

WEEK 1

1. What is operations management?

Production is the creation of goods. Operations management is the set of activities that **adds value** in the form of goods and services by transforming inputs into outputs. 15 years ago it was called production management because the focus was heavily for production. Nowadays, services industry increases their importance, so it changed to Operation Management. Operation Management takes care of high level, medium level, daily activities to add value to the product and cut costs for the company.

OM is to manage activities across the transformation process from output to input to **add value and cut costs**.

What is value added? For firms, it's the price customers are willing to pay (**profit**), and for non profit organisations, it's the benefit to the output (eg: universities; undergraduates as inputs and graduates are output → they are more prepared a.k.a values added by lecturers).

Example: For Cathay Pacific, their OM activities include thinking and developing the services they provide, the products (meals inflight etc), location (hop off network transport), inventory (how many meals etc). For Krispy Kreme, the activities include managing the raw materials for the food, product design, taste, location.

2. Competitive dimensions

How do we measure competitiveness? These are 5 commonly applied competitive dimensions: cost, quality, speed, flexibility and services.

- **Cost:** providing low cost products or services.
 - With increasing competitiveness, organisation needs to reduce operation cost to provide low cost services or products
 - Example: Walmart, Primark, Kmart.
- **Quality:** providing high-quality products/services

- Bad quality results in rework, complaints and bad image.
- Example: Mercedes Benz, Emirates.
- **Speed:** fast products or services delivery and quick response to customers
 - These days PLC gets shorter thus companies need to speed up their new product development time to introduce new products faster
 - Dominos, FedEx. FedEx promises to pick up phone calls within 3 seconds.
- **Flexibility:** providing a wide variety of products or services, ability to respond to changes
 - Flexibility is important because of unpredictable of operation environment and supply chain. You need to be flexible in terms of having back up plan and contingency plan.
 - Example: Samsung has beaten Sony because it offers variety types of products
 - Dell and Nike offer personalised products
- **Services**
 - Provide good presale and after sale services.
 - Example: Ikea's post purchase services such as delivery and assembly man.

After reading the case of Apple Inc, please identify how Apple Inc has managed its four OM activities (*Product and Service Design, Process and Layout Design, Quality Management and Control, Inventory Management*) successfully to add value to its products/services?

- **Product and Service Design**
 - Continuous breakthrough; iPhone 6, 6s, iPad etc
 - Rapid time to market (TTM); every 12 months produces new type of iPhone
 - Customer-focused design and development; user friendly, lightweight
- **Process and Layout Design; big store, divided 4 sections city, see, learn etc**
 - Simple and intuitive
 - Store is split logically
 - Plenty of space for experiencing products and services
- **Quality Management and Control**
 - Advanced and improved product functionalities
 - Extensive product training and workshops

- Quality management
 - Product: improve product functionality. Less re-work, more advanced functions
 - Service: extensive product training and workshop.
- **Inventory Management; less stocked products**
 - Shifting sales to Apple Website and online iTunes store
 - Outsourcing operations