Central Park Conservancy
Institute for Urban Parks

Fundamentals of Operations Management
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Vice President of Operations Management

Background in:
• Commercial Development & Construction Management
• Commercial Property & Facilities Management
• Administration & Management of Academic Facilities
• Managed systems and project implementation in both non-profit and private sectors and higher education

Education:
• Bachelor’s Degree in Real Estate Sciences, NYU
• Communications, NYIT
Objectives for this Morning

• **Introduce** and define Operations Management (OM) in terms of its contribution and the activities it involves

• **Describe** how operations contributes to the overall betterment of an organization

• **Present** operations as a function that addresses issues in a services environment

• **Show** how OM is working at Central Park Conservancy and explore opportunities to share information externally

• **Demonstrate** how OM systems and functions interact with the other functional areas within an organization
Why Study Operations Management?

1. Operations Management is one of four major functions in any organization – we want to study how people organize themselves for productive enterprise.

2. We want (and need) to know how goods and services are produced.

3. We want to understand what Operations Managers do.

4. OM represents a significant part of an organization’s expense budget.
Role of OM within an Organization

Marketplace

Corporate strategy

Marketing strategy

Operations strategy

Finance strategy
What Operations Managers Do

Basic Management Functions

- Planning
- Organizing
- Staffing
- Leading
- Controlling
What is Operations Management?

**Operations Management (OM)** is the set of activities that create value in the form of goods and services by transforming inputs into outputs.

- *Production* is the creation of goods and services.
What is Operations Management?

Management of the conversion process which transforms inputs, such as raw materials and labor, into outputs in the form of finished goods and services.
The Economic System

Inputs

Labor, capital, management

Feedback Loop

Transformation

Economic system transforms inputs to outputs
/CONVERSION PROCESS

Outputs

Goods and services
The Transformation Process within OM
The Value Chain and Its Support Functions

- Suppliers
- Transformation process
- Environment
- The Firm
- Customers
- Purchasing
- Marketing
- Finance
- Human resources

Central Park Conservancy
Central to the Park
Application of OM to Service Operations

- Batch cooking operations at McDonald’s
- Just-in-Time
- Automatic inventory replenishment at Wal-Mart
- Park Operations & Management
Managerial Issues

• **Shift in balance of power to consumers**
  - Globalization of business & markets
  - E-commerce

• **Achieving higher levels of productivity**
  - Creating higher quality products
  - Delivering better customer service
  - Achieving shorter delivery times
  - Reducing labor and material costs
Operations Strategy Decisions

- **Strategic (long-range)**
  - Needs of customers (capacity planning)

- **Tactical (medium-range)**
  - Efficient scheduling of resources

- **Operational planning and control (short-range)**
  - Immediate tasks and activities

Top-down Approach to OM Strategy
Operation Management’s Contributions

- Achieve Higher Standards
  - Ability to **increase productivity**
  - **Lower cost** of goods and services
- Better Quality Goods and Services
  - Competition increases quality
- Concern for the Environment
  - Recycling and concern for air and water quality
  - Sustainability
- Improved Working Conditions
  - Better job design and employee participation
Essential Functions

• **Marketing** – generates demand

• **Production/operations** – creates the product or service

• **Finance/accounting** – tracks how well the organization is doing, pays bills, collects the money

• **Human resources** – provides labor, wage and salary administration, and job evaluation
## Differences Between Goods and Services

<table>
<thead>
<tr>
<th>Goods</th>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Tangible</td>
<td>• Intangible</td>
</tr>
<tr>
<td>• Can be inventoried</td>
<td>• Cannot be inventoried</td>
</tr>
<tr>
<td>• No interaction between customer and</td>
<td>• Direct interaction between customer and process</td>
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<tr>
<td>process</td>
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**Central Park Conservancy**

*central to the park*
Characteristics of Service

- Intangible product
- Produced and consumed at the same time
- Often unique
- High customer interaction
- Inconsistent product definition
- Often knowledge-based
- Frequently dispersed
Definition of Quality

• Quality is important in all functional areas of an organization.
• Quality is now much more than the technical requirements for manufactured goods.
• Service quality (customer relationships) is equally important.
Efficiency vs. Effectiveness

• The difference between efficient and effective is that efficiency refers to how well you do something, whereas effectiveness refers to how useful it is.

• Efficiency is doing things right
• Effectiveness is doing the right things.
• Doing the right things is more important than doing things right.

Example: if a company is not doing well and they decide to train their workforce on a new technology. The training goes really well - they train all their employees in a very short time and tests show they have absorbed the training well. But overall productivity doesn’t improve. In this case the company’s strategy was efficient but not effective.
New Trends in OM

- Ethics
- Global focus
- Environmentally sensitive production
- Rapid product development
- Mass customization
- Empowered employees
- Supply-chain partnering
- Just-in-time performance
Ethics and Social Responsibility

Challenges facing operations managers:

- Developing and producing safe, quality products, service & environments
- Maintaining a clean environment
- Providing a safe workplace
- Honoring stakeholder commitments
Operations Management at Central Park Conservancy

- Purchasing
- Tree Care
- Trash & Recycling
- Space & Staff Management
- Health & Safety
- CMMS (Computerized Maintenance Management System)
Operations Management at Central Park Conservancy

Purchasing:
- Buyers/planners
- Strategic spending
- Vendor management
- Competitive bidding
- Use of strategic contracts
- Leveraging state & local contracts
- Use of buying cooperatives
Project Purpose
Centralized Purchasing

- Create an efficient workflow model for the CPC to transition to centralized, on-line, purchasing activity
  - Identify and ensure that the CPC purchase requisition approval workflow and business requirements are met to the maximum extent possible
    - Identify and quantify approval routing for Purchase Requisitions
    - Identify and quantify commodities and services that do not require a Purchase Order (examples – offices supplies, cell phone bills, FEDEX, etc.)
    - Identify the approval routing for the purchase of office supplies
Establish Work-flow

Admin receives & enters request

Director or AVP Review approval or decline

Purchasing agents performs budget & policy check, performs contract review and comp bidding.

VP final approval
Approval Workflow

Multiple Requestors, 2 Approval Levels

Staples Advantage Model

- Multiple Requestors
- Level 2 Approver
- Level 3 Final Approver
- Order Received by Staples
Operations Management at Central Park Conservancy

Tree Care:

• Trained staff
• Certifications
• Proper equipment & safety training
• Inspections
• Tree Works
• Arc GIS mapping
• Tree inventory
• Emergency & contingency planning
Operations Management at Central Park Conservancy

Trash & Recycling:

- Needs based analysis
- Reception design & selection
- Strategic location of receptacles
- Collection method & frequency
- Carry-in/carry-out policy
- Receptacles located via Arc GIS mapping
- Emergency and contingency planning
Operations Management at Central Park Conservancy

Central Park South to 86th Street

Recycling & Trash Receptacle Locations
Operations Management at Central Park Conservancy

Central Park 86th to 110th Street

Recycling & Trash Receptacle Locations
Space & Staff Management:

- Environmental Health & Safety
- Field-based Safety Committee
- Safety policies and procedures
- Staff training
- PPE
- OSHA compliance
- Accident reporting and follow-up
- MSDS
Operations Management at Central Park Conservancy

Health & Safety:

- Environmental Health & Safety
- Field-based Safety Committee
- Safety policies and procedures
- Staff training
- PPE
- OSHA compliance
- Accident reporting and follow-up
- MSDS
Operations Management at Central Park Conservancy

CMMS (Computerized Maintenance Management System):

- Inventories Park Assets
- Supports planned work approach
- Records activity
- Improved reporting capabilities
- Cartegegraph implementation
Operations Management at Central Park Conservancy

- Purchasing planners/buyers
- Environmental Health & Safety professionals
- Logistics (or operations) supervisor
- Production (or operations) scheduler/controller
- Production (or operations) analyst
- Data/inventory analyst
- Quality assurance specialist
- Others…
Thank you for attending!