Understanding Service Business by Scott E. Sampson

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Introduction



- **Fundamentals**
- Unified Services Theory Basics

Fundamentals

- Services Fundamentals: Planning
- Services Fundamentals: Execution
- Understanding Non-Services (manufacturing)
- **Business Strategy**
 - Identifying Strategic Oportunities
 - Identifying Strategic Threats
- Managing Processes
 - Cost Issues
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The author

Introduction

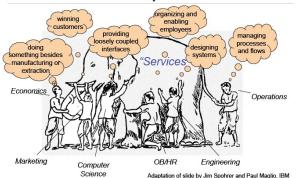
- Scott E. Sampson
- Brigham Young University
- Assistant professor of operations management
- M.B.A. and Ph.D. from the Darden School of the University of Virginia
- B.A. from Brigham Young University
- Has worked as a consultant
- Current research involves studying methods for using customer feedback as a basis for quality improvement in the service sector.
- Has published articles in
 - Management Science
 - Naval Research Logistics
 - Journal of the Operational Research Society
 - Interfaces
- One publication in DBLP (Operations Research, 2008)

Fundamentals

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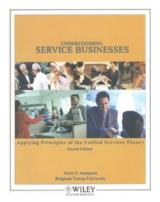
Six blind men and the elephant



The book

Introduction

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IT IS A WORKBOOK!!!

http://services.byu.edu/sw/doku.php?id=usb:toc

Conclusions

Book's contents

Fundamentals

Introduction

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Fundamentals

- Unified Services Theory Basics (6 SBPs)
- Services Fundamentals: Planning (5 SBPs)
- Services Fundamentals: Execution (5 SBPs)
- Understanding Non-Services (manufacturing) (4 SBPs)

Service Business Strategy

- Identifying Strategic Oportunities (5 SBPs)
- Identifying Strategic Threats (6 SBPs)

Managing Service Processes

- Cost Issues (3 SBPs)
- Human Resources Management (3 SBPs)
- Marketing in Services (4 SBPs)
- Production and Inventory Control (3 SBPs)

Service Quality and Value

- Defining Service Quality (3 SBPs)
- Challenges in Delivering Service Quality (3 SBPs)
- Service Recovery (3 SBPs)
- Measuring Service Quality and Productivity (3 SBPs)

Managing Processes

Book's organization

Fundamentals

- Name of the Service Business Principle . . .
- Statement of the Service Business Principle . . .
- Why it ocurs . . .
- Closely related to ...
- Details . . .
- How it impacts decisions . . .
- What to do about it . . .
- For example . . .
- My airline application . . .
- Supplemental reading . . .
- How manufacturing differs from services . . .
- Quantitative analyses . . .
- Analysis questions . . .
- Application exercise . . .
- To consider . . .

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Understanding Service Businesses

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The Unified Services Theory

Definition

Introduction

With services, the customer provides significant inputs into the production process. With manufacturing, groups of customers may contribute ideas to the design of the product, however, individual customers' only part in the actual process is to select and consume the output.

- Necessary and Sufficient condition for a business process to be a service business process
- Nearly all other managerial themes unique to services are founded in this distinction
- The entire remainder of this workbook is devoted to explaining the implications of the Unified Services Theory
- There is not a single SBP covered that does not tie back into the Unified Services Theory

Managing Processes

| Service Business | Inputs from Customers |
|----------------------|-------------------------------|
| accounting | financial transaction records |
| airlines | selves and baggage |
| architecture | design preferences |
| auto repair | broken car |
| banking | savings, checks |
| consulting | business problems |
| custom home building | lot, colors and styles |
| delivery | packages |
| dental | teeth |
| education | mind |
| entertainment | attention |
| government | community issues |
| legal services | legal problems |
| medical | sickness and injuries |
| public services | burning house |
| real estate | property to sell |
| restaurant | empty stomach |
| retail | questions about products |

Introduction

Fundamentals

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Identifying the Customer

Definition

With services, "the customer" is sometimes not clearly defined. Generally, the customer is the individual or entity who directly or indirectly decides whether or not the firm shall be compensated for production. The actual paying customer may desire a non-paying "critical audience" to be satisfied with production, qualifying the critical audience as an indirect customer.

Customer is the individual or entity who directly or indirectly decides whether or not the firm shall be compensated for production.

- Some providing inputs and some merely consuming outputs
- Customers of higher education:
 - Students (of course!)
 - Governments (and other sponsoring organizations)
 - Prospective employers and recruiters

The Unit of Analysis

Definition

Introduction

With services, the unit of analysis is a process segment. A process segment is a sequence of steps of production. When processes are dissected into smaller segments, the presence or absence of service principles becomes more pronounced.

- Customer inputs are present in some parts of a production process, but not present in others
- Use Divide&Conquer principle
- Categorize them:
 - Main business
 - Added value
 - Regulatory requirements

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Definition

Introduction

With services, production (making the service "product") and consumption (customer demand or delivery) often occurs simultaneously, making the exact timing of production a critical issue.

- Process cannot begin until essential customer inputs are received
 - Self
 - Belongings
 - Information
- Generates problems in the management of productivity capacity

Definition

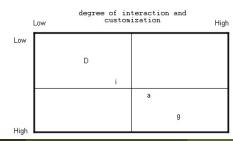
Introduction

With services, there are often forces that restrict automation. Therefore, the service production process tends to be more labor-intensive than manufacturing processes.

Adapt to input variation

Labor intensity

Prefer personal touch



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Difficulty in Measuring Output

Definition

Introduction

With services, although the output can be identified, it often cannot be easily quantified. Therefore, it can be hard to measure productivity.

- Manufacturers of standard items can simply count the number of items produced
- Measuring time expended is to measure an input, not output
- In a consulting firm, how does one quantify the magnitude of advice?

- Count the number of graduates (fail to capture the knowledge they gained)
 - It would be easy to "crank out" graduates with little competency (as is done in many highschool programs in the U.S.)
- Count the number of courses taken or grade point average (yet, those are only vague surrogate measures of knowledge)
- Tabulate job placement statistics or starting salary statistics (yet, how many of those graduates could have gotten just equally good jobs by skipping class and "cramming" for exams-knowing little but being able to give a great job interview)
- Ask graduates who have been out a few years how much useful knowledge they thought they received from various courses (a very delayed measure of education productivity)

Be careful in selecting productivity measures, since these measures tend to define what employees focus on in the production process

Introduction

Difficulty in Maintaining Quality

Definition

Introduction

With services, quality measurement tends to be subjective and difficult to scale. The standards by which quality is defined are often ambiguous. These unique specifications of quality, coupled with labor-intensiveness and inconsistent customer inputs, make it difficult to provide consistent quality.

- Each customer may have a different scale for comparing good and not good, as well as unique standards by which the service is evaluated
- The best service processes and the best employees can only do so much if customers provide inputs of low quality

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With manufacturing, the introduction of custom processes represents customer-information input, therefore causes the process to behave like a service. The paradigms and systems for successfully managing custom manufacturing are dramatically different from those warranted for non-custom manufacturing.

- When suppliers use customer information to guide their production processes, those processes assume service properties to some degree
- The customer-information inputs are so minute and minor, relative to the non-customer information inputs, that the overall production process is hardly affected
- Manufacturers are typically service-provider providers

Manufacturing in Sheep's Clothing

Definition

Introduction

All manufacturing is not alike. Manufacturing where most of the value is added in product development is often mistaken for services. Other manufacturing is mistaken for services because of service symptoms not caused by the Unified Services Theory.

- The symptoms of service, although caused by the UST, can also be caused by other factors
 - Electric power generation is manufacturing (even if it cannot inventory)
 - Making movies is manufacturing (even if it cannot be automated)

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Business Strategy

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Likening a Service

Definition

With services, significant strategic insights come from defining the process and identifying services with similar processes.

- Strategic innovations in one service industry can be applicable in different but related industries
 - Compare helth care vs passenger transportation:

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- Both change the customer (either body itself or its location)
- The result is much desirable than the process
- Usually percieved as cold and not too personable

Definition

Introduction

With services that process information, strategic advantages can be gained by using technology to switch from batch processing to delivery on demand (JIT - or "Just In Time"). JIT information is a "pull" system, meaning that information is processed as the customer requests it. This switch to JIT information can in fact convert an information manufacturing process into an information service process.

Business Strategy

- Telephone books
- Retailers catalogs
- Newspapers
- Text books

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Definition

Introduction

With services, customers will often react negatively to technologies which depersonalize (or standardize) the service. The exception is when "customer cost" savings are valued. (Generally, customers will react positively to technologies which increase the level of personalization.)

- Higher quality at lower cost
 - Technology to substitute for expensive labor
 - There is no production resource more adaptable to various customer inputs than labor
- Technology should introduce savings in the customers

Lowered Entry Barriers

Definition

Introduction

With services, the relevance of various barriers to entry is generally lower than corresponding barriers in manufacturing situations. However, in most cases the lower barriers can be fortified.

- Economies of scale
- Product differentiation
- Capital requirements
- Access to distribution channels
- Government policy
- Cost advantages independent of size
 - Propietari technology
 - Continually offer new features
 - Investment in R+D

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Potential Operating Objectives

Definition

With services, the potential objectives of the production process is limited by the types and amounts of customer content. The potential operating efficiency will be inversely related to the amount and variety of customer-self content.

- Customers consider themselves as unique individuals ..., and are resistant to the impersonalization that generally comes with high efficiency
- Examples:
 - FedEx standard packages
 - MacDonald vs Subway
- Companies can gain cost advantage by converting portions of the process to manufacturing by eliminating customer inputs

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The Choice of Employees

Definition

Introduction

With services, a critical employee skill is the ability to exercise judgment in divergent processes. When the consequences of poor judgment are great, judgment ability often requires years of training and experience and the employees tend to be very costly. However, even complex rule-governed systems can be trained or automated. Good employee selection is much more important for divergent processes than for complex processes.

Complexity is the number and intricacy of the steps in a process Divergence is the requirement for exercising judgment, or discretion. in a process

- An amount of divergence tends to be much more costly than an amount of complexity
 - Substitute [little] divergence for [a lot of] complexity

Culture Compensation

Definition

Introduction

With services, a significant part of employee compensation can be the organization's culture.

Cultures Which Are Attractive to Employees:

Security Some companies have a no-layoff policy

Development Some companies have a culture of building the skills and opportunities of employees

Ideas Some organizations encourage employees to share ideas of how to advance the company

Excellence Employees generally prefer to be part of an organization they can be proud of

• How Culture is Perpetuated:

- The best cultures are perpetuated by the actions of upper management.
- Management sends signals about what is valued in the organization, both in words and in policies.
- If management's words about what is valued are inconsistent with policies, the words will be of little effect.

Who is in Control

Definition

Introduction

With services, the production process can be controlled by the organization, the employees, or the customers, depending on who is qualified to meet the company objectives. Nevertheless, the customers and employees need to buy into this.

- The service organizations generally want efficiency, which is the ability to produce at a reasonable cost.
- The service **employees** often want **autonomy**, or a liberty to exercise some degree of discretion.
- The customers want satisfaction, which is that their needs and expectations for the service be fulfilled.

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The Marketing of Properties

Definition

Introduction

With services, the products tend to be high in experience properties and low in search properties. Highly divergent services are often high in credence properties.

Search: easily evaluate and compare prior to purchase

Experience: must be experienced to be evaluated

Credence: has to rely on the evaluation given by a credible source

- Not have enough knowledge
- Rely on the opinion "experts"
 - How do a law firm's clients know they received the best legal advise?
 - How does the client of a consulting firm know its recommendations are the best?
 - How does a college graduate know he or she received a good education?

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Understanding Service Businesses

Customer Inventory Costs

Definition

Introduction

With services, the primary inventory costs are costs to the customer, including psychological costs of being inventoried in a queue and good will costs of being unable to receive appropriate service.

- Customers expect to be served shortly after they demand service (near JIT)
- Waiting costs are lowered by increasing the service capacity
 - A capacity cost is incurred
- Use the "psycology of gueuing"

Detailed Production Tracking

Definition

With services, keeping track of production and inventory can mean tracking details about every customer. This often requires highly complex information systems.

- One unit of production may be relevant
 - Provide peculiar inputs

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Uncertain Expectations

Definition

Introduction

With services, expectations are often subjectively acquired and subjectively defined. Therefore service providers need to be careful when attempting to define expectations for customers. Too low expectations can lead to lost sales. Too high expectations can lead to disappointment and lost future sales.

Quality comes from the satisfaction of expectations

Value comes from the satisfaction of needs

- Misalignment between company- and customer-specifications leads to dissatisfaction
- Expectations tend to be experiential or credence based

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With services, customer-labor may ignore, avoid, or reject technologies or process improvements which are intended to increase quality and productivity. As a result, customer buy-in to process changes must be carefully addressed.

- Customers provide themselves as labor inputs
 - Potential for buy-in from the customer

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Early Communication/Early Recovery

Definition

With services, communication with the customer throughout the service delivery process can decrease the magnitude and expense of service failures. Conversely, failure to communicate early in the service process can allow small customer concerns to grow into large problems.

- The customer-product is averse to rework
 - There is also a need to rework customer's attitude
- Service providers can offer a channel of communication
- Service providers can actively solicit feedback

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Measuring Customers

Definition

Introduction

With services, we often measure quality by measuring customers. Unfortunately, customer measurement is often far from precise.

- Subjective Rulers
- Intrusive Measurement
- Resistance to Measurement
- The Halo Effect
- Self-Selected Sampling
- Interpreting the Interpretations

A Measure of Motivation

Definition

Introduction

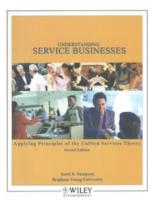
With services, employee motivation will often deteriorate to the level at which employees are measured.

- If you measure customer volume, ... you get rapid service
- If you measure complaints, ... you motivate complaint-avoidance behavior
- If you measure work attendance, ... you motivate punctual clock punching

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Conclusions

- Relevant for SS
- Could be used to define a whole course
 - Give support through the webpage
- Suggestions about links to existing CS concepts and courses:
 - Flowcharts and Blueprints
 - User Interfaces and Usability
 - Natural language processing
 - Expert systems
 - Linear programming
 - Critical path methods
 - Time series analysis
 - Statictics
 - Analytical queuing theory
 - Forecasting with seasonability



http://services.byu.edu/sw/doku.php?id=usb:toc