



Sloan School of Management
Massachusetts Institute of Technology

Customer Service Operations Analysis

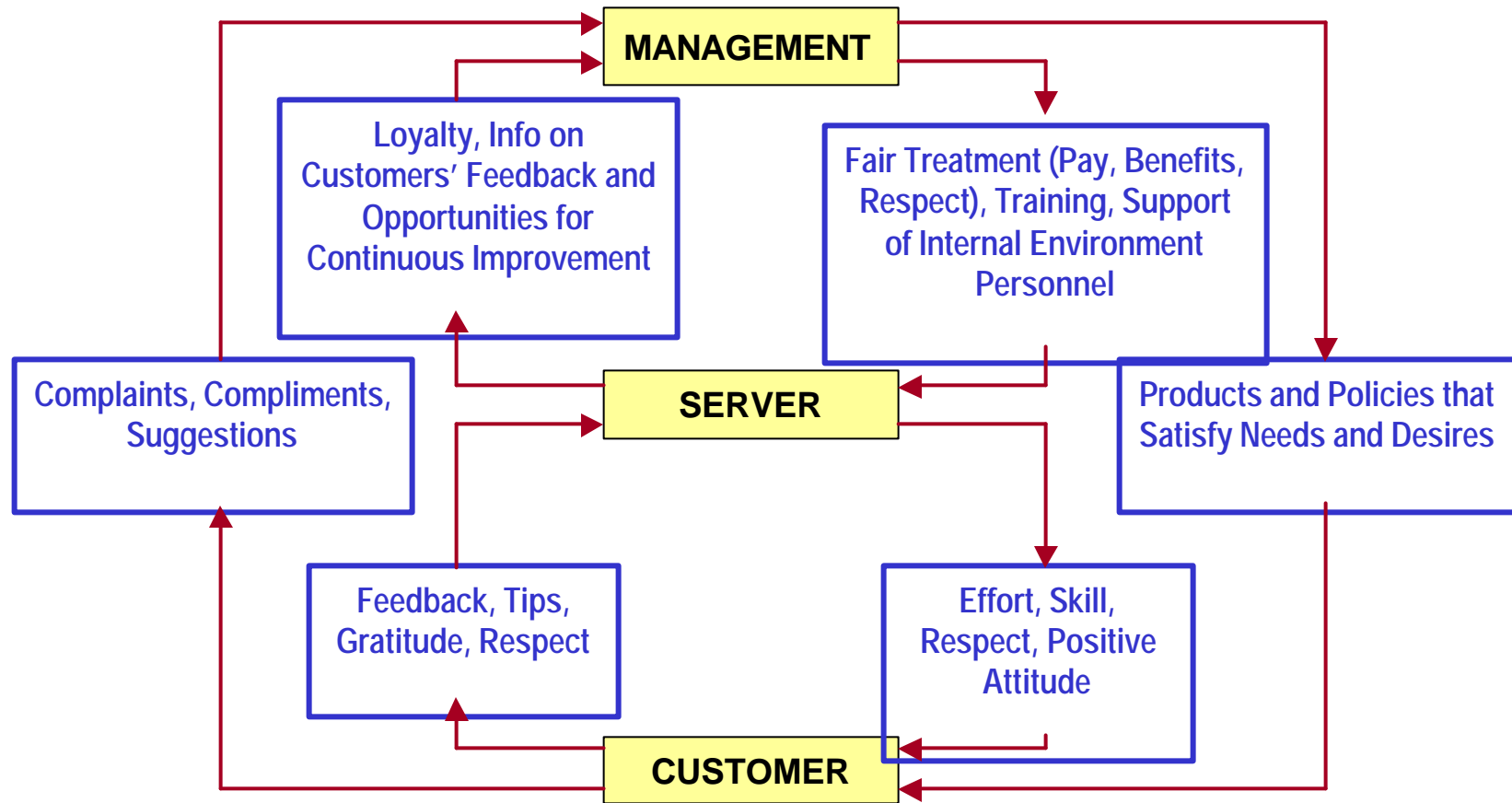
Prof. Charles Fine

Adapted from material compiled by Prof. Gabriel R. Bitran

Some Characteristics of Services

- ✍ **Intangibility** - explicit and implicit intangibles
 - **"We manufacture perfume; we sell hope."**
- ✍ **Perishability** - an hour of non-production is an hour lost
 - **Airplane w/o spare part costs > \$10K/hr**
- ✍ **Heterogeneity** - inherent variability of service
 - **Each doctor's bedside care is unique**
- ✍ **Simultaneity** - services are simultaneously produced and consumed
 - **A poor attitude by the server cannot be recalled**

Dynamic Interactions



Citibank-call center-consumer

Ford-dealer-consumer

McDonalds-server-consumer

Hospital-nurse-consumer

Unilever-Walmart-consumer

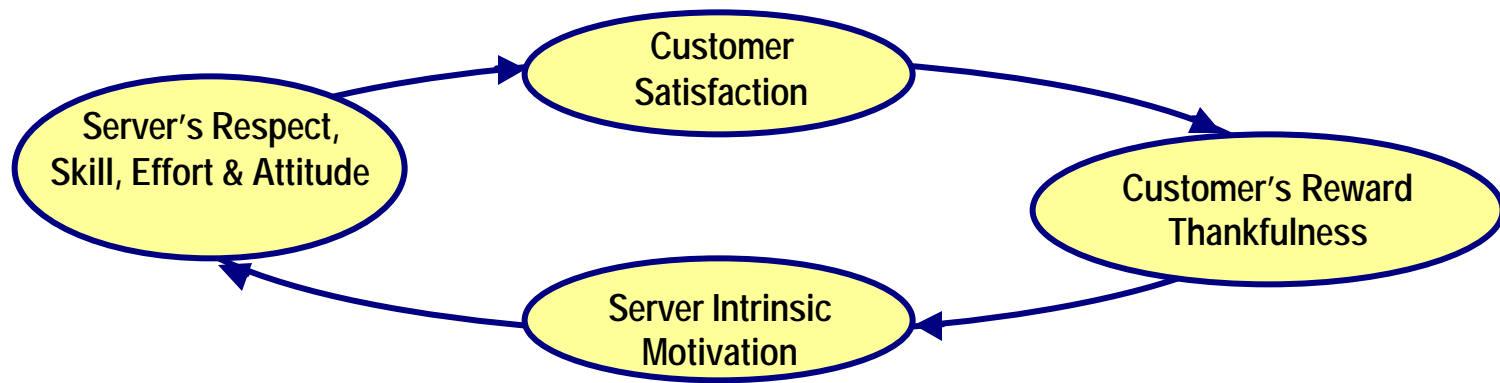
Dell-Service call center-consumer

Some elements of the Encounter

- **The concept of the Script**
 - ✍ **How well can you anticipate customer needs?**
- **Two factors that contribute to the inherent difficulty of managing high contact services:**
 - ✍ **Heterogeneity of human behavior (performance)**
 - ✍ **Variability of the service demanded**
- **Due to the variability of the service demanded, training alone is not sufficient. At some point there is the need for an underlying value system to guide the proper behavior.**
 - ✍ **Guidelines for reaction to the unanticipated**

Some elements of the Encounter *(cont.)*

- **Customer satisfaction is highly dependent on the attitude of the server**



- **Server's perceived status can be directly related to customers (customers want to wait in line even if others are shorter)**
- **Servers derive status from the status of their customers ("Ladies & Gentlemen serving Ladies & Gentlemen")**

Some elements of the Encounter *(cont.)*

- The **intangibility** of services makes it difficult to concept test
- The **simultaneity** of production and consumption limit test marketing because the entire production, including backroom, may have to be created
- The **variability** of service delivery also affects the ability to test market since customer reactions will vary and controlled simulation will be difficult to achieve

Phases of the Service Encounter

What are the phases for each encounter?

- ✍ **Access -- call, visit, website**
- ✍ **Check-in -- welcome, first impression**
- ✍ **Diagnose -- need identification**
- ✍ **Service -- satisfaction provision**
- ✍ **Check-out -- conclusion, last impression**
- ✍ **Post check-out -- satisfaction confirmation, feedback for future improvement**

Concepts of power and control

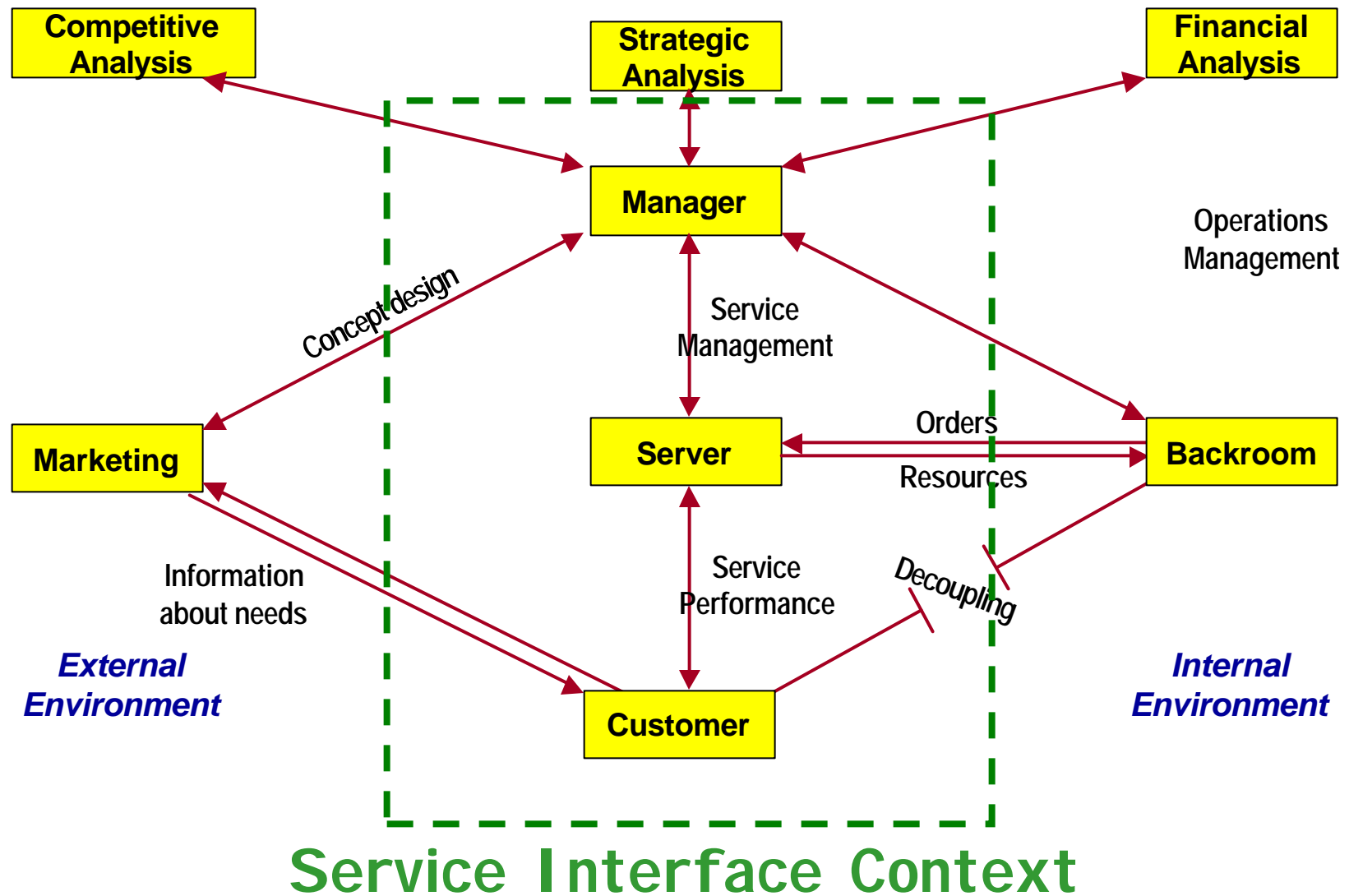
- **Supply Chain level & Service Encounter Level**
- **Real and apparent control**
- **Customers not only influence servers but also attempt to control them**

Strategies servers use to assert control

- **Ignoring** the customer (waiter, AOL)
- **Rejecting** the customer (bank)
- **Replying** to a customer's attempt to control (airline attendant)
- **Reacting** (other than verbally) to a customer's attempt to control
- **Engaging** the customer so that he/she does not try to seek control (Microsoft source code not provided)

The formulation of communities of servers
(unions, buying groups)

External and Internal Environment



External Environment

The Outside Context to which the Business must Respond both Proactively and Reactively

- Historical and Cultural Setting
- Economic Trends
- Social Trends
- Technological Developments
- Competitive Environment

Concept Design

Identification of a Service which

- 1. will Satisfy a Specific Customer Need,**
- 2. in a Target Market,**
- 3. in a Way that Adds Value,**
- 4. for which Customers Will Pay Enough
to Produce Profits**

Internal Environment

**The Organizational Context which
Contains and Supports all the
Activities within the Business**

- **History/Life Cycle**
- **Founder's/Leaders' Style and Values**
- **Corporate Culture**
- **Organizational Design**
- **Resource Constraints - Human and Capital**

Breakthrough Concepts for Achieving Quality Objectives

Critical Thinking

Creative Thinking

Breakthrough Concepts

Statistical Process Control (6 sigma)

Just-In-Time

Design for Manufacturability

Cycle Time Reduction

Objectives:

Drive out variability

Conform to requirements

(customer and supplier)

Zero Defects

Breakthrough Concepts

Values

Empowerment

Extraordinary Guarantee

Experimental Development

Objectives:

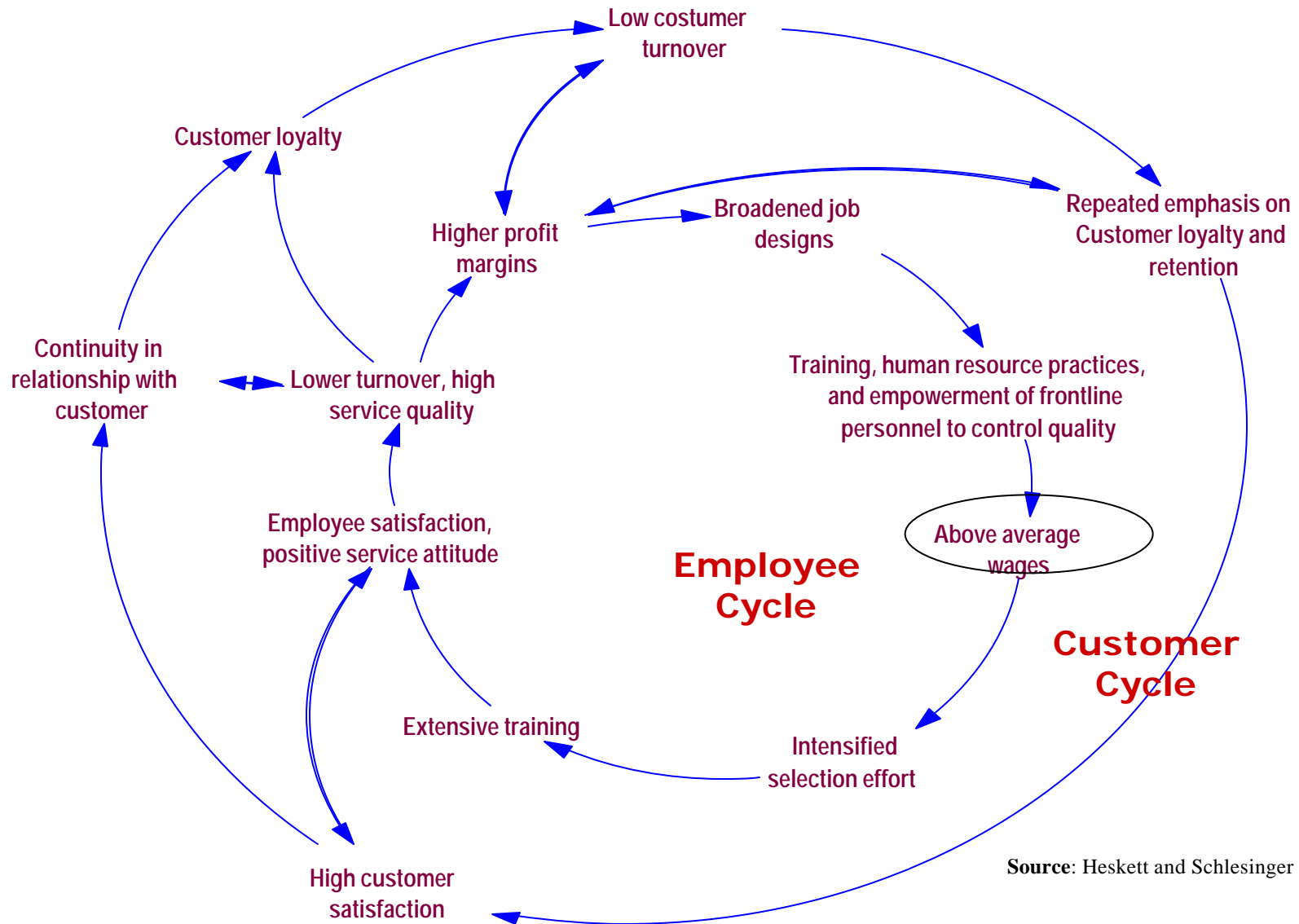
Do whatever it takes

Total Satisfaction

Zero Defections

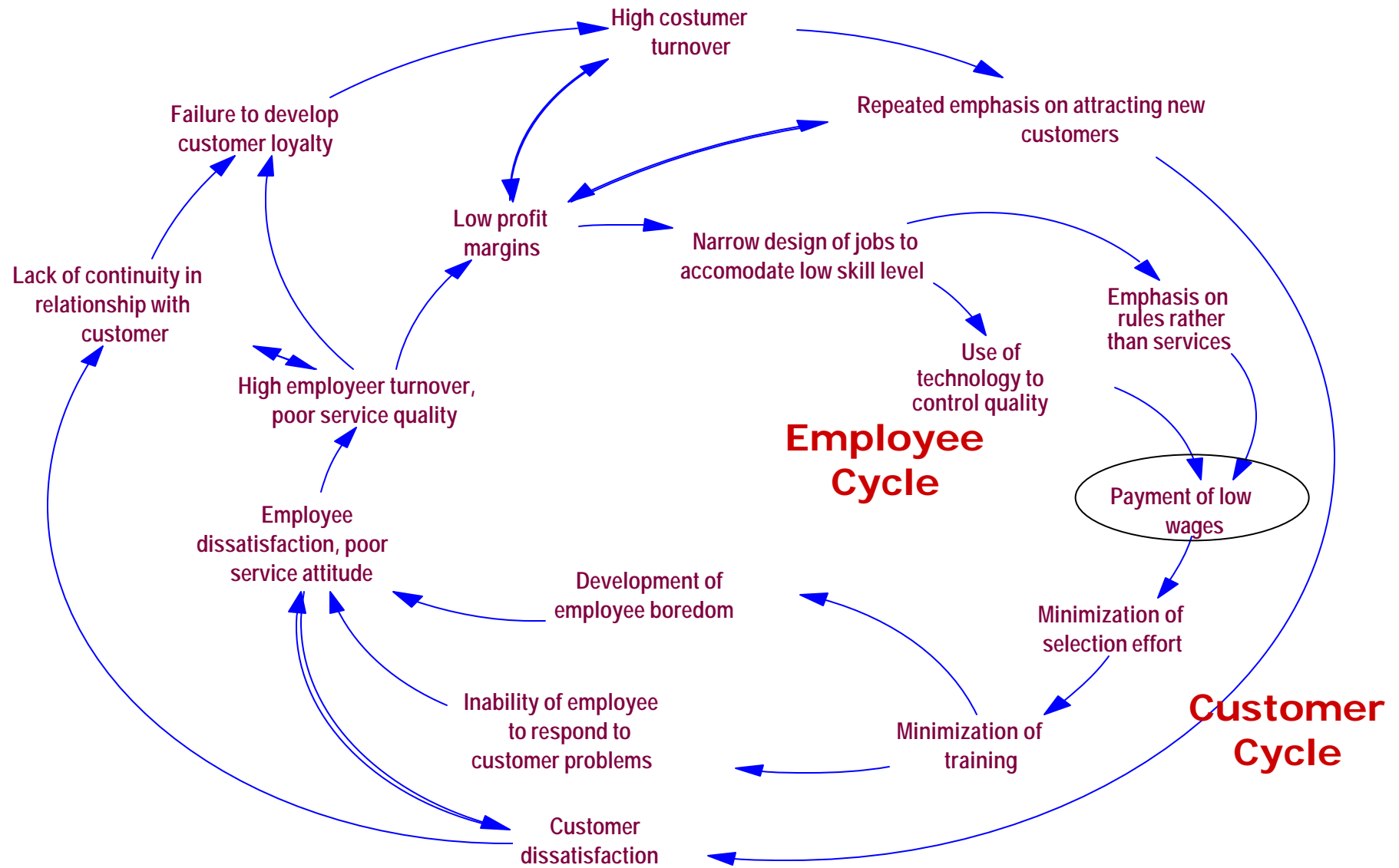
(customer and
employees)

High Performance Model: Cycle of Success



Source: Heskett and Schlesinger

Low Performance Model: Cycle of Failure

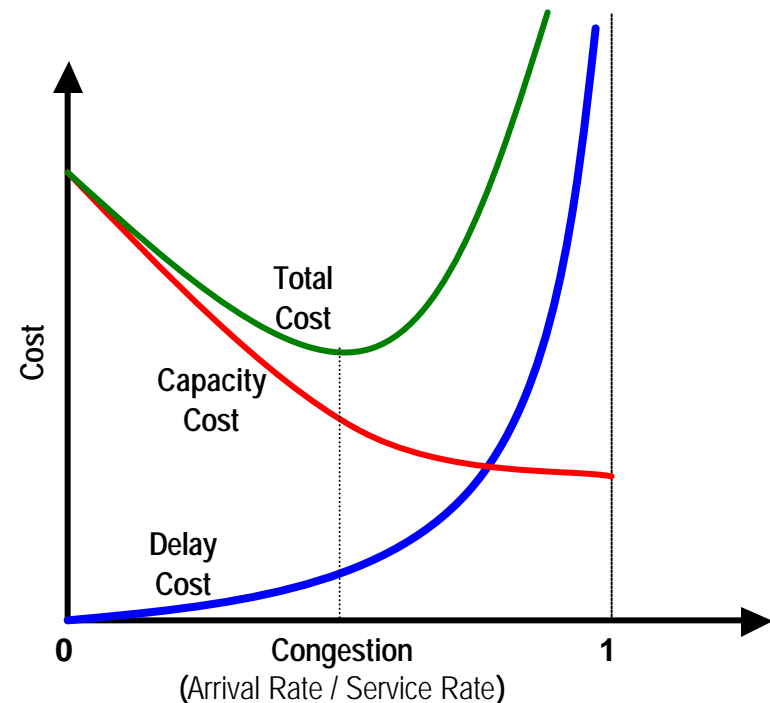
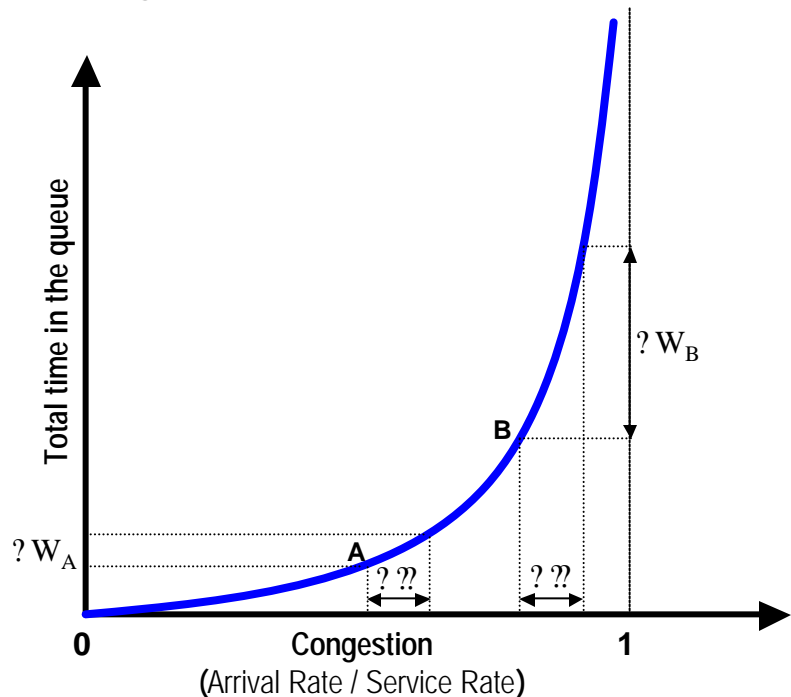


Source: Heskett and Schlesinger

Management of Queues

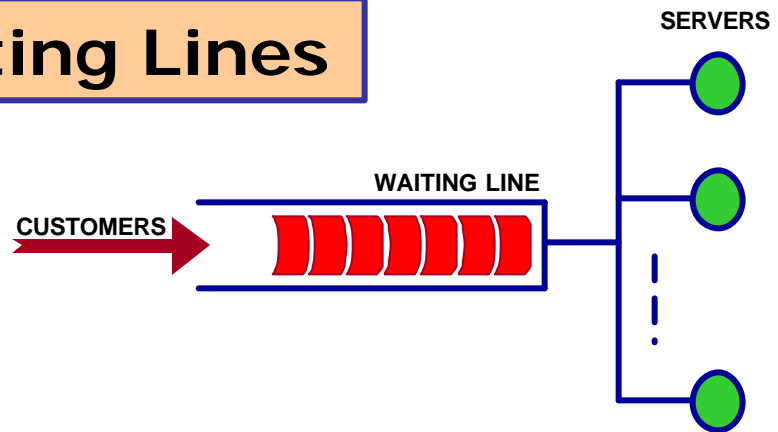
The Physics of Waiting Lines

- ✍ Number and type of servers
- ✍ Waiting time, service time, and system time
- ✍ Queue discipline
- ✍ Number of people in queue
- ✍ System utilization



Management of Queues

The Psychology of Waiting Lines



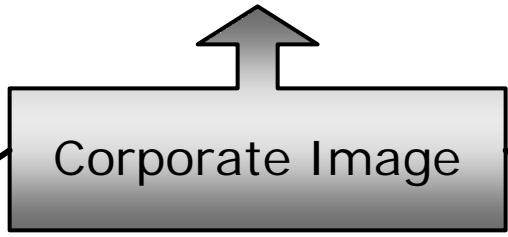
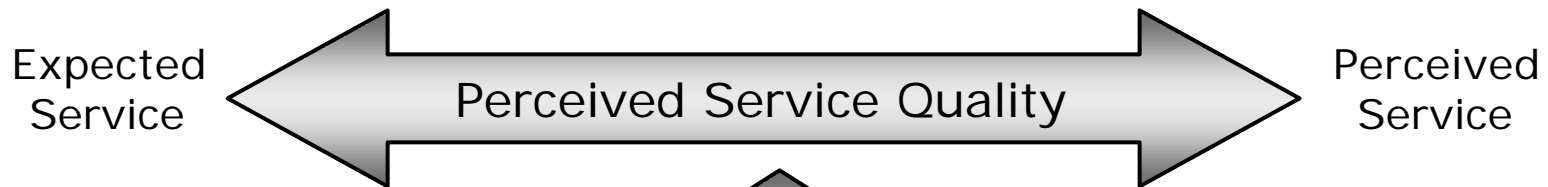
Propositions

1. Unoccupied time feels longer than occupied time
2. Process waits feel longer than in process waits
3. Anxiety makes waits seem longer
4. Uncertain waits seem longer than known, finite waits
5. Unexplained waits are longer than explained
6. Unfair waits are longer than equitable waits
7. The more valuable the service, the longer the customer will wait
8. Solo waits feel longer than group waits

Quality Control

- **Simultaneity**
 - ✍ Eliminates ability of filter for quality
 - ✍ Almost impossible to inspect even explicit characteristics of products prior to delivery
 - ✍ Integration of functions of marketing and production hinders translation of consumer perceptions into more quantifiable production terms
- Instill quality by specification, standardization, training, and motivation (keep in mind the “heterogeneity” property of some services)

Quality Control: *Perceived Service Quality*



Technical Quality

- Knowledge
- Technical solutions
- Employees' abilities
- Computerized systems
- Machines

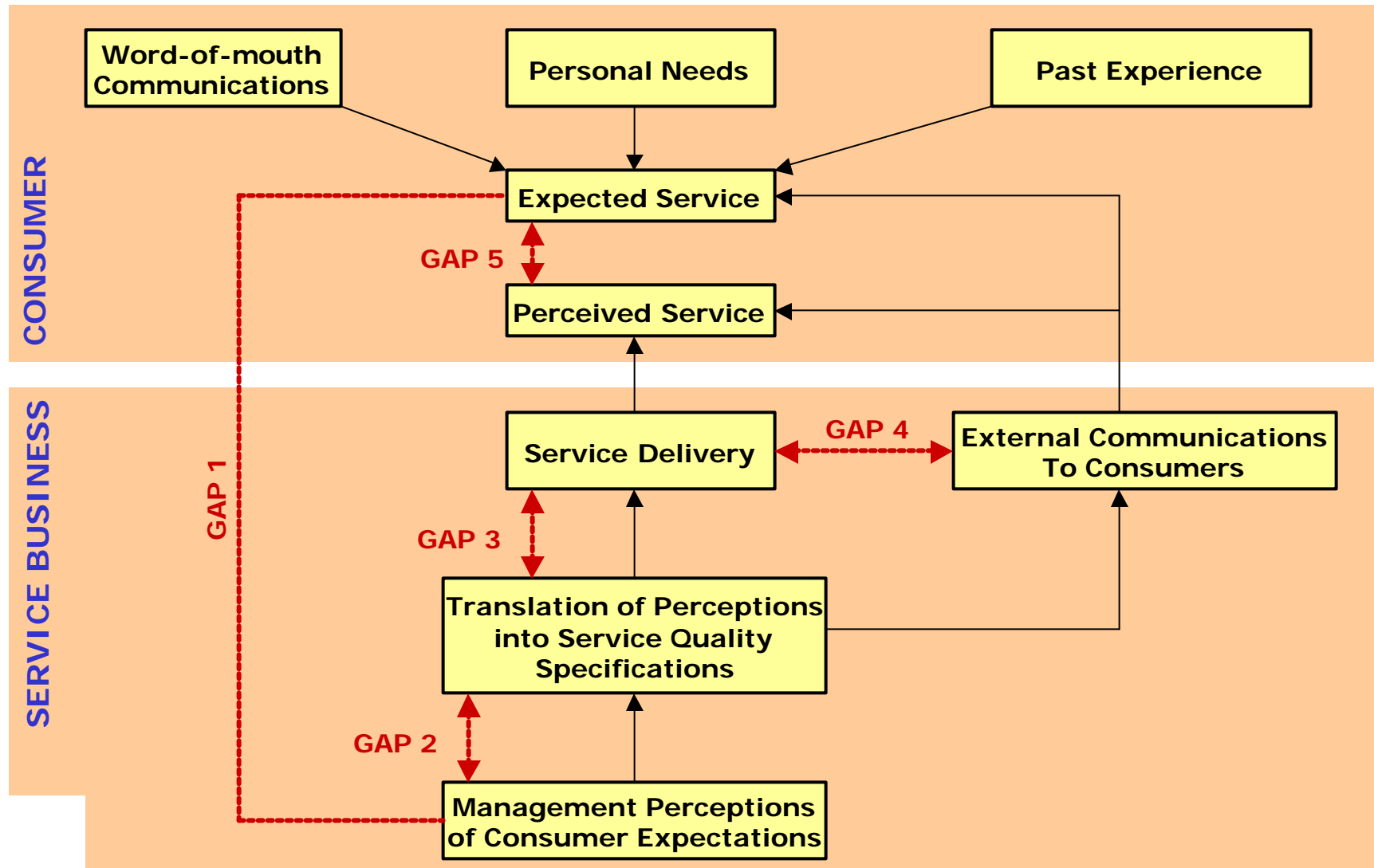
Functional Quality

- Attitudes
- Internal Relations
- Customer contacts
- Behavior
- Accessibility
- Service-mindedness
- Appearance

WHAT?

HOW?

Quality Control: *The Service Quality Model*



Quality=Perception-Expectation

Service Guarantees

- **Characteristics**
- **Attitudes**
- **What a guarantee does**
- **Higher benefits**

Characteristics

A good service guarantee is:

- ✍ **Unconditional**
- ✍ **Meaningful**
- ✍ **Easy to understand and communicate**
- ✍ **Easy and painless to invoke**
- ✍ **Easy and quick to collect**
- ✍ **Credible**

Attitudes

- **Negative**

- ✍ **“How do I minimize warranty costs while maximizing marketing punch?”**

- **Positive**

- ✍ **“The guarantee is the single most reliable way to identify operational areas needing improvement; Guarantees not acted upon are data not collected.”**

- ✍ **Money spent on the guarantees is an investment in customer satisfaction and loyalty.”**

Source: D. Hart

What a guarantee does

- ✍ **Service guarantee forces an organization to explicitly define its customers needs**
- ✍ **A service guarantee forces an organization to understand all the elements of its service-delivery process**
- ✍ **A service guarantee forces an organization to determine the root causes of its operational problems**
- ✍ **A service guarantee forces a sense of urgency on an organization**
- ✍ **A service guarantee forces an examination of vendor quality**

Higher benefits

The benefit of a service guarantee is higher when

- ✍ The price of the service is high**
- ✍ The customer ego is on the line**
- ✍ The level of the customer expertise with the service is low**
- ✍ The negative consequences of service failure are high**
- ✍ Customer's image of service quality in the industry is low**
- ✍ The company depends on a high rate of customer repurchase**

Conclusions

Service Design and Management is a critical competence for the firm

- ✍ **Concept Design & Customer Needs**
- ✍ **Delivery system design**
- ✍ **HRM: Design, Selection, Training, Motivation**
- ✍ **Consistency and Quality Control**
- ✍ **Financial and Operational Control**
- ✍ **Continuous Improvement**
- ✍ **Breakthrough Innovations**