Systems Approach to Foodservice Management

Introduction

- Foodservice operators face problems
  - High labor cost
  - Skilled labor shortage
  - Intense competition
  - Decreased profit margins
- Need for efficiency led to systems approach
  - All components coordinated to achieve common goal

What Is a System?

- A set of interrelated components that work together within an environment to achieve an objective
  - Closed system
    - A system that is not influenced by and does not interact with its environment
  - Open system
    - A system that dynamically interacts with its environment

Systems Approach

- Beginnings in applied mathematics
- Some use an instinctive approach

Basics of General Systems Theory

- System is a set of components and variables that are:
  - Organized
  - Interacting
  - Interdependent
  - Integrated

General Systems Theory

- Interrelated and Integrated
- Viewed as a whole
- Defined goals and outputs
- Must have input
- Transforms input into output

General Systems Theory (continued)

- Cannot atrophy or undergo entropy
- Controls in the form of feedback
- Contains smaller subsystems
- Systems are differentiated
- System exhibits equifinality

Foodservice Organization as a System

- A foodservice organization is an independent economic unit, which has as its aim the earning of a profit by offering goods and services for sale
  - It is a physical/conceptual entity
  - It has interrelated and interacting parts (departments, people, equipment, etc.…)
  - It exists in an environment with which it interacts
  - It has a preferred state (profitability)

Definition of the system

- May seem simple-minded
  - Often when defining a system underutilized or overlooked elements discovered
- Hierarchy of goals exists
  - Organizing goals is the first step

Element of a System

- Traditionally diagrammed as three boxes
  - Input
  - Transformation
  - Output
- Elements connected by feedback arrows
- Elements surrounded by environment
- Control and memory necessary

Output

- Goals are the output of the system
- Goals must be specific and measurable
  - Specific stated goals must correspond to the overall purpose of your operation

Transformation

- How is input treated to achieve goals or output
- Process correspond to subsystems
  - Management functions
  - Functional subsystems
    - Production, service, sanitation, assembling materials
  - Linking subsystems

Input

- Resources available (Human and Material)
- Treated in ways that contribute to attainment of goals
- Input includes some or all of the six M's
  - Manpower (Personnel)
  - Machines (Equipment)
  - Materials (Food)
  - Markets (Customers)
  - Money (Financial Resources)
  - Methods (Procedures, Policies, Standards)

Feedback

- Signals need for adjustments or changes in the processing of input
- Compares actual output to desired or ideal output
- Feedback can take various forms
  - All information is feedback
  - Cost must be compared to benefits
  - Feedback must be timely

Environment

- All system interact with each other and with the environment that surround them
- External environment
  - Viewed as a restriction or constraint
  - Centers on the needs of the customer
  - Managers exert little control
- Internal environment
  - Centers on human and material resources

Environment

- The four major subsystems in the environment are
  - The economic system
  - The technological system
  - The socio-cultural system
  - The politico-legal system

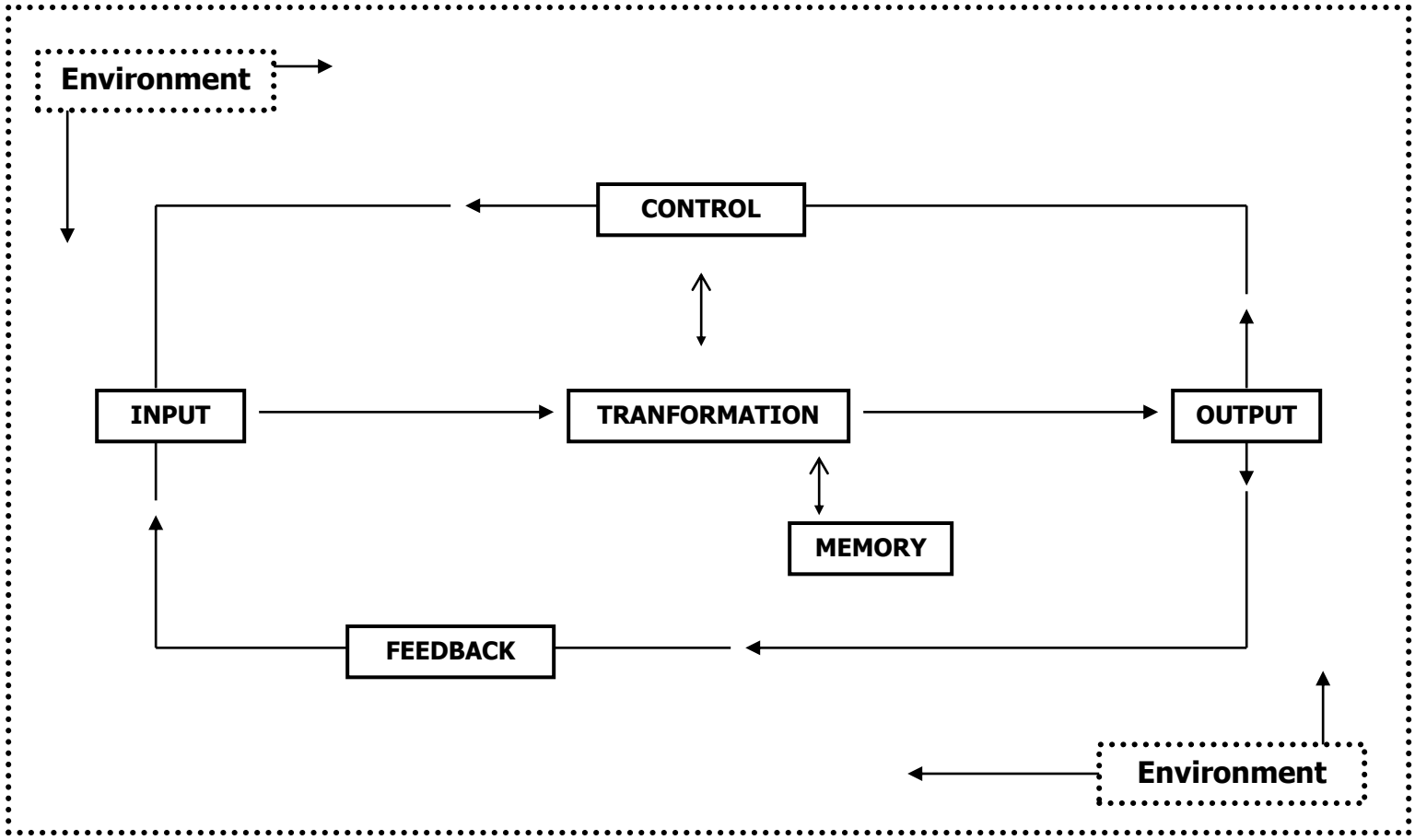
Memory

- Includes the records necessary to operate and manage growth
  - Financial
  - Personnel
  - Forecasting

Control

- Encompasses:
  - Goals and objectives
  - Standards, policies and procedures
  - Programs of the organization
- Menu is considered the most important internal control in foodservice
- The legal environment has an impact on control

The Foodservice System



The Systems Approach

- Divide and conquer
  - Decompose a system into its subsystems or components
  - Analyze each subsystem or component separately
- Describe the subsystems/components and their relationships with each other and the external environment

Systems Approach to Organizational Analysis

- Define a conceptual boundary for the system or subsystem
- Identify the parts of the system or subsystem
- Identity the parts of the environment
- Determine system or subsystem interactions
- Commence problem analysis

Problem Solving

- Define the system to be investigated
- List the goals of that system
- List all the subsystems and their respective goals
- Suggest the best way to accomplish the goals of the subsystem
- Put new system to work
- Evaluate results

Requirements

- How changes affect:
  - The whole business
  - Business goals
- Requires subsystems be integrated efficiently
  - Preparation and service
  - Together how can elements best accomplish objectives of the operation

Technology

- Supplemented systems approach
  - Convenience foods
  - Storing and holding of foods
  - Data processing
  - More efficient equipment
  - Automation

Basic Form

- System approach meshes the 6 M's:
  - Men
  - Machines
  - Materials
  - Methods
  - Markets
  - Money
- Subsystems interdependent and interrelated

Negative Approach

- What happens when a system is missing?
  - Comfortable routine
  - Operation “runs itself”
  - Components working against each other
  - Self serving goals
- Rarely do such goals correspond to the overall goals of the operation

The Hospitality Manager

- Systems approach helps the manager
  - Examine the operation, it's goals and resources
  - Organize the personnel and the work
    - Coordination to achieve goals
  - Suggests ways to solve problems
    - Puts problems in perspective
  - Provides an approach to development of MIS

Goals and Resources

- Every system has its subsystems
- Every system is a subsystem of a larger system
- Example – Food Production
  - Goals of the system must coincide with those of the operation
  - Own subsystems:
    - Bakery, Line, Pantry and Prep
  - All must accomplish the operations goals

List of System Goals

- Listed in general terms first
  - Goals depend upon the system analyzed
- Do not want to maintain the status quo
- Improvement requires constant review
  - Must be specific
  - Define what is meant

List of Subsystem Goals

- Recall the various processes that take place
  - Why are they present?
  - Where are they located?
  - What do they accomplish?
  - When do they accomplish?
  - How do they accomplish?
  - Who does the work?

Accomplishment of Subsystem Goals

- Suggest the best ways to accomplish goals of the subsystem
- Problems solved through processes of the subsystem

Organization and Coordination

- Manager can get too close to see the faults of the operation
  - System approach can provide objectivity that is lacking
- Break the operation down into its subsystems
  - Pinpoint subsystems that are essential
  - Pinpoint what has to be done and organize resources to do it
  - Designing a system designs the operation

Installation of New System

- Development of system not enough
  - Must put new system to work
- Installation more difficult than planning
  - Reluctance to change
  - Explain system before installation
    - Stress advantages
    - Accentuate the positive
- System will not run perfect at first
  - Don’s abandon hope because of preliminary problems

Evaluation of Results

- Continue to watch and compare outputs
  - Accomplished with feedback
- Occasionally new system must be scrapped
  - Output does not match or surpass previous operation
- Change should not be made for the sake of change

In Perspective

- Approach not unique to foodservice
  - Plato, St. Thomas Aquinas and Machiavelli advanced forms of the systems approach
  - Most of us think systematically
- A grouping of separate components that work together toward a goal in the most efficient manner