

## INFORTE | IT as a Strategic Weapon



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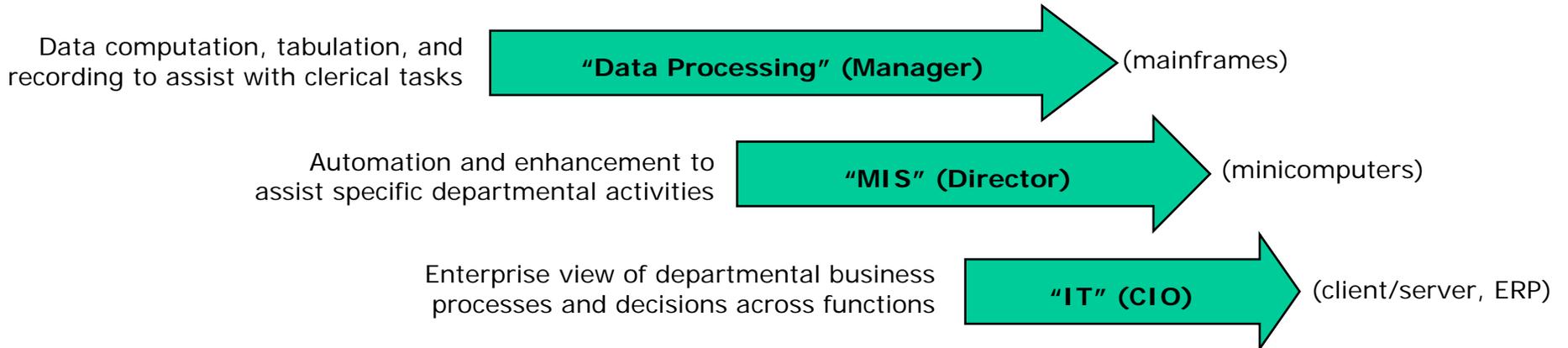


This presentation draws on original ideas from Inforte, joint research with Professor Michael E. Porter and Inforte, and from Professor Porter's books and articles, in particular, Competitive Strategy (The Free Press, 1980), Competitive Advantage (The Free Press, 1985), On Competition (Harvard Business School Press, 1998), and "Strategy and the Internet" (Harvard Business Review, March 2001) where Inforte was a contributor.

Many executives view IT as being **strategic** and able to support and reinforce **sustainable competitive advantage**...

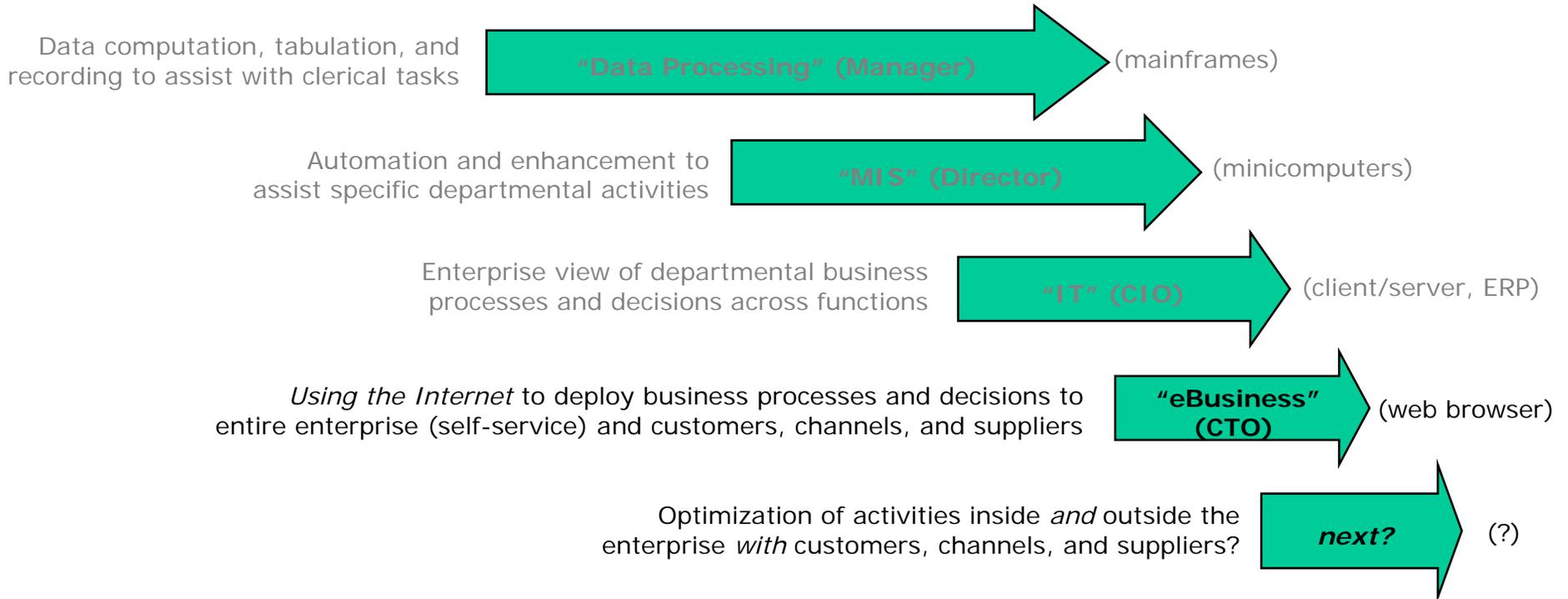


...however, the heritage of IT has been **almost exclusively** focused on operational efficiency...

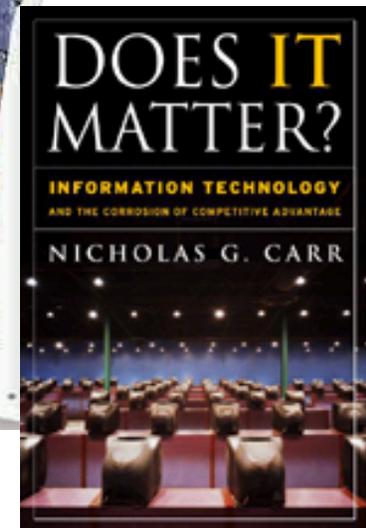


...until recently, with the introduction of Internet technologies.

- Since applications can now be flexibly deployed inside the company (to all employees) **and** can reach customers, channels, and suppliers, IT is being viewed more and more as **strategic**.



- If soldiers on the field of battle have the same weaponry, how can that weaponry provide one soldier an advantage?
  
- Summary of thinking:
  - **IT has become a commodity.**
  - Because IT is ubiquitous, **focus on risks** rather than strategic advantages.
  - **The greatest risk is overspending** and putting your company at a cost disadvantage.
  - **Follow, don't lead:** hang back from the cutting edge, buying only after standards and best practices solidify.





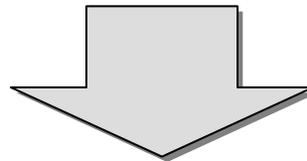
- **IT changes industry structure** and, in so doing, alters the rules of competition.



- IT creates competitive advantage by **giving companies new ways to outperform their rivals.**



- **IT spawns whole new businesses**, often from within a company's existing operations.



*So how can we best use IT as a strategic weapon?*

# INFORTE | What is Strategy?



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- The central goal of a firm must be **superior long-term return on investment**
- The fundamental unit of strategic analysis is the **industry**
- Company economic performance results from **two** distinct causes:



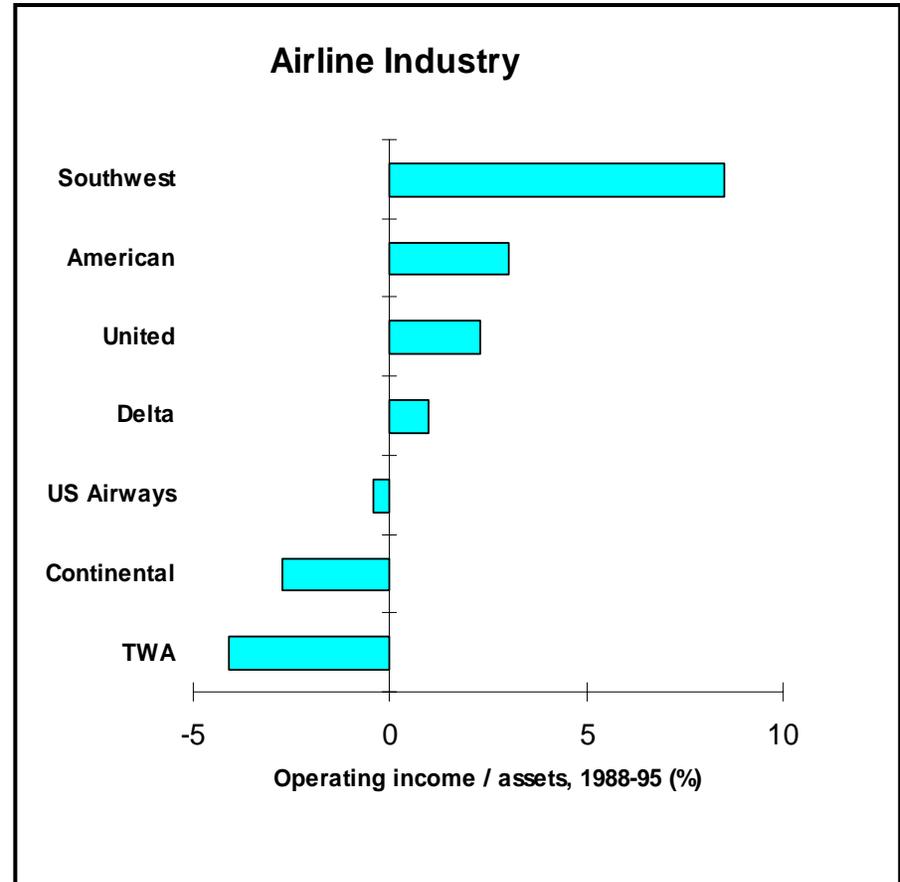
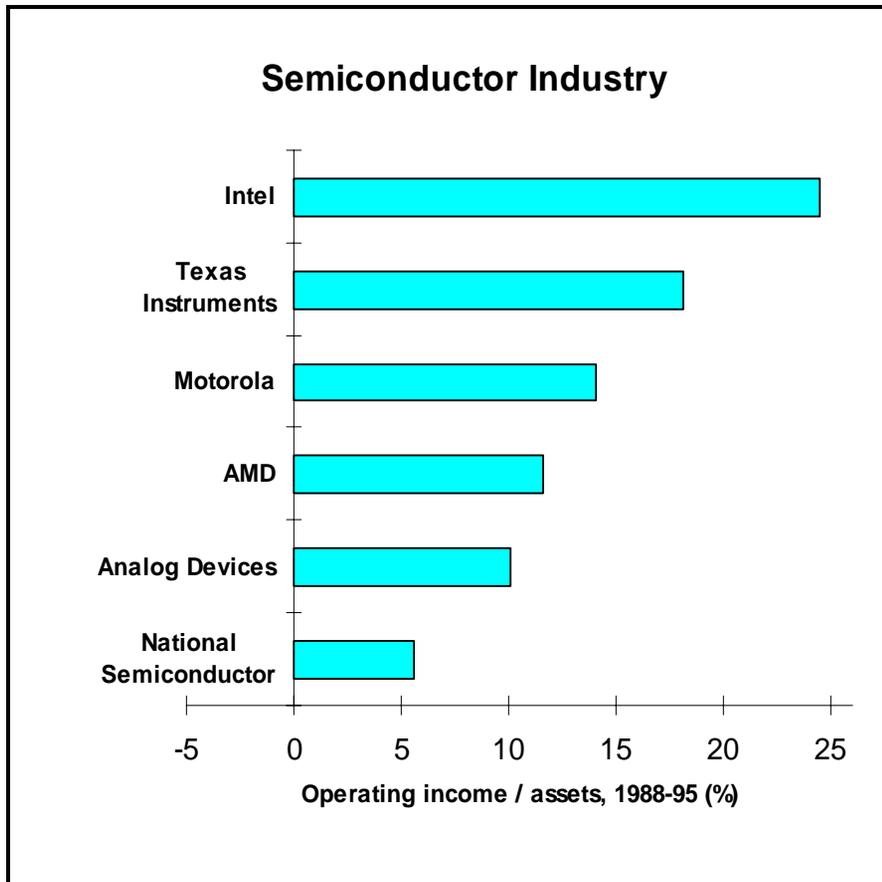
- *Rules of Competition*



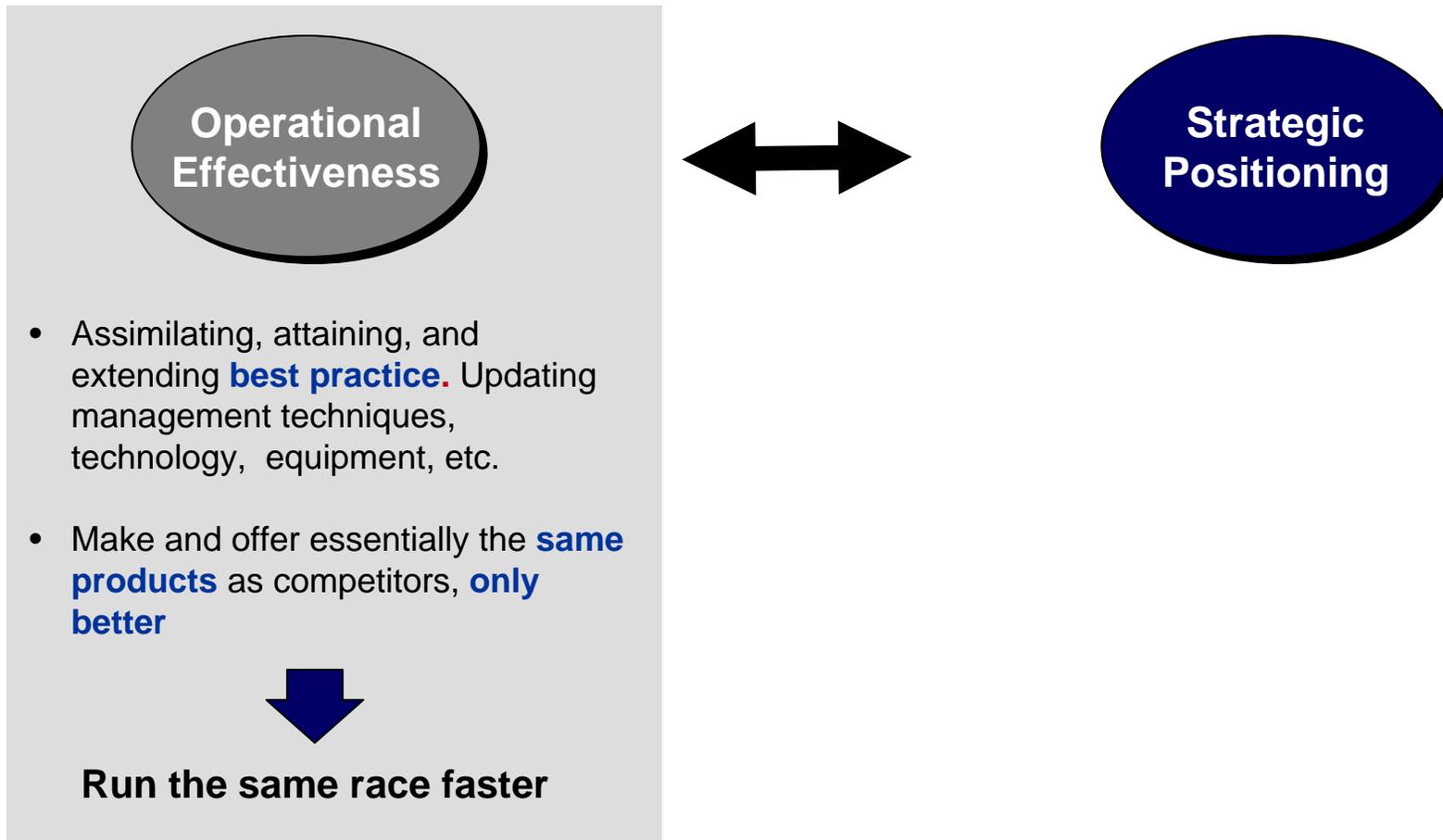
- *Sources of Competitive Advantage*

- Strategy must encompass **both**

Differences in Profitability **Within** Selected Industries, 1988-95



Source: Pankaj Ghemawat and Jan W. Rivkin, "Creating Competitive Advantage"

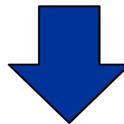




Operational  
Effectiveness

- Assimilating, attaining, and extending **best practice** in activities by
- Employing the most up-to-date equipment, inputs, IT, and management techniques to improve products and processes
  - e.g., Total Quality Management, time-based competition, lean production, benchmarking, Activity-Based Costing, re-engineering, learning organization, change management, Six Sigma

- Eliminating waste, defects, and delays



- Requires continuous organizational improvement



Operational  
Effectiveness

- Improving operational effectiveness is necessary to achieving superior profitability, but it is **not sufficient**
  - Absolute but not relative improvement
  - Competitive convergence



- Assimilating, attaining, and extending **best practice**. Updating management techniques, technology, equipment, etc.
- Make and offer essentially the **same products** as competitors, **only better**



**Run the same race faster**

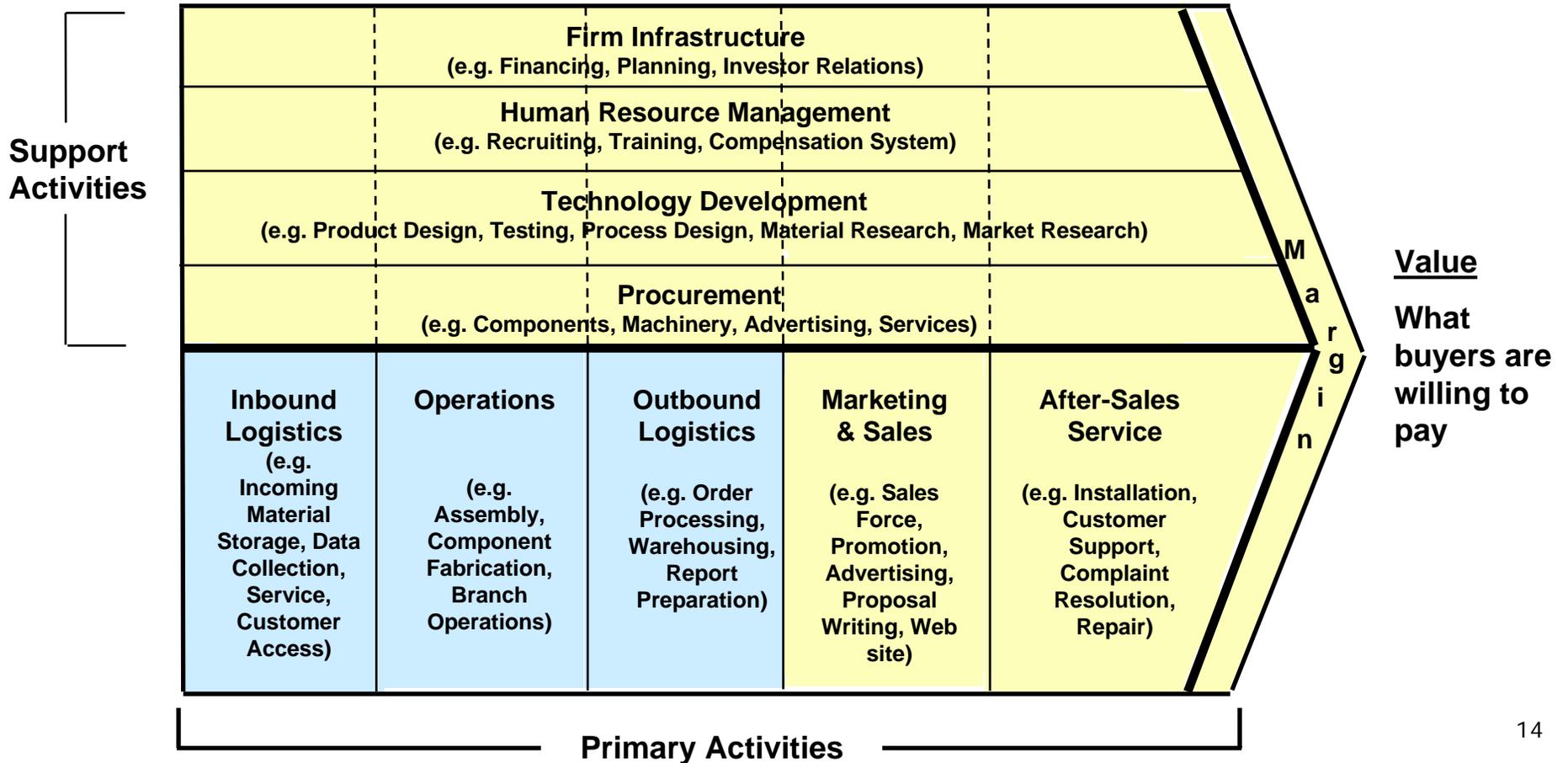
- Creating a **unique** and **sustainable** competitive **position**
- Focusing on a **distinct** combination of **activities**



**Choose to run a different race**

1. Different desired mix of value      2. Different value chains

Value Chain Representation of *activities within a firm* to show how value is produced



**Mix of Value**

- Mild, residue-free soap formulated for pH balance

**Activities**

- Eleven ingredient formulation to minimize skin irritants
- Two-layered packaging
- Slow, controlled molding process to ensure quality
- Distribution only through drugstores or the drug section of combination stores
- Premium price
- No/few price promotions
- Detailing to the medical community
- Attendance at dermatology conferences
- Fact-based consumer ads
- Advertise in medical journals
- Advanced skin care research (Neutrogena SkinCare Institute)

**Customer Group**

Large corporate and institutional customers and their employees

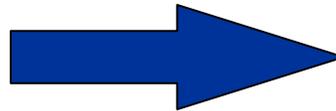
**Mix of Value**

Moderate range of standard, mid- and large capacity personal computers, PC servers, and PC workstations with low support requirements

**Set of Activities**

- Prices 15% below rivals
- Employees of institutional customers get same discount on personal machines
- Direct sale via sales force, telephone, and the Internet
- Models include most up to date components
- Build to order from a menu of options
- Assemble only, using just-in-time relationships with nearby suppliers
- Outsource maintenance and repair
- Limited R&D

**Strategy is a race  
to one ideal  
position**



**Strategy is the  
creation of a **unique**  
and valuable  
position, involving a  
**different set of  
activities****

- Choosing a unique position is necessary but **not sufficient** to create a sustainable advantage because of the threat of imitation
- Traditional thinking focuses on competitors' **ability** to imitate
- Equally, if not more important, is whether competitors **want** to imitate



- Tradeoffs are **incompatibilities between positions** that create the need for choice
- Strategic tradeoffs lie at the heart of **sustainability**

- Forgo cleaning, skin softening, and deodorizing features
- Bear higher costs through the configuration of:
  - manufacturing
  - detailing
  - medical advertising
  - skin research
- Give up the ability to reach customers via:
  - promotions
  - television
  - some distribution channels

- **“Core” Competencies**
- **“Critical” Resources**
- **“Key” Success Factors**

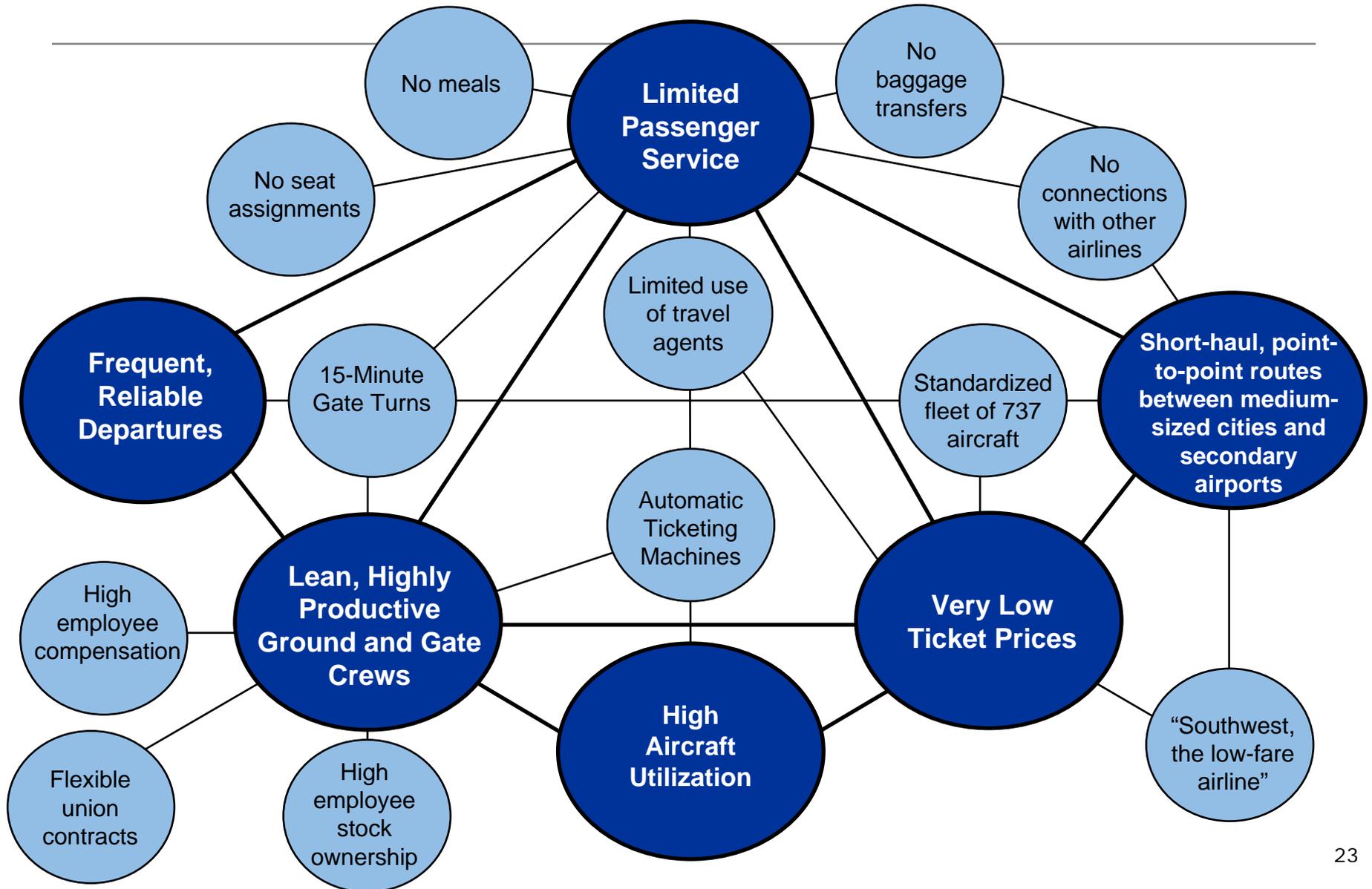
- Question: What is it about the direct sales model and mass customization that has been difficult for competitors to replicate?
- Answer: **It's not as simple as just having a direct sales force. It's not as simple as just having mass customization in plant or manufacturing methodology. It's a whole series of things in the value chain from the way we procure, the way we develop product, the way we order and have inventory levels, and manufacturer and service support. The entire value chain has to work together to make it efficient and effective.**



Source: *Forbes ASAP*, April 5, 1999

- **All Differences Across Companies' Prices and Costs Derive from the Hundreds of Activities Required to Create, Produce, Sell and Deliver Products or Services**
  - Cost is generated by performing activities (i.e. calling on customers)
  - Cost advantages are generated by performing activities more efficiently than competitors
- **Therefore, Differentiation Arises from Both a Company's Choice of Activities and How They are Performed**
  - Activities Become the Unit of Measure for Competitive Advantage
  - Overall competitiveness is a result of ALL of a company's activities, not just a select few

***Strategic Positioning is performing **different activities** from rivals, or performing **similar activities in different ways*****



### What **Is** a Strategy?

- Unique position
- Tailored activities
- Activities fit together in an integrated system
- Clear tradeoffs
- Continuity of position but consistent improvement

### What is **Not** a Strategy?

- Best practice improvement
- A vision
- Learning
- Agility
- Flexibility
- Innovation
- Restructuring
- Mergers / Consolidation
- Alliances / Partnering
- Customer Relationship Management

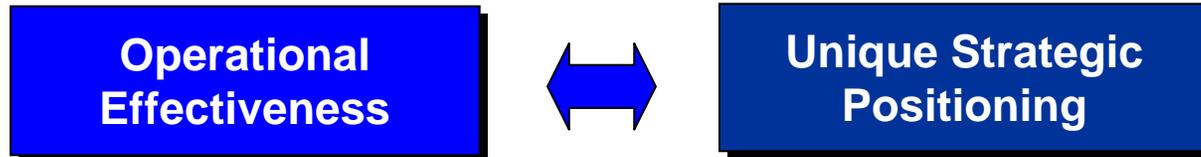
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# How can IT Support and Reinforce Strategy?

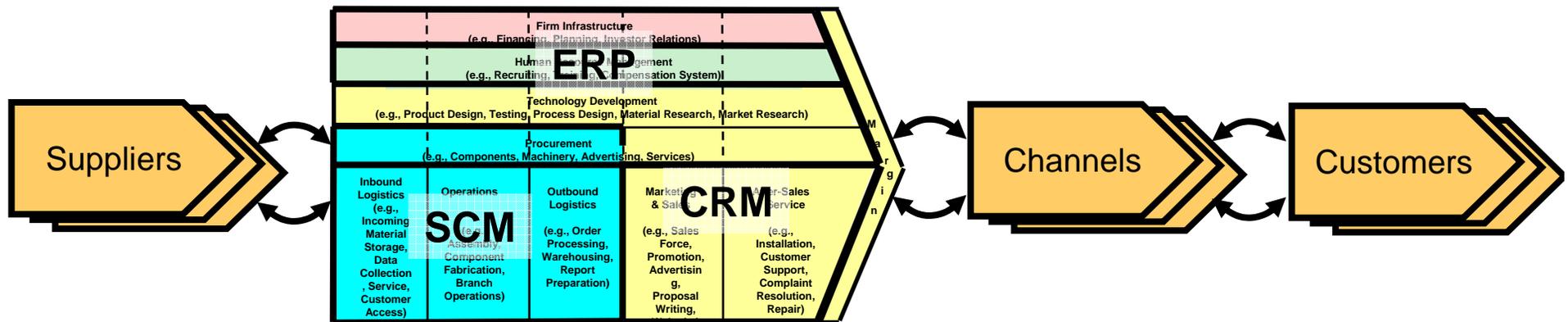


- **Dell's strategic positioning would not be possible without IT!**
- If IT doesn't matter, does that mean that any company can simply copy Dell's example?
  - Not exactly... Dell's strategic position is not easily adopted by a rival, because it requires trade-offs that competitors don't *want* to imitate!
  - Some of Dell's trade-offs: leading-edge buyers, retail sales channels, traditional business PC sales channels, buyers who won't wait for build-to-order, etc.
- What's **strategic** to one company will not be equally relevant to another.

- Competitive advantage can arise for two different reasons:

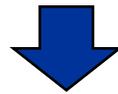


- IT may be the single most important current driver of **operational effectiveness**
  - the consequences of falling behind are severe
- Given the pervasive potential of the IT to affect activity configuration, cross-activity integration and fit, **every company must have an aggressive IT program** that examines and implements IT where and how it makes sense

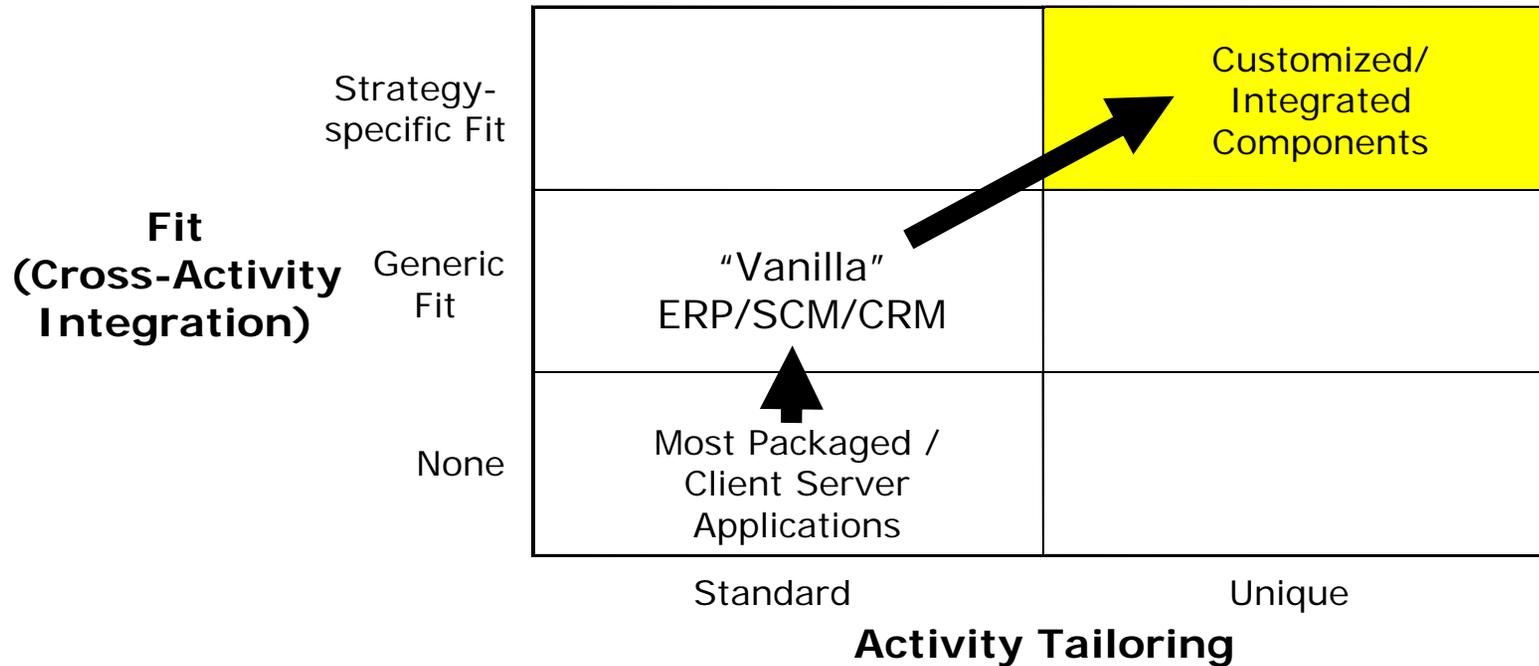


- However, operational effectiveness advantages from current Information Technologies are likely to be **less sustainable** than with previous generations of IT
  - virtually every company is **already aware** of IT and its importance
  - there are many IT standards **open and accessible** to any company
  - technology is **less proprietary**
  - Internet applications in particular tend to be **quite transparent** compared to traditional processes and products
  - features tend to be **quick and relatively easy to copy**
  - there are **lower scale thresholds** in systems development
  - a huge IT consulting industry has already developed to rapidly **diffuse best practice**

- Operational effectiveness advantages due to IT will usually be **fleeting**
  - Stand-alone examples: insurance policy calculators, airport kiosks, “vanilla” ERP, “vanilla” reporting & analytics



- The real potential of IT for profitability is as a **strategy tool**
- IT can support the **extension and deepening** of strategic uniqueness
- While previous generations of IT have contributed to competitive convergence, IT can now provide the technological platform to **tailor IT to strategy**
- Doing so will require companies to design and implement IT applications with a different philosophy than current practice



- Use of IT applications enables **fit in the activity system** that is **tailored** to strategy



- IT **can be** a powerful strategy tool **if** it is used to better tailor and integrate activities around a unique positioning
- However, **few companies** are using IT in this way

- The companies that are successful in turning the IT into competitive advantage will be those that **tailor** IT applications to their unique strategy (*CapitalOne*)
- Strategies that **integrate** IT and traditional advantages / ways of competing should prevail in many industries (*Merrill Lynch, ExxonMobil SpeedPass*)
- IT is a powerful tool for **strengthening and extending fit** in the activity system (*Safeway vs. Tesco*)
- **Integrated strategies** in which IT applications become integral to the activity system will not only **enhance uniqueness**, but will increase the **difficulty of imitation**



- Given the importance of integration with traditional ways of competing, **separating all** IT-based operations from the rest of the company often **undermines** the potential for competitive advantages
- The strategic value of IT **outsourcing** depends on fit
  - Outsourcing tends to make activities generic
  - Tailor suppliers to strategy

### Operational Effectiveness

- Lower technology implementation costs (*although not necessarily simple projects!*)
- Closer to "out-of-box" or "vanilla" configurations
- Integration limited to common supporting ERP systems (purchasing, vendor management, accounts payable, general ledger, etc.)
- Potentially *higher* organizational change management costs *if current processes need re-engineering*
- Business case primarily driven by quantitative short- and mid-term universal measures (NPV, EVA, SVA, pro forma, etc.)



**Run the same race faster**

### Strategic Positioning

- *Higher* technology implementation costs (*with sustainable returns!*)
- *Tailored* configurations to support *unique* activities
- Integration may include proprietary production or front-office systems (project management, product development, etc.)
- Potentially *lower* organizational change management costs *if supporting current processes with less re-engineering*
- Business case primarily driven by qualitative long-term support of unique cross-functional activities



**Choose to run a different race**

- ***Operational Effectiveness***
  - Necessary, but not sufficient for competitive advantage
  - IT benefits will be more fleeting than the past
- ***Strategic Positioning***
  - Support and reinforce unique positioning and the strategy
  - **This requires understanding your strategy and unique positioning**, and understanding how IT fits in to it!
  - IT in-and-of itself is probably not a competitive advantage
- For IT to be a strategic weapon, you **have** to both!

**INFORTE** | Thank you!

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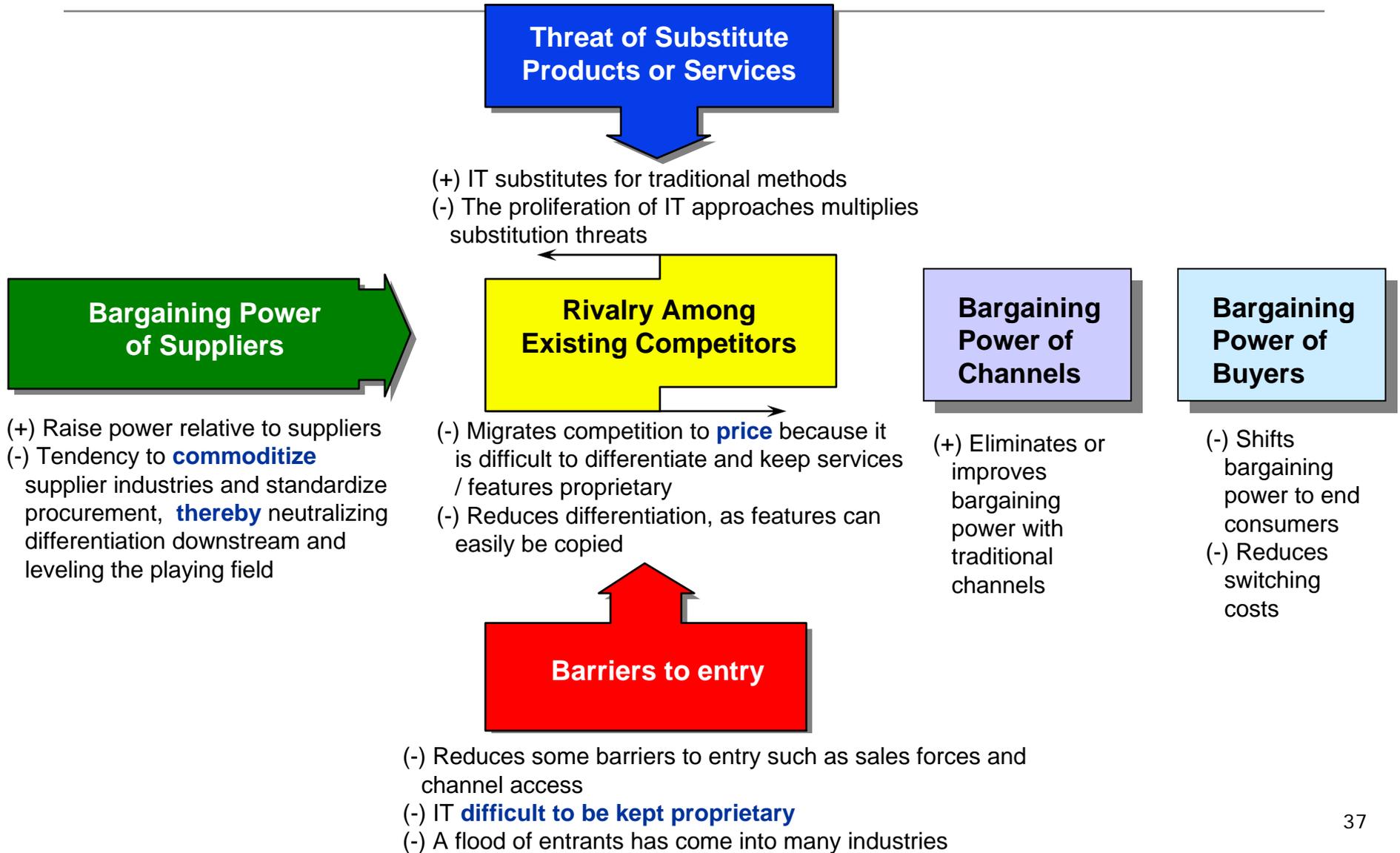
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# Five Steps to Assessing Strategic Opportunity in IT



- **Evaluate *existing and potential* information intensity of the *products and processes* of the business units.**
  
- **Value Chain Examples**
  - A large number of suppliers or customer with whom the company deals directly
  - A product requiring a large quantity of information in selling
  - A product line with many distinct product varieties
  - A product composed of many parts
  - A large number of steps in a company's manufacturing process
  - A long cycle time from the initial order to the delivered product
  
- **Product Examples**
  - A product that mainly provides information
  - A product whose operation involves substantial information processing
  - A product whose use requires the buyer to process a lot of information
  - A product requiring especially high costs for buyer training
  - A product that has many alternative uses or is sold to a buyer with high information intensity in his or her own business

2. Determine the role of IT in industry structure (examples)



### 3. Identify and rank the ways in which IT might create competitive advantage

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- **Value Chain**
  - IT is likely to effect every activity in the value chain, and likely to create new linkages among activities.
  - Identify activities that are likely to be most effected in terms of cost **and differentiation**.
  
- **Competitive Scope**
  - Can IT help the company serve new segments?
  - Will IT allow broad-line competitors invade areas occupied by niche competitors?
  - Will IT provide leverage to expand globally?
  - Can managers harness IT to exploit interrelationships with other industries?
  - Can IT help create competitive advantage by narrowing its scope?
  
- **Product**
  - Can the company bundle more information with the product?
  - Can the company embed IT in it?

4. Investigate how IT might spawn new business

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- What opportunities are there to create new businesses from existing ones?
- What information generated (or potentially generated) in the business could the company sell?
- What information-processing capacity exists internally to start a new business?
- Does information technology make it feasible to produce new items related to the company's product?

- The action plan should **rank the strategic investments** necessary in hardware and software, and in new product development activities that reflect the increasing information content in products.
- **Organizational changes** that reflect the role that IT plays in linking activities inside and outside the company are likely to be necessary.
- **General managers must be involved** to ensure that cross-functional linkages, more possible to achieve with IT, are exploited.
- **IT managers must coordinate the architecture and standards** of the many applications, as well as provide assistance and coaching in systems development... **otherwise the benefits will be lost.**
- **IT can help in the strategy implementation process**, with reporting systems tracking progress toward milestones and success factors, measuring activities more precisely and helping motivate managers to implement strategies successfully.