



Quality

- Quality is a vital part of the production process
- It is defined as:

“Consistently providing what customers want”

- Examples of poor quality control include:
 - Product fails – e.g. a breakdown
 - Product does not perform as promised
 - Product is delivered late
 - Poor instructions/directions for use
 - Customer service is hard to find (e.g. telephone not answered)
 - Business employees appear rude or uninterested in the customer



The Costs of Poor Quality

- These examples show that quality is important for both goods and services
- If a business does not provide good quality then there are a number of things that may happen:
 - Lost customers (expensive to replace – and they may tell other people about their bad experience)
 - Cost of reworking or remaking product
 - Costs of replacements or refunds
 - Wasted materials
- There are 3 ways in which this can be avoided:
 - **Quality Control**
 - **Quality Assurance**
 - **Total Quality Management (TQM)**



Quality Control

- This is the traditional way of managing quality
- It involves:
 - Inspection products during production
 - Testing products
 - Sampling products as they are produced
- Quality control is more about detection than prevention
- It is a very expensive process
- So businesses have focused more on quality assurance





Quality Assurance

- This involves minimising the chances that the product/service will be sub-standard
- The focus of quality assurance is on product design
- This is because:
 - Quality can be "built-in"
 - There is less need to inspect (quality control)





Total Quality Management

- TQM is essentially an “attitude” that is adopted by the whole business
- Everyone in the workforce is concerned with quality at every stage of production process
- Quality is checked by workers and not inspectors





The Japanese Approach to Production

- Japanese companies, such as Toyota have often led the way in production techniques
- They developed the idea of “**Kaizen**”, which translates as “Good Change”
- The idea is that workers are encouraged to share ideas with managers about how quality can be improved





Lean Production

- In an attempt to reduce costs Toyota also developed “Lean Production”
- The idea behind this is that products are produced as cheaply as possible
- Most companies have adopted a “Just-In-Time” approach to production as a result of this





Just-In-Time Production

- The idea behind this is simple:
- Raw materials are only delivered as they are needed
- This means that:
 - Money is not being used to buy supplies that just sit on shelves
 - Workers need to be able to communicate with each other otherwise supplies will not be ready when they are needed
 - Less space is required to store stock
- However:
 - If anything goes wrong the whole production line will stop
 - The business relies upon suppliers to meet deadlines

