



COLUMBIA  
BUSINESS  
SCHOOL

# *Industrialized Intimacy*

## *A Framework for Customer Service in the Information Technology Era*

**Peter Kolesar, Garrett van Ryzin and Wayne Cutler**

*January, 2001*

# *Our themes*

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- **The continuing evolution into a service economy presents the economy as a whole and individual firms with the dilemma of how to increase productivity and quality in the services.**
- **The continuing lag in service productivity growth as compared to manufacturing is a serious prosperity issue.**
- **That customers continue to perceive service quality as poor overall is another issue.**
- **Information technology is not an automatic answer --as our Sloan Foundation sponsored research on productivity in financial services has shown.**
- **We believe that a service strategy that we have called “industrialized intimacy” sometimes offers answers to these issues.**

# ***A Reference***

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- **The concepts contained in this presentation were first published in:**

**Peter Kolesar, Garrett van Ryzin and Wayne Cutler,  
“Creating Customer Value Through Industrialized  
Intimacy,” *Strategy and Business*, Issue 12, 3<sup>rd</sup>  
quarter, 1998**

# Outline

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- **The Booz Allen/Columbia Business School Service Operations Strategy Project – background**
- **Our starting point: Levitt’s “Service Factory” model**
- **Our “Industrialized Intimacy” model**
  - **concept**
  - **examples**
  - **where it applies**
  - **some operations strategy implications**

# *Project background*

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- A Columbia Business School/Deming Center industrial outreach effort by Professors Garrett van Ryzin and Peter Kolesar working a task force of senior managers from Booz-Allen & Hamilton's Service Operations Practice Group.
- The Mission: Strategy development for Booz Allen, itself
  - identify next-generation service operations strategy issues
  - team composition:
    - » 10 Booz Allen personnel --world-wide
    - » 2 Columbia faculty: Our mission .... Define "*The Black Factory*"

# *Our starting point: Levitt's service factory model (HBR '72, 76)*

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- **The Problem:** Comparing manufacturing and service circa 1972, there was a big quality and productivity gap.
- **Levitt's diagnosis: a lack of technocratic thinking**
  - **“service as servitude”**

solutions lie in the “performer of the task rather than the task itself.” *We see service as invariably and undeviatingly personal. This diverts us from seeking alternatives to the use of people.*
  - **failure to exploit manufacturing techniques**

systems, processes, standardization, work method, automation, measurement, control, etc.

# ***Limits of “Servitude.” Thinking of service brings out ancient paralyzing thinking***

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## **Service evokes:**

- **Personal ministrations**
  - **Gallantry, charity, selflessness**
  - **Obedience, subordination and subjugation**
  - **People serve out of mission (priests) or out of compulsion (maid)**
  - **Higher status service: the church, the army -- one behaves ritualistically not rationally**
  - **Lower status: service (maid, cleaning lady) one simply obeys**
  - **Neither presumes independent thinking. The most that can be expected is to “try harder”**
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- ***We see service as invariably and undeviatingly personal. This diverts us from seeking alternatives to the use of people.***

# *A Contrast: the manufacturing management style*

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- **We ask:**
  - What tools to use -- old or new?
  - What skills are required?
  - What processes are best?
  - What organizational arrangements are needed?
  - What incentives produce results?
  - What controls and audits are needed?
- **Production and results orientation, not on attendance on others**
- **Relations are business-like, devoid of invidious rank or self.**
- **To improve in manufacturing we don't think of:**
  - improving individual performance
  - of exerting greater effort
  - expanding commitment or loyalty or grater assertion of dependence
- **We do:**
  - Find entirely new ways of performing the task or
  - Actually change the task itself
  - Look for solutions inside the tasks themselves, rather than in the performers of the tasks



# *McDonald's Example: Systematic substitution of equipment for people, carefully planned use of technology*

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## **Flawed explanations of McDonald's success:**

- Dedication of independent entrepreneurs
- Franchised financial structure
- Geographical distribution

## **An operations explanation:**

- Rapid product delivery
- Uniform high quality
- Obvious cleanliness
- Orderly atmosphere
- Cheerful courtesy

## **Some operations details**

- Pre packed and measured materials
- Plant design that permits no variation: no space or equipment for alternatives
- No employee discretion in food formulation or preparation.
- "Discretion is the enemy of order, standardization and quality"

## **French fries process:**

- Precut precooked frozen materials
- Exact size and location of fryer: small frequent batches, overfill but no spill, scoop and bags
- understanding potato properties, engineering of cooking process, supply chain management

# *Levitt's conclusions*

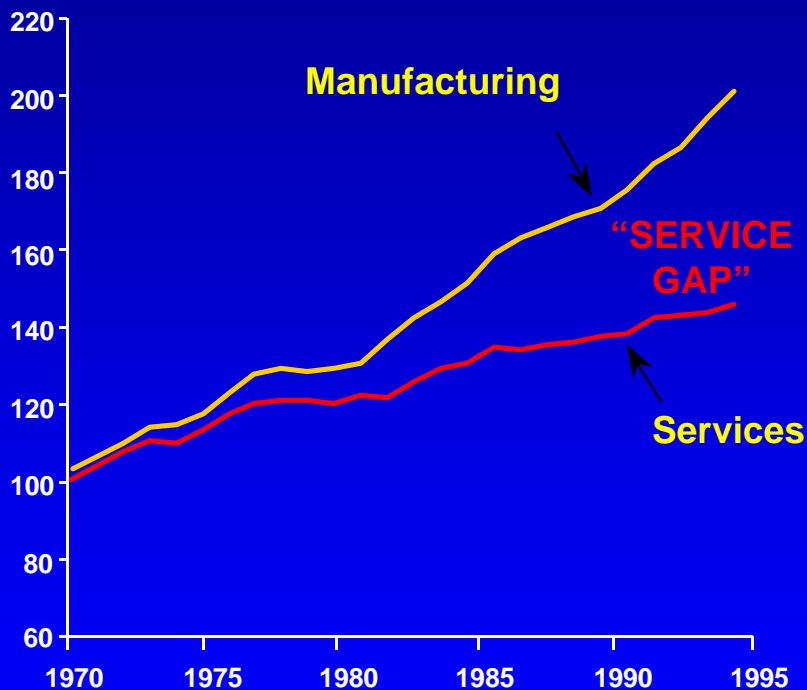
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- **Customer service is not discretionary -- it is required for getting and holding business**
- **If customer service is treated like manufacturing in the field, it will get the planning, control and automation and audit and review required for performance improvement and quality control**
- **Also technology, labor saving and systems approaches will be implemented**
- **Service executives must think of themselves as manufacturing a product and ask:**
  - **What technologies and systems can be used here?**
  - **How can the product be designed so that we use systems instead of serendipity, machines instead of people?**

*So, in the more than twenty years since these ideas appeared, what has happened?*

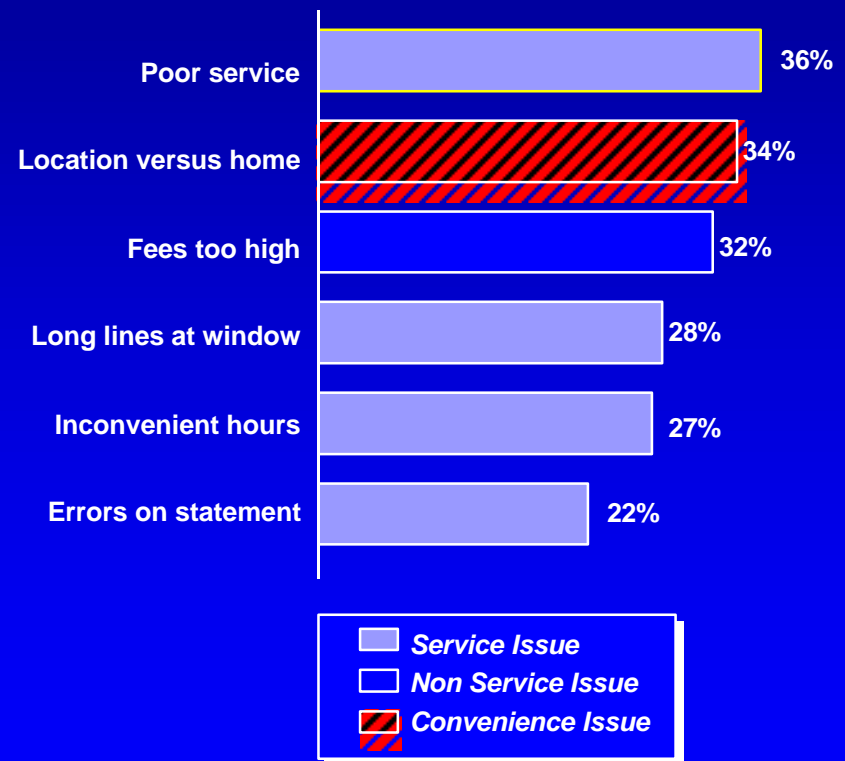
# The "service gap" persists ...

**LABOR PRODUCTIVITY (OUTPUT PER HOUR, 1970=100)**



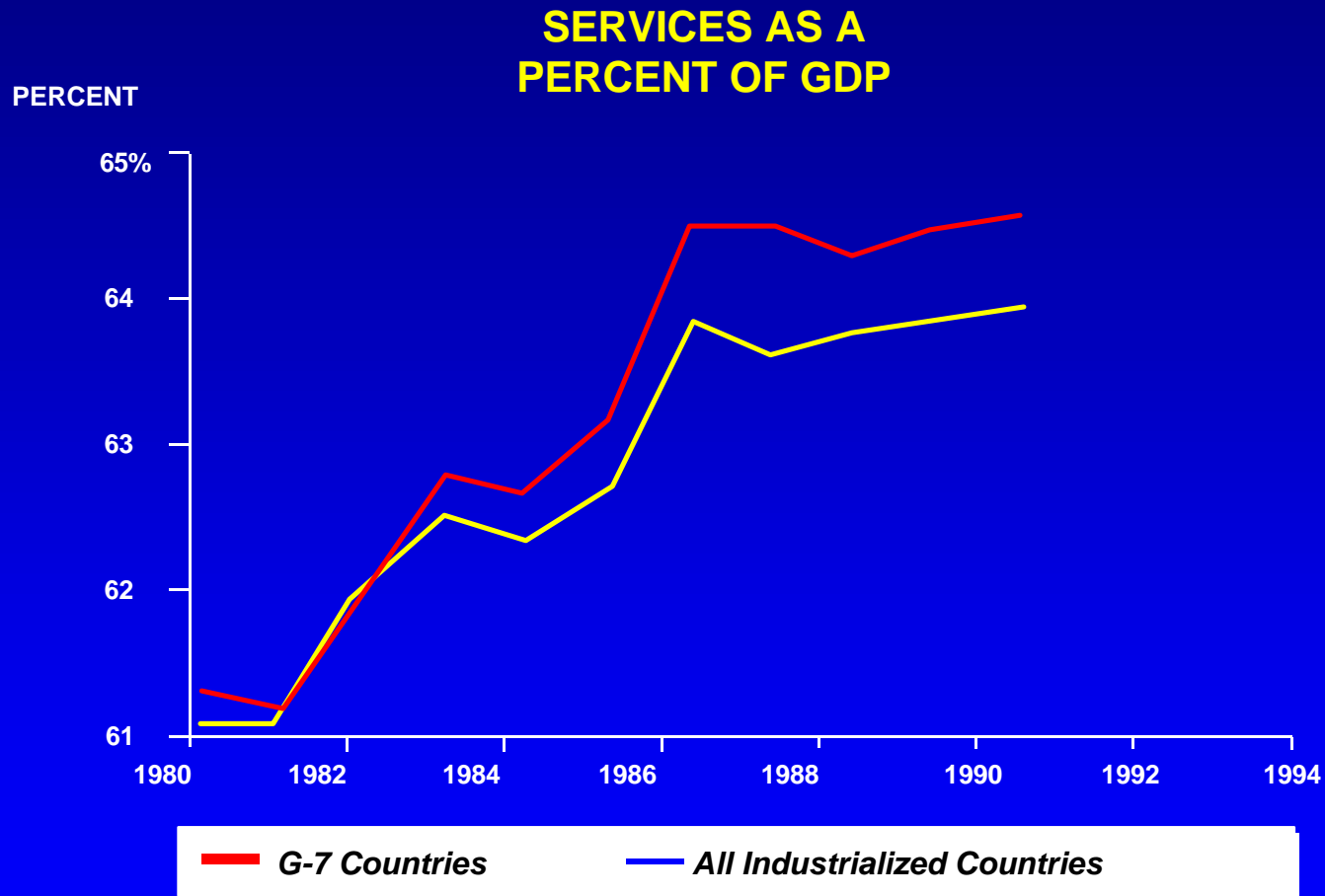
Source: US Bureau of Labor Statistics

**MAIN REASON FOR SWITCHING BANKS (PERCENT OF RESPONDENTS)**



Source: Customer interviews, BA&H Analysis

**... and services are more important than ever ..**



*Note: Includes all industries except Natural Resources, Construction, Manufacturing and Utilities*

*Source: DRI McGraw/Hill, World Bank, World Book; analysis*

## ***We conclude: the traditional service factory model***

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- **Is good at achieving some objectives like efficiency (low cost), economies of scale, consistency and speed . . .**
- **Appears to have a limited domain of application**
- **And is less effective on other critical service dimensions ...**

## *A few questions we asked ourselves:*

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- **What is service, anyway?**
- **How is service delivery different and tougher than manufacturing?**
- **What is service quality?**
- **What are the critical components of a service value proposition?**

# *What is service, anyway?*

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- **Service** = *“doing the customer’s work”*
- **Service** = *“providing facilities on behalf of the customer”*
- **Some service industries:** health care, hospitality, travel & transportation, education, finance, consulting, insurance, communication, police, fire, retailing, . . .



# *Service quality and customer satisfaction dimensions*

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- **Fulfillment of the mission -- getting the work done right.**
- **Added dimensions:**
  - » **Direct customer contact/communication and co-production**
  - » **A requirement for customer understanding/empathy**
  - » **It is difficult to define an objective reality of what is delivered. Managing the customer's perceptions of the work and its value are critical.**
  - » **Flexibility/personalization of the work and of the perceptions delivered is often needed.**
  - » **Problem anticipation/and problem recovery are issues. Often a bad job cannot be redone, reworked or scrapped.**

*The “Service Factory” model is often self-limiting. It misses what we call “intimacy” requirements!*



## *The Taxed Service System: What makes service operations tough?*

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- **Outputs are less tangible**
- **Customers' desired outputs are more variable**
- **Production and consumption occur simultaneously**
- **Facilities are often decentralized**
- **Co-production with the customer**
- **Service production is more employee intensive**

# *Industrialized Intimacy: Our Thesis*

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- Levitt's Service Factory Concept is exactly right -- as far as it goes. But, it risks throwing out the baby with the bath water.
  - Service -- doing the work of the customer is fundamentally humanistic.
  - The Service Factory has seen limited applicability, mostly to mundane services .
- "Customer contact" is often central to delivery of real value and customer satisfaction.
- The two extremes must and can be merged: hence our term "*Industrialized Intimacy.*" How to do it ?
  - By imagining it is possible
  - By using the new information, computing and communications technologies.

# *Industrialized Intimacy*

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- **A service delivery strategy that exploits information technology capabilities to efficiently create and deliver appropriately familiar and customized highly valued services.**

*Customer*

*Front-line Employee*

*What the employee knows*

**Anonymous  
Service**



∅

**Intimate  
Service**



The customer's

- name, phone, company
- demographics & location

Current requirements

Service history

- past purchases
- service status
- service failures

Preferences

This service's position in the customer's value and experience chain

**DEFINITION:** **intimate**

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1) pertaining to the inmost character of a thing; fundamental, essential

2) private or personal

3) closely acquainted or associated; very familiar

4) resulting from the careful study or investigation [an *intimate* knowledge of ..]

**SYN:** **familiar**

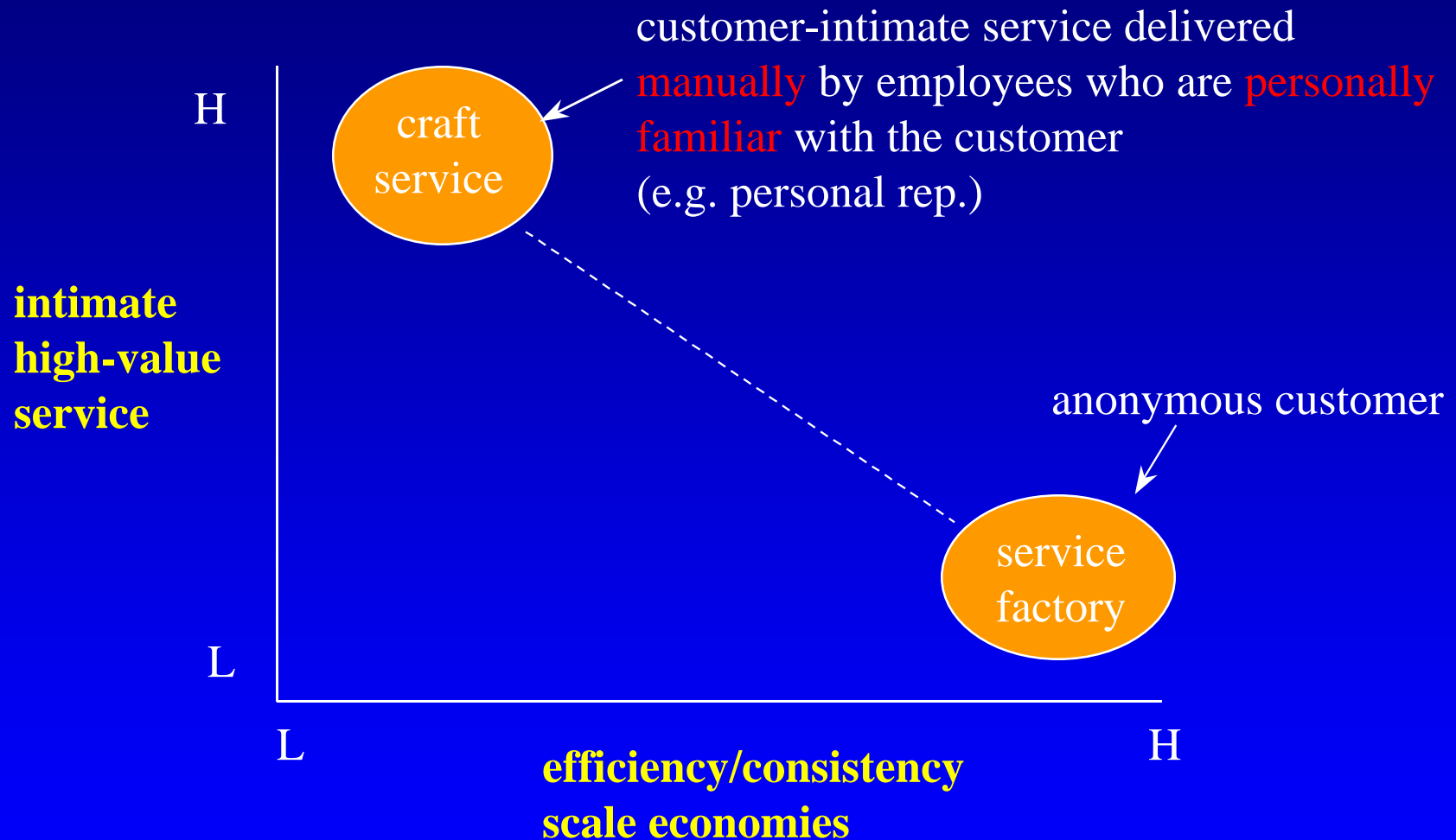
## ***Familiarity with the customer can be used to improve service delivery by***

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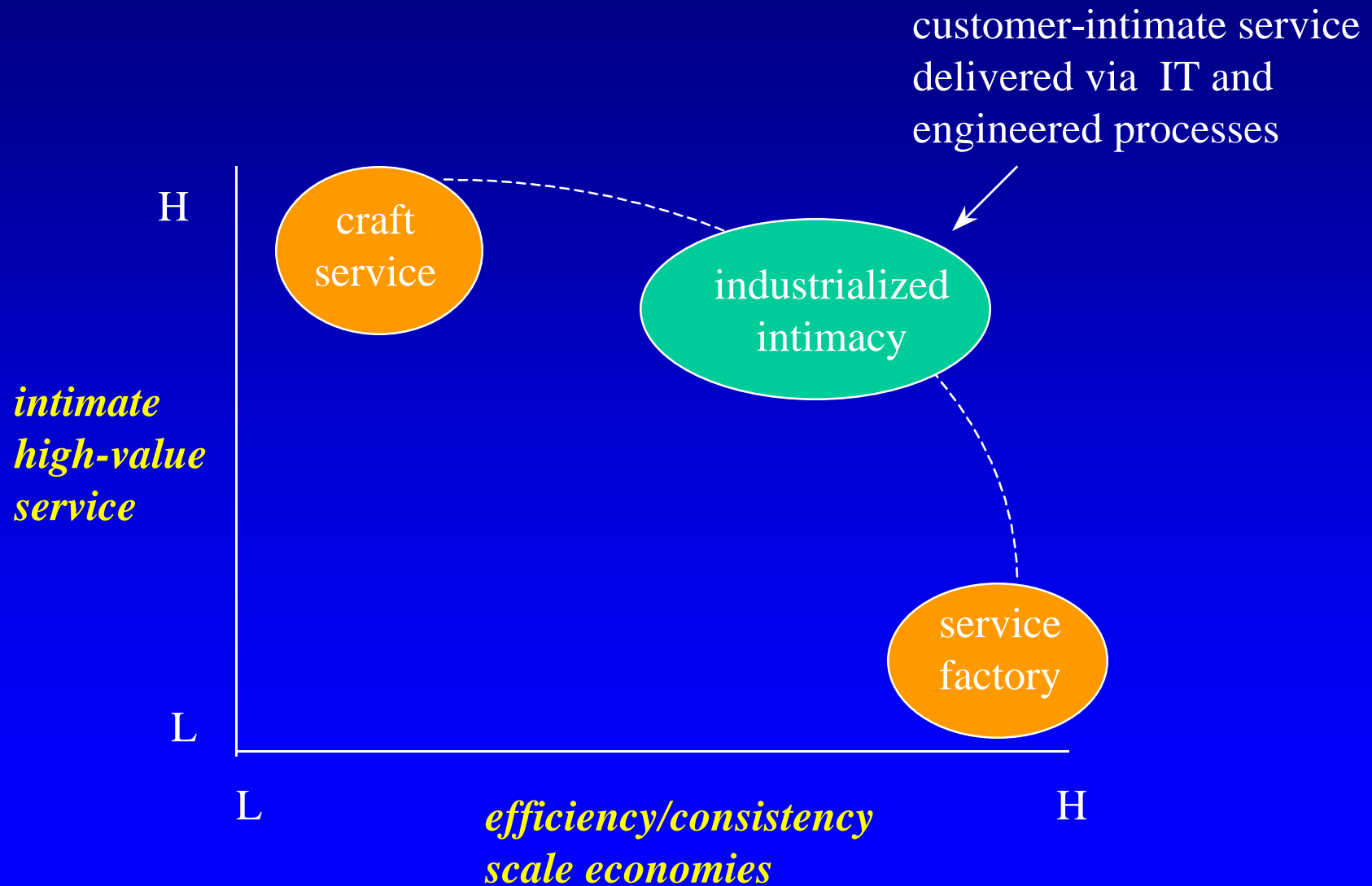
- **Customizing delivery:** give the customer what is really wanted, and as an additional benefit eliminate rework (service errors.)
- **Increasing perceived quality**
  - personalization
  - empathy/caring
  - trust/confidence
- **Eliminating work**
  - simplification, elimination of the unnecessary or redundant
  - recalling automatically the customer's service status/history/identifying or distinguishing data
  - communicating that data, instructions and needs through the system as needed
- **Better follow-through** (see this transaction is part of a larger sequence of need fulfillment)
- **Anticipating needs** (proactive servicing)
- **Improving service recovery** (what is the best way to make it right?)

**How can this agenda be implemented operationally?**

# A historical technology trade-off

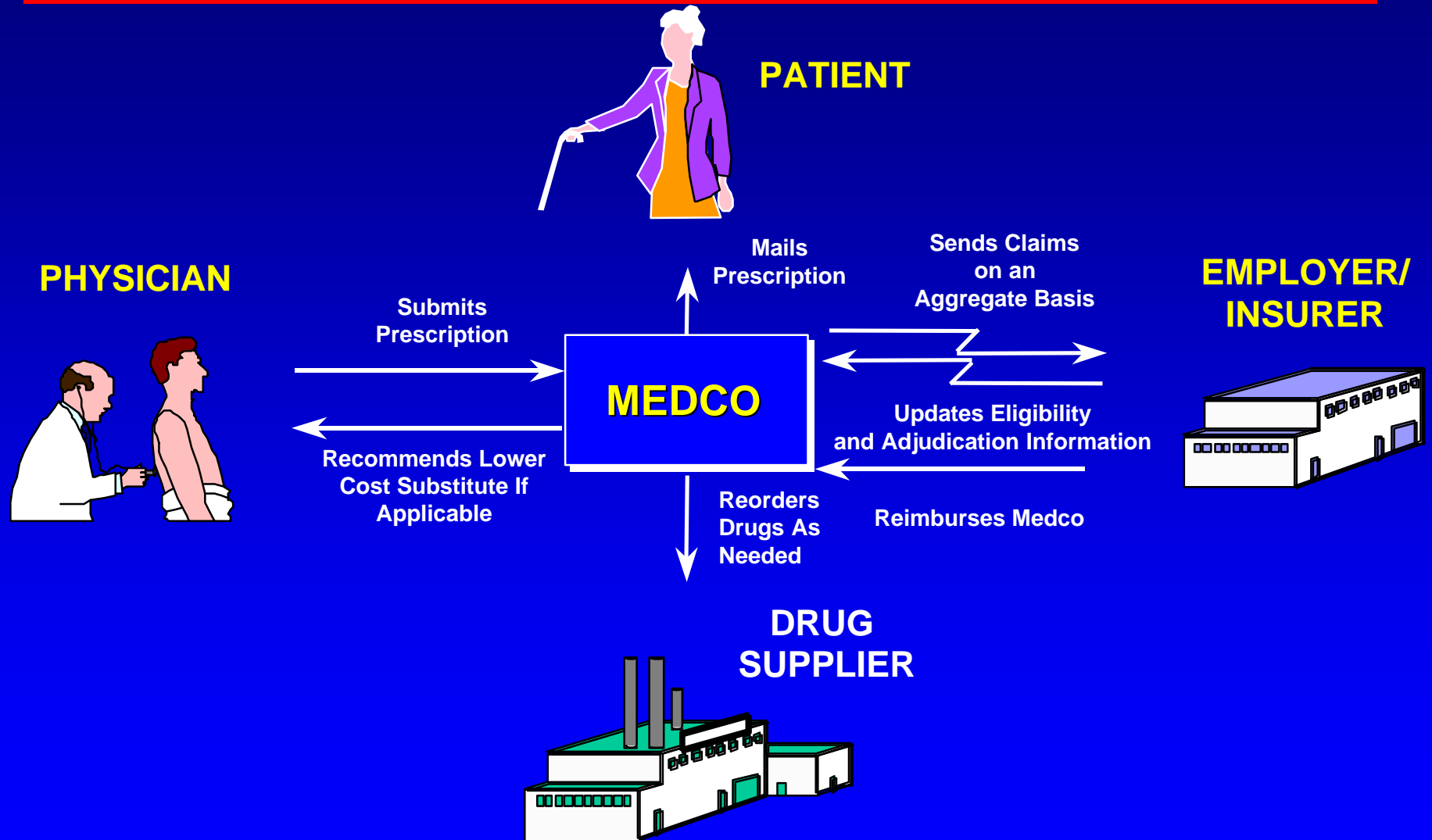


# IT offers a new design possibility: Industrialization of Intimacy





# Example: *Merck / Medco*



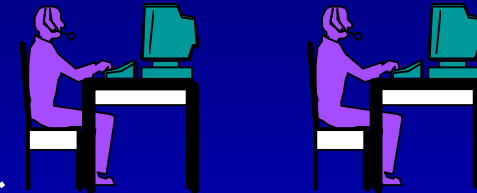
# Example: *Ritz Carlton Hotels*

**Customer**



Efficient reservation  
and identification of  
service preference

**Reservation Center**



**Database**

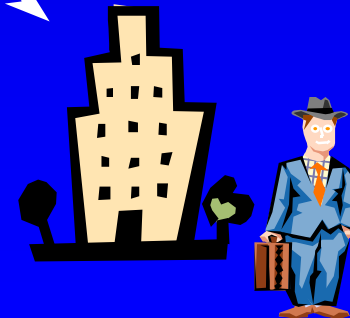


COVIA System  
- personal data  
- guest history  
- guest preference

Morning line-up to  
distribute guest info. to  
front-line employees



Preference and service  
incidents recorded



# *The system creates an “illusion” of intimacy*

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- **Customer’s Perception: my service provider is ...**
  - knowledgeable, involved, responsive, caring and competent
- **The Reality: no single person in the organization really “knows” this customer**
  - it is the “**system**” that knows
  - it is the “**system**” that makes it possible/easy/obligatory to be responsive, caring, competent,..
- **Is this “bad,” “deceptive,” or “improper”? Maybe, but ..**
  - The service is seamless, efficient, effective, consistent and convenient.
  - Customers want the company/server to care!

# *Isn't this just mass customization in disguise?*

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- **Mass customization**
  - “infinite variety”
  - customization/tailoring delivery
  - micro-marketing (segment of one)
  - applies to products & service
- ***Industrialized Intimacy***
  - includes increased variety/customization, but it is only one dimension of improvement
  - also uses knowledge of the customer to improve delivery processes
  - and has other benefits (streamline servicing, better communication, improve perceived quality, anticipate needs, recovery, etc.)
- ***Industrialized Intimacy* targets some of the unique (and often vexing) requirements of service work**

## ***An industrialized intimacy strategy makes sense when there is:***

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- **A potential to use customer knowledge to improve servicing exists.**
- **Varied & multiple contact with customers**
  - **over time (long-term relationship, 24 hr/day, 7 day/wk. operation)**
  - **multiple locations (high geographic diversity)**
  - **multiple channels (call center, branch, internet)**
  - **multiple product lines**
- **High labor turnover**
- **Strong pooling economies**
- **Growth potential through expanding the scope of service**

# ***Industrialized Intimacy Design Principles***

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- 1) **Design** based on a long-term, life-cycle view of customer relationship
- 2) **Engineer** customer knowledge into the service delivery processes
- 3) **Engineer** competency into the delivery process
- 4) **Leverage** self-service options to improve delivery
- 5) **Understand** the customer's total service needs and strive to satisfy them. View this service as part of a larger sequence of servicing opportunities -- upstream and downstream.
- 6) **Strive** for "once-and-done" servicing.
- 7) **Provide** customer-defined (**selected**) features and flexible pricing (mass customization).
- 8) **Integrate** the entire enterprise to support the strategy including the technology, systems & facilities, and culture.

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# *Operations Strategy Implications*

# *Technology capabilities*

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- **technology management**
- **database management**
- **communications networks**
- **“expert” real-time translation of customer data**
- **integration across channels**
- **yield management**
- **employees training**



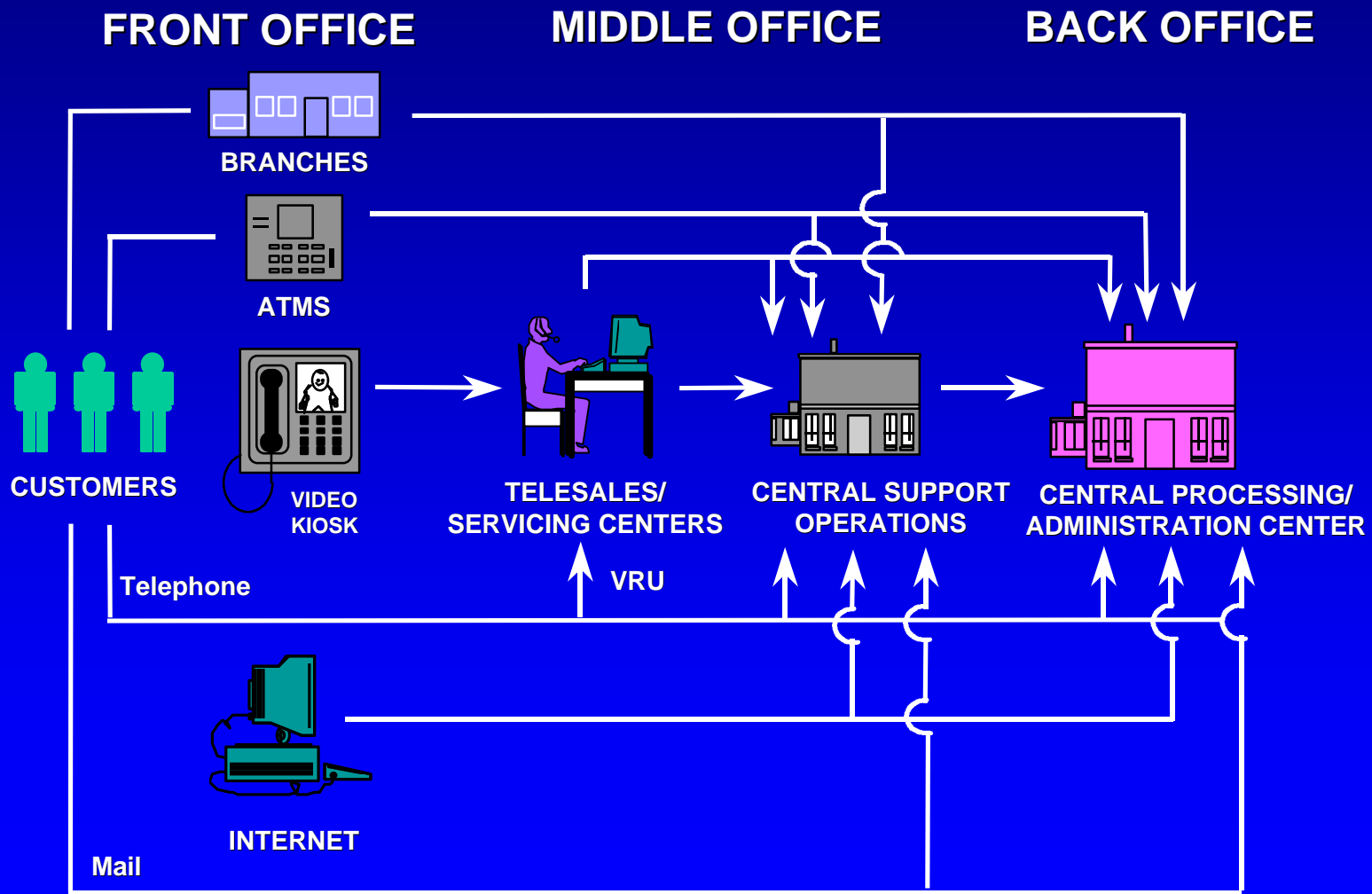
# *Broad organizational design issues*

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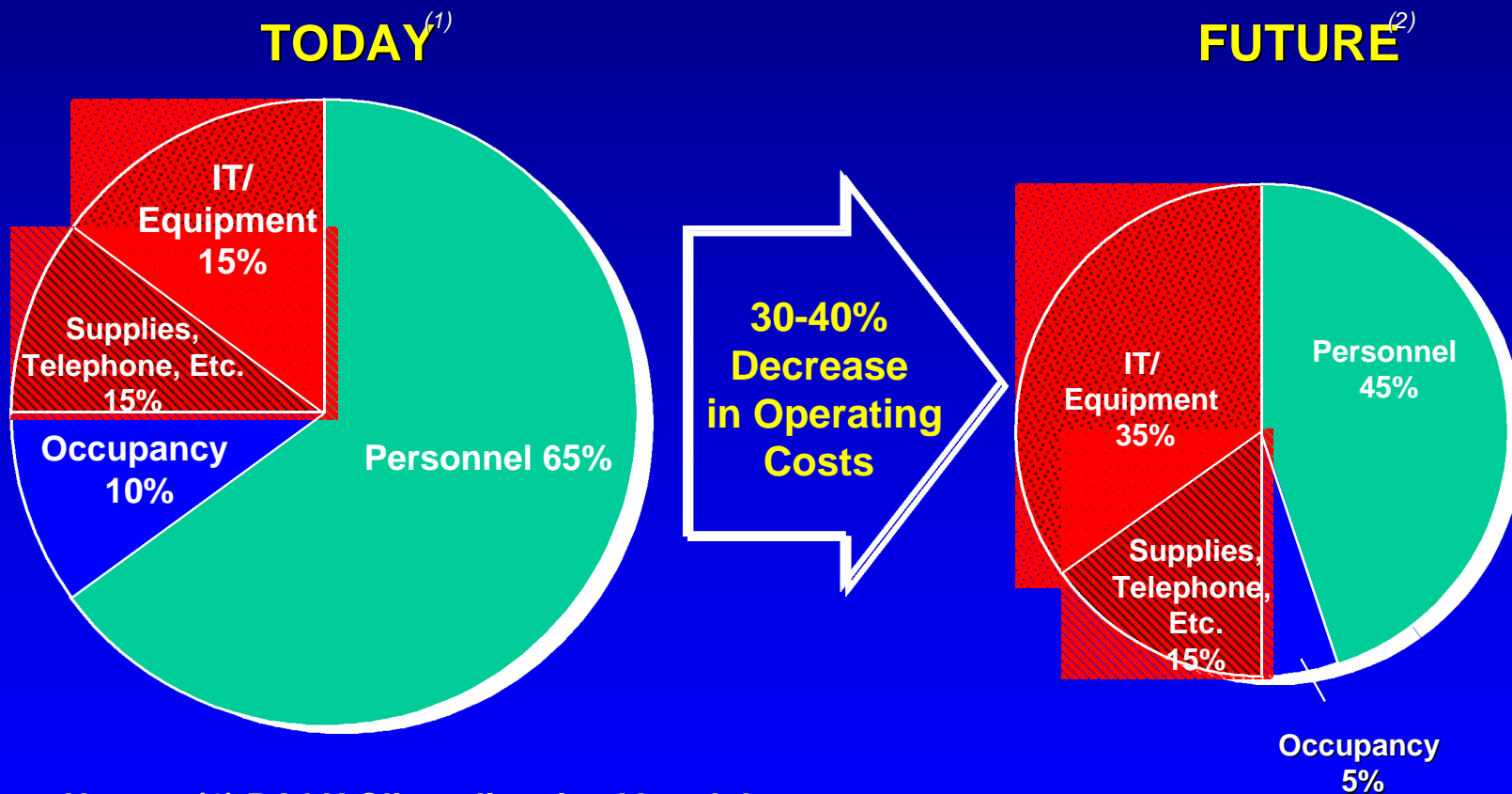
To implement industrialized intimacy well probably requires changes to:

- **Processes and technology**
- **People and their skills and behaviors**
- **Responsibility/authority structure and rules**
- **Measures and rewards**
- **Corporate values and culture**

# A more complex operations network



# Increased capital intensity



Notes: (1) BA&H Client disguised breakdown  
(2) BA&H Estimate

# ***Caution: A new information hazard, invasion of privacy***

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- **When you do business with us any information about you that we obtain is ours to use as we see fit**

**Amazon.com policy**

“ .. as the free-flowing exchange and exploitation of information is being celebrated as the main engine of economic prosperity into the next century, individual privacy is looking more and more like an endangered species”

*NY Times, p. A1, 6/12/97*

- **There are parallels to the hazards of the early industrial revolution.**

**child labor**

**industrial heath & safety**

- ***In the final analysis firms have a long-run interest in gaining and maintaining the trust of customers.***

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***The End***