

# BUSINESS KNOWLEDGE INC.

## OPERATIONS

“Competitive advantage through process efficiency”



Better Knowledge, Better Business, Better Future  
**BUSINESS KNOWLEDGE INC.**

Operations  
416-831-3773  
[info@businessknowledgeinc.com](mailto:info@businessknowledgeinc.com)

# OPERATIONS

## Operations definition and strategic context

- Operations are producing goods and services through established processes, for people's use
- Operations strategic direction is given in the Business Strategic Plan as the Operating Plan (Operations Management)



# OPERATIONS

## Operations definition and strategic context

- Operating Plan (Operations Management)
  - Present and future business operations requirements
  - Operations structure: Incoming Logistics, Purchasing, Manufacturing, Maintenance, Shipping / Receiving, After Market Support;
  - Business position analysis: accessibility (location), nature of property (owned / rented), proximity to airports, railways, ports, major highways
  - Status of equipment and technology: old, new, re-furbished, requiring upgrade
  - Environment and policies in place



# OPERATIONS

## Main Areas of Operations

- Process Management
- Project Management
- Capacity
- Quality
- Inventory Management
- Supply Chain Management
- Planning and Scheduling
- Resource Planning



# OPERATIONS

## Main Areas of Operations

- **Process Management**

- **Supports decisions about activities transforming inputs into outputs (products or services)**
- **Strategic tactical execution to deliver customer value through a structured process that involves the customer and deals with resources, capital and environment**
- **Continuous process improvement for increased quality, efficiency, and timely reaction to customer requirements**





# OPERATIONS

## Main Areas of Operations

- Project Management

- Project phases describe a project from beginning to the end over a determined period of time (initiation, planning, execution, control, closing)
- Scope, time and budget, resources, quality, risks, communications, procurement, should be integrated along project phases for successful project execution
- Project outcome is influenced by its stakeholders, management team skills, organization and social environment



# OPERATIONS

## Main Areas of Operations

- Capacity

- Should fulfill the output rate of present and future volume for products or services offered
- Planning and sizing should be done for short and long term and be correlated with the process of choice ( project, batch, line, continuous flow)
- Theory of Constraints – method used for capacity decisions on day-to-day operations management



# OPERATIONS

## Main Areas of Operations

- Quality

- Modern operations management systems are centered on quality products or services for sustainable business in a highly competitive environment
- Customer satisfaction is a business challenge as high performance design products and services should be produced efficiently with consistent quality





# OPERATIONS

## Main Areas of Operations

- **Quality systems**

- **Built-in quality** requires organization involvement to meet high standards at each step and for each iteration of the process
- **Total Quality Management Systems (TQM)** is a holistic concept with focus on continuous quality improvement
- **Quality Function Deployment (QFD)** – is a complex system that converts customer needs into design requirements, further quantified in critical to quality features and then offered to customers at a pre-determined price



# OPERATIONS

## Main Areas of Operations

### Inventory Management

- Inventory is the total amount of items that a business stores for production of their goods or services. Optimum inventory control provides the right amount of stock for the current business demand
- Inventory is associated with cost, low levels of inventory driving higher efficiency, and more profit
- Economic Order Quantity (EQO) is the optimum stock size that minimizes the inventory costs
- Inventory control systems could check continuously the inventory levels (Q systems) or periodically (P systems)



# OPERATIONS

## Main Areas of Operations

### Supply Chain Management

- Is a system that attempts to synchronize Customer - Business – Supplier Interface for demand, materials, sub-components of the final product or service, and information
- Performance indicators are associated with order placement, order fulfillment and materials purchasing
- Strategic supply chain philosophy is to maximize the use of a business infrastructure to reach its full potential on the marketplace



# OPERATIONS

## Main Areas of Operations

- **Planning and Scheduling**

- **Operations planning process is focused on the timeline (annual, short-term, and long term) and financial assessment of the business (near and far future)**
- **Aggregate plans (families of products or services) are addressing annual planning and deal with production rates, work force levels, and inventory costs**
- **Scheduling covers the workforce and operations steps for implementing the aggregate plans**





# OPERATIONS

## Main Areas of Operations

- Resource Planning

- Demand is a key factor in influencing resource planning for product or service end unit item (parent) and components; components have a dependent demand on end unit;
- Material and labor requirements for complex products and services are difficult to manage in the absence of a structured resource planning system
- MRP (Material Requirements Planning) is an operations information system that supports the material planning needs of any major business
- ERP (Enterprise Resource Planning) is a general resource planning information system across a business





# OPERATIONS

## References

- Larry P. Ritzman, Lee J. Krajewski, Manoj K. Malhotra, Robert D. Klassen  
Second Canadian Edition, *Foundations of Operations Management*, Toronto,  
Canada, Pearson Prentice Hall 2007



# OPERATIONS

## Q&A



Better Knowledge, Better Business, Better Future  
**BUSINESS KNOWLEDGE INC.**

Operations  
416-831-3773  
[info@businessknowledgeinc.com](mailto:info@businessknowledgeinc.com)