprise Company research and development is carried out by the Marketing and Operations departments.

You will advise on product design and development, make a prototype, cost the product, and plan a safe method of production which can reproduce that prototype effectively and efficiently.

You will purchase materials of an appropriate quality and at the best price. You will ensure that any training requirements are met.

The Marketing Director will find out who the potential customers are, and will watch the production process very closely, to ensure that the product is exactly what the customer wants.

You will also need to liaise with the Sales Director to ensure that adequate, but not excessive, stock is available when needed.

You must keep the Financial Director informed of production costs.

Your responsibilities include doing everything you can to ensure the Company retains delighted customers.

Pay special attention to how well your Company is achieving customer satisfaction when you review your progress.

### Important

Check the Legal Responsibilities and Insurance Cover to ensure the legality of any product or service.

## Planning

This section refers to Stage 2 of the company cycle, Planning.

### Product design and prototype

- ? Once a product has been selected, liaise with the Marketing and Finance Directors on product feasibility and design.
- ? Pay particular attention to ease of manufacture, and adherence to quality and safety standards. You will then be involved in the production of a prototype, paying particular attention to the raw materials needed and the processes which will turn these into the finished product.
- ? Check that your product or service does not contravene YE regulations in the Insurance and Legal Responsibilities document.
- ? Consider carefully the environmental impact of your product.

### Production methods and planning

- ? Once you have produced a successful prototype, you will need to fill in the Equipment and Tools List (Form OPS1). This form must be counter-signed by an Adviser.
- ? You will need to work out your production processes in detail, step by step.
- ? You should fill out form OPS2, the Operation Sheet, listing all the equipment and materials needed for each step in the process including appropriate quality controls.
- ? Plan the order and timing of your production processes so that the right amounts of the appropriate quality of raw materials and facilities are available at the right time, and machines and people are available as required.
- ? Carry out the 5-step risk assessment.

### **Training and health and safety**

- ? If training in the production processes including the use of tools is needed, work out exactly how, when and where such training will take place (Form OPS1).
- ? Liaise with Human Resources and your Advisers to ensure that you comply with Health and Safety legislation, and complete OPS7, the Health and Safety Rules form.
- ? Be aware of the comfort and safety of your Operations Team at all times.
- ? Check with Trading Standards for further information.

### **Purchasing stock and pricing**

- ? You should now be able to give a fairly accurate estimate of production costs, and should liaise with the Marketing, Sales and Finance Directors to determine a selling price for your product.
- ? Now you must purchase the raw materials needed for production. Select carefully in terms of quality, cost and reliability of supply. Use a copy of the Purchase Order form to record each purchase made. (OPS6)
- ? Gain authority for purchases over ? 200 and complete the Purchase Authority section of OPS6.
- ? Once you are sure that you can reproduce the prototype in bulk to conform to the requirements of quality, price and delivery times, agree it with the Marketing Director.

Forms are found in the Operations Resources.

## **Up and Running**

This refers to Stage 3 of the company cycle, Up and Running.

### **Operations record and stock sheet**

(Weekly: separate form for each product)

- ? This is for details of finished products that have passed final quality inspection.
- ? Enter number of items produced (a) today and (b) to date.
- ? Enter number of items passed on to Sales (c) today and (d) to date.
- ? Obtain the Sales Director's signature.
- ? Enter items returned from Sales in (e). Then calculate stock ( $b - d + e = \text{stock}$ ). (If you are using the ? Live? forms in Excel this calculation will be done for you)

Form OPS3 is available through the Operations Resources.

**Stock sheet** (Monthly - Hand in to Finance Director in time to incorporate figures in monthly board meetings.)

- ? Supply information relating to all stocks of raw materials, partly finished items and finished items.
- ? For partly finished items and finished items the cost per unit will include the cost of materials and labour.
- ? Weekly completion will make for more accurate records.

Form OPS4 is available through the Operations Resources.

### **Accident report form**

- ? Use this form to report any accidents immediately.
- ? It must be sent to Young Enterprise National Office through the Human Resources Director.

This requirement is for insurance purposes.

- ? Keep a copy for the Company Records.
- ? Ensure that the Managing Director, Advisers and Link Teacher are informed.

Form OPS5 is available through the Operations Resources.

## **Review**

(Weekly/Monthly)

- ? You will be required to present a progress report at the weekly meetings.
- ? For the monthly Board Meetings you must prepare a more detailed report, including an inventory of stock.

## **Other duties**

(Continuous)

- ? **Targets:** Liaise with Marketing and Sales to produce target figures for your team. It is essential and motivating to know what production rates you are achieving against targets.
- ? **Quality Management:** All items must pass through a quality management system before being handed over to Sales. At each stage of production check against the prototype that quality levels are being maintained and ensure that there is a final inspection point. Attach the YE Product sticker to show the item has been approved. Remember, after this point the next inspector is the customer. Remember, ? Quality Sells? , and a dissatisfied customer is a bad advertisement for your product.
- ? **Training:** Regularly check that your team is adequately trained, especially if new production processes are introduced.
- ? **Health and Safety:** Check that your team is complying with all applicable regulations. If protective clothing is necessary it must be worn and ensure the availability of any necessary supervision. Your team must be aware of any hazards that the raw materials you are working with present. They must know where the following are situated:
  - o First aid kit
  - o The telephone
  - o Fire extinguishers
  - o The emergency exits
  - o You must also be aware of evacuation procedures
  - o Purchasing: You will need to buy in raw materials to meet agreed production estimates.
  - o Maintenance: Check that all equipment and tools are well looked after and stored away safely.
  - o Production area: Must be left clean and tidy.
  - o Review: Regularly review all operations to ensure that production is efficient and conforming to quality requirements.

## **Ending the Year**

This refers to Stage 5 of the company cycle, Ending the Year.

### **Stock and equipment**

- ? **Stock Clearance** - Plan in agreement with Sales Director. Run down production as your Company approaches liquidation. Attempt to clear stock.
- ? **Equipment** - Return all borrowed tools and equipment.

### **Final report and liquidation**

You will need to draw up a report of your time in office to present at the Annual General Meeting and for inclusion in the Company's Annual Report.

## **Some Skills and Qualities You Will Need to Develop**

- ? **Logical thinking:** the ability to think through processes and translate these into practice.
- ? **Organisational skills:** the ability to organise your team, materials and tools in order to make the best use of resources.
- ? **Understanding of technological processes:** the processes will not necessarily be very sophisticated. However, you will need sufficient understanding to be