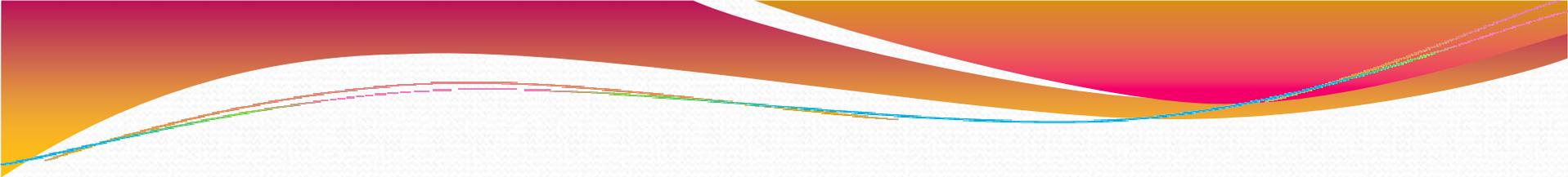


# O. M. Beketov National University of Urban Economy in Kharkiv



Lecturer:  
Associate professor  
C.I. Kalashnikova

## COURSE «OPERATIONS MANAGEMENT»

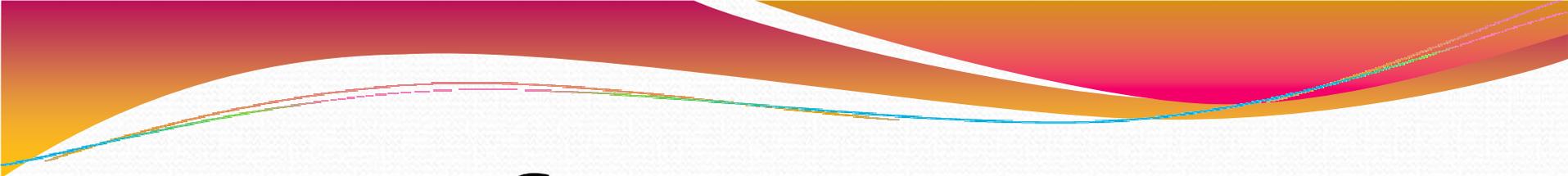


*«A long journey starts from one step» (Lao Tse)*

## The main objective of the course

is formation of **competences** on the main categories, basic principles, modern concepts, theoretical definitions and major practical methods of management for the main activities of the enterprise.

The course is also aimed at formation of **skills** of designing operations strategy, creation and use of industry operations system as basis for ensuring fulfillment of the enterprise's objectives.

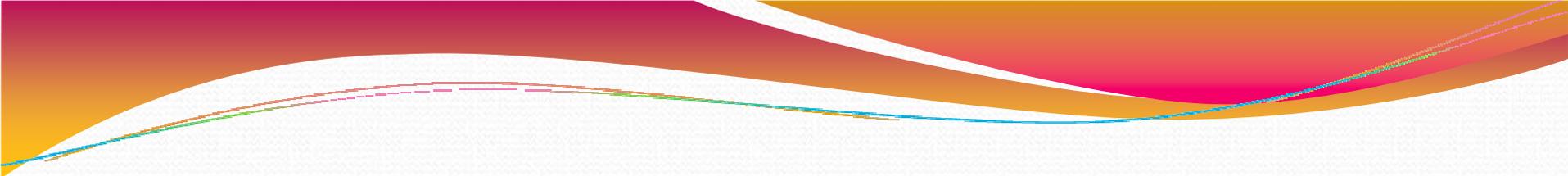


# Course content

Module 1. Management and Administration  
(Operations Management):

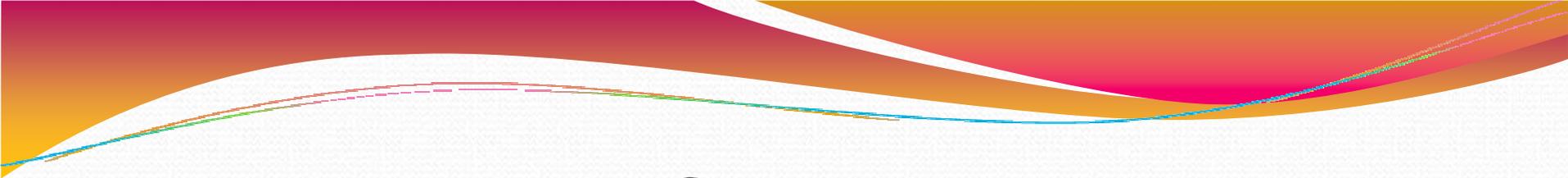
Content module 1.1. The theoretical basis of  
operations management

Content module 1.2. Management of  
operations system



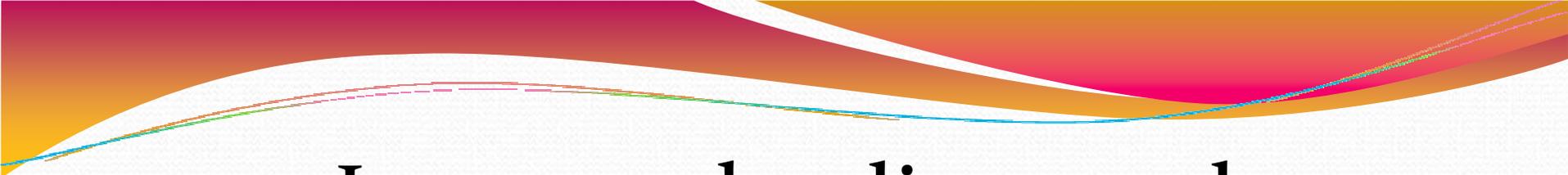
# Content module 1.1. The theoretical basis of operations management

Lecture 1. Operations management as a type of functional management



# References

1. Nersecian, R. L. Trends and Tools for Operations Management: An Updated Guide for Executives and Managers. Westport, CT: Quorum, 2000
2. Slack, N., ed. The Blackwell Encyclopedia Dictionary of Operations Management. Cambridge, MA: Blackwell, 1996
3. Sower, V. E.; J. Motwani; and M. J. Savoie, eds. Classic Readings in Operations Management. Ford Worth: Dryden Press, 1995
4. Richard B. Chase, F. Robert Jacobs, Nicholas J. Aquilano Operations Management For Competitive Advantage. New York, NY, 2006
5. Heizer J. Principles Of Operations Management / J. Heizer, B. Render. –4lh edition. – New Jersey : Prentice Hall, 2001. – 716 p.
6. Микитенко Н. В. Операційний менеджмент. Практикум: навч. посіб. / Н.В. Микитенко. – К.: КНЕТУ, 2009.



# Issues to be discussed

- Operations Management
- Transformation Processes
- Goods and Services
- OM in the Organizational Chart
- Historical Development of OM
- Current Issues in OM



# What is Operations Management?

Operations management (OM) is defined as the design, operation, and improvement of the systems that create and deliver the enterprise's primary products and services.



***Within the operations functions, management decisions can be divided into three broad areas:***

<b>Strategic (long-term) decisions</b>	How will we make the product? Where do we locate the facility or facilities? How much capacity do we need? When should we add more capacity?
<b>Tactical (intermediate-term) decisions</b>	How many workers do we need? When do we need them? Should we work overtime or put on the second shift? When should we have material delivered? Should we have a finished goods inventory?
<b>Operational planning and control (short-term) decisions</b>	What jobs do we work on today or in this week? Whom do we assign to what tasks? What jobs have priority?

# Transformation Processes

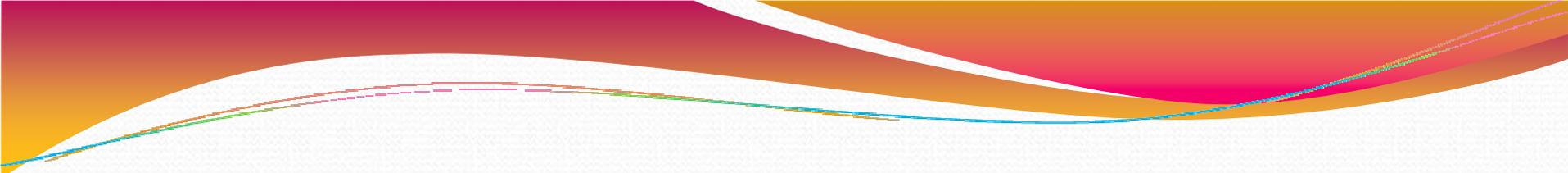
**Transformation processes** use resources to convert inputs (raw material, a customer or finished product from another system) into some desired output.

In general, transformation processes can be categorized as follows:

- Physical (as in manufacturing)
- Location (as in transportation)
- Exchange (as in retailing)
- Storage (as in warehousing)
- Physiological (as in health care)
- Informational (as in telecommunications)

# Examples of different types of transformation processes in various areas

System	Primary Inputs	Resources	Primary Transformation Function(s)	Typical Desired Output
Hospital	Patients	MDs, nurses, medical supplies, equipment	Health care (physiological)	Healthy individuals
Restaurant	Hungry customers	Food, chef, wait staff, environment	Well-prepared, well served food, agreeable environment (physical and exchange)	Satisfied customers
Automobile factory	Sheet steel, engine parts	Tools, equipment, workers	Fabrication and assembly of cars (physical)	High-quality cars
College or university	High school graduates	Teachers, books, classrooms	Imparting knowledge and skills (informational)	Educated individual
Department store	Shoppers	Displays, stocks of goods, sales clerks	Attract shoppers, promote products, fill orders (exchange)	Sales to satisfied customers
Distribution center	Stockkeeping units (SKUs)	Storage bin, stockpickers	Storage and redistribution	Fast delivery, availability of SKUs
Airline	Travelers	Airplanes, crews, scheduling/ticketing systems	Move to destination	On-time, safe delivery to destination <sup>10</sup>

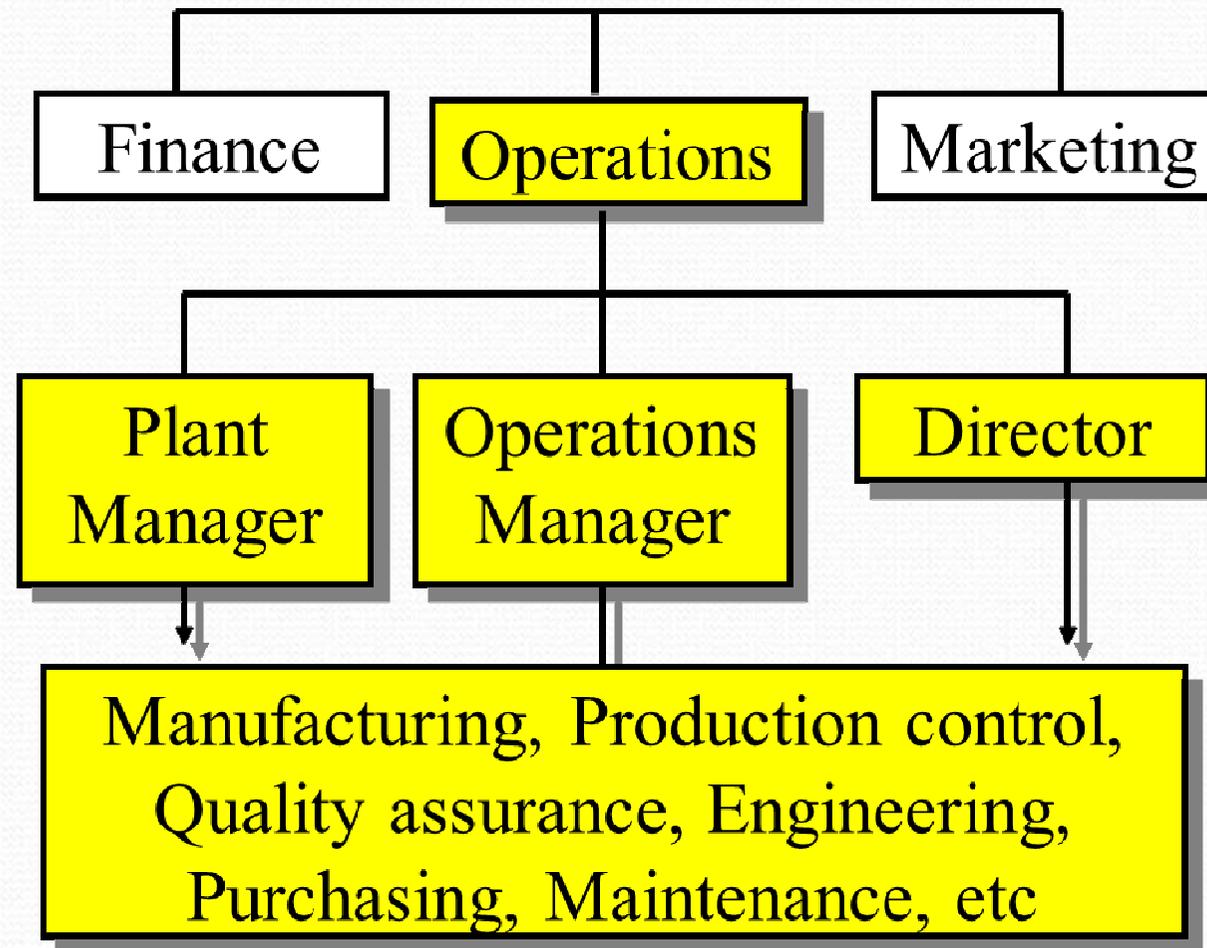


# What is a Service and What is a Good?

The essential difference between services and goods is that a **service** is an intangible process, while a **good** is the physical output of a process.

Other differences are that in services, location of the service facility and direct customer involvement in creating the output are essential factors; in goods production, they usually are not.

# OM in the Organization Chart



# Timeline of OM's history

Period	Place, the	What was done
4000 BC	Egypt	Introduction of elements for planning and control
400 BC	Cyprus	Determination and studying of transport operations
XV century	Italy	Introduction of coding (enciphering) operations for goods. Introduction of goods standardization. First principles for stock
XVIII century	Adam Smith	Division of labour: production specialization
XX century 1900-1910	F.W. Taylor	Scientific management: studying of methods, accounting time quotas, optimizations for organization structure
1924	Walter Shewhart	Statistic control for processes

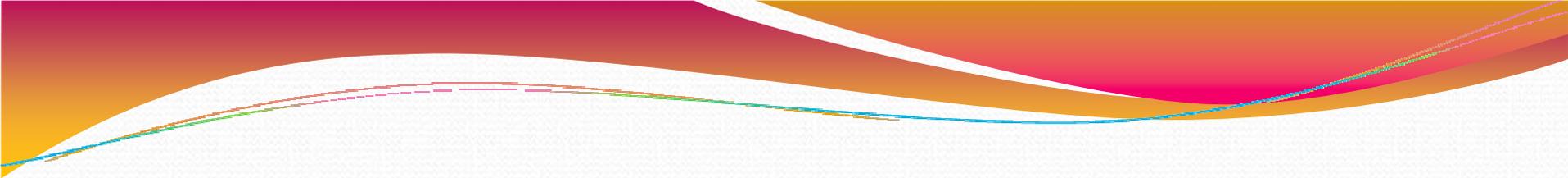
## Timeline of OM's history (cont'd)

Period	Place, the author(s)	What was done
1950ss	A. Figenphum, W.E. Deming	Total quality control
1960ss	USA	Concept for service operation
1970ss	IBM, J.Orlicky, O. Wight	Shop scheduling, inventory control, forecasting, project management
1980ss	Harvard Business School (USA)	Manufacturing as a competitive weapon
1990ss	International Organization for Standardization (Europe), Microsoft Corporation SAP (Germany)	Total quality management. Business process reengineering. Electronic enterprise (Internet, WWW). Supply chain management (client /server software)
2000ss	Amazon, eBay, America Online, Yahoo, AliExpress	E-commerce



# Current Issues in OM

- Coordinating the relationships between mutually supportive but separate organizations.
- Optimizing global supplier, production, and distribution networks.
- Increasing co-production of goods and services.
- Managing the customers' experience during the service encounter.
- Raising the awareness of operations as a significant competitive weapon.



Thank you for your  
attention!