

GOVERNANCE OF INFORMATION TECHNOLOGY (IT)

Chapter 6

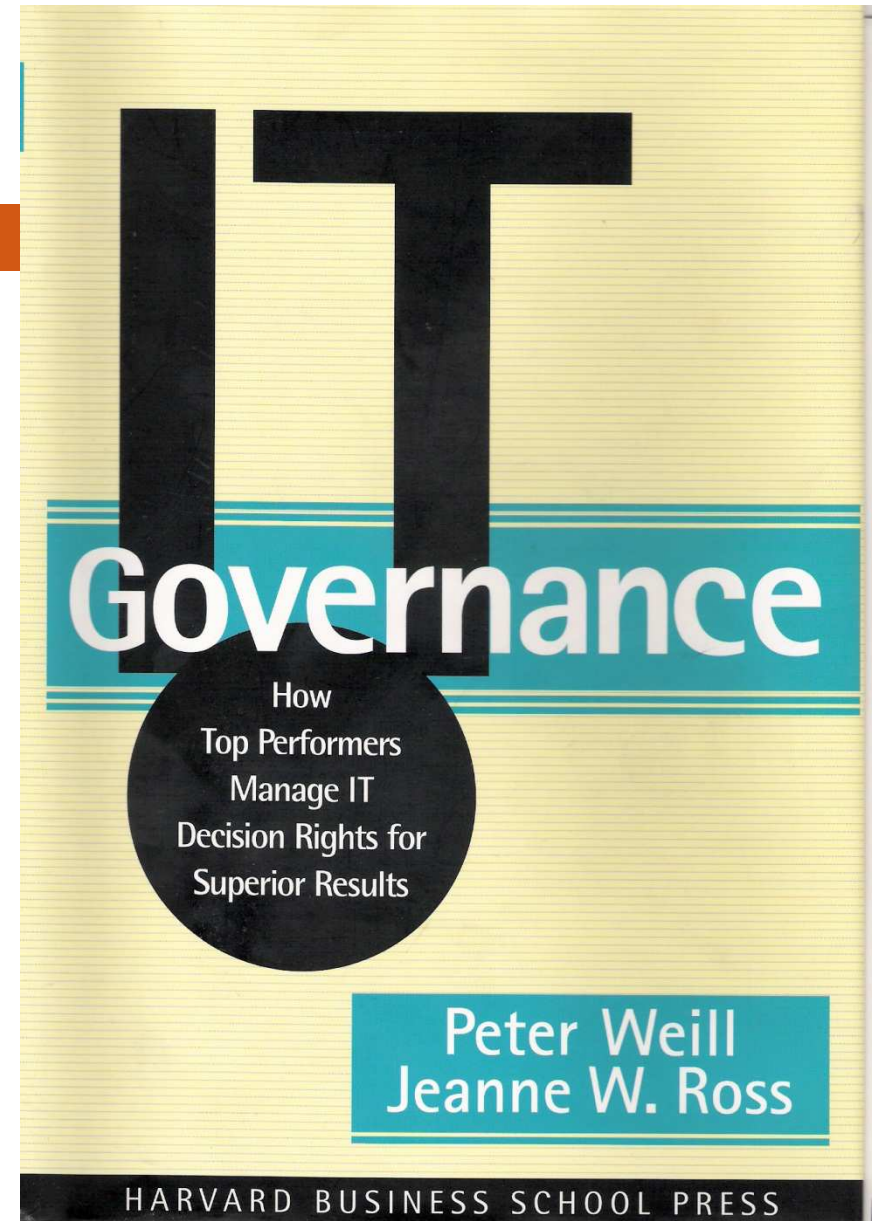
“The best competitive strategy is to make the enemies believe precisely what they want to believe”. Anonymous.

Summary

1. Introduction. Governing IT.
2. Management vs. Governance.
3. Decision-making and ...
4. ... structures of governance of IT.
5. Starting a framework for IT governance in their company without standards.
6. Business strategy, performance and governance of IT.
7. Align IT: indicators of progress.
8. The role of the CIO: IT leadership.
9. The value of IT.
10. ISO 38500, a conceptual model: the six principles of the standard.
11. Adapting the conceptual model of governance to the reality of the company.
12. Example Apps to aid decision-making for CIOs
13. Example Application Portfolio Management
14. To govern public enterprises, The 4 "E's"

Basic Reference

- **IT Governance: How Top Performers Manage IT Decision Rights for Superior Results by Peter Weill, Jeanne Ross (2004)**



6. Introduction

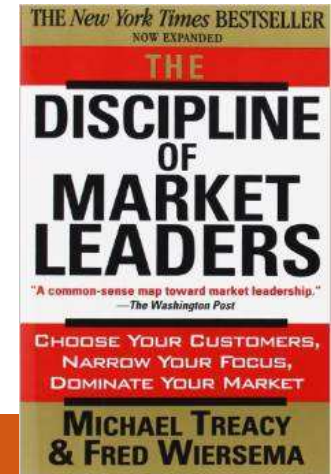
- Senior executives often wonder about the value they receive from IT investments, many have experienced frustrations:
 - Huge expenditures on services for customers who are not consolidated
 - Large-scale deployments that have ravaged more than improve processes
 - Operational annual increases without a corresponding increase in income
 - Infections by viruses and worms that cause malfunctions
 - Multimillion investments (e.g. Y2K) that do not improve performance
 - ...

6. Introduction

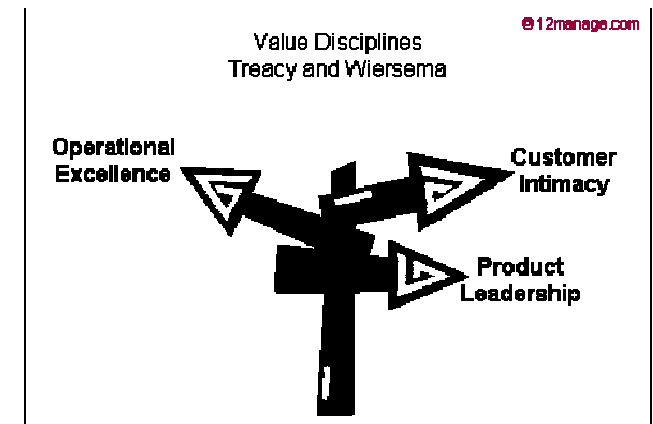


- The reflex action in response to these frustrations are usually:
 - Firing CIO
 - Outsource all IT function
- ... They can not tackle the problem, which usually comes from a poor governance of IT because:
 - Lack of participation in business leadership by IT
 - The governance of IT is a responsibility of senior executives (Juiz & Toomey, 2015):
- If IT does not create value, the first thing is to see how the practices of governance are done, who makes responsible decisions and how those decisions are taken, how it fits (lines) on the business strategy and how it communicates.

6. Introduction

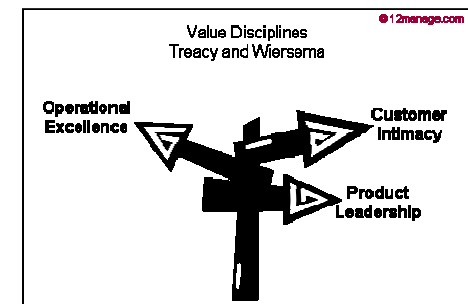


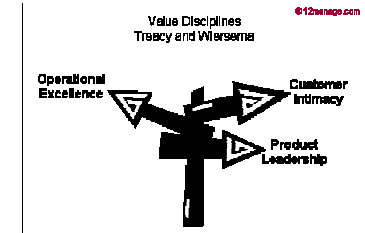
- In this chapter, we will design alternatives for IT governance, according to the business strategy you want to reinforce.
- Introduction to the disciplines of value:
 - Operational excellence
 - Product Leadership
 - Customer intimacy



6. Governance of IT and business strategy

- Value disciplines:
 - The concept of value disciplines used to highlight the implications of different strategies for IT governance.
 - The market leaders are usually excellent at some of the market value in any of the three value disciplines, and quite competitive on the other 2.
- The three value disciplines are:
 - Operational Excellence
 - Customer Privacy
 - Leadership in product or service

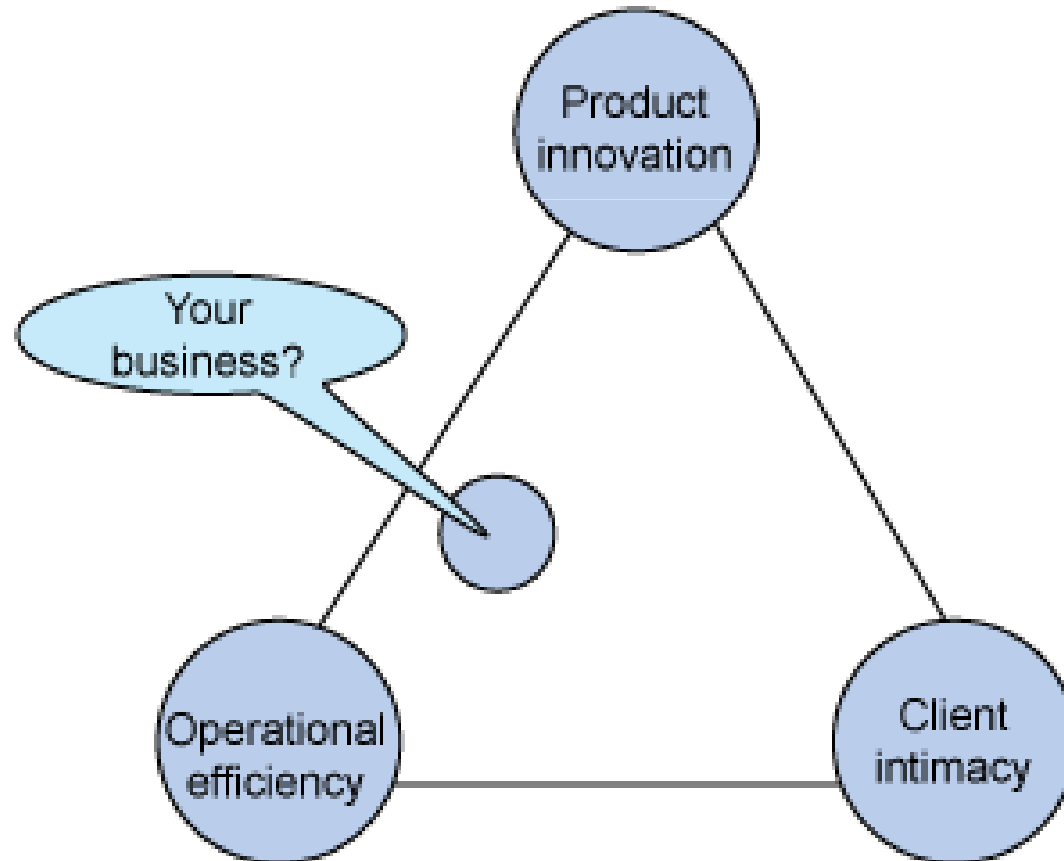
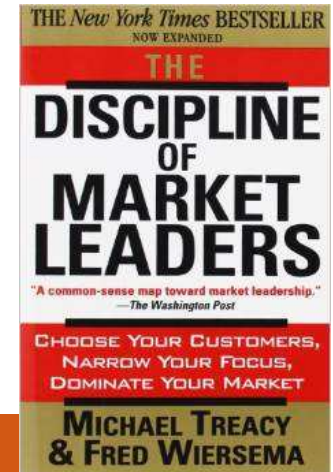




6. Governance of IT and business strategy

- Operational excellence: business emphasizes efficiency and reliability, leads the industry in price and easiness (comfort, convenience), minimize cost overruns and adjust the product distribution chain.
- Customer intimacy: the business focuses on cultivating relationships, customer service, the value of the company for life, responsiveness and "customization" based on a thorough understanding of the client.
- Leadership of product or service: the business is based on continuous innovation, it supports new solutions to problems and rapid commercialization of the product or service.

Value Disciplines



6. Governance of IT and business strategy

- Operational excellence:
 - Companies that focus on operational excellence, reflect a harmony between efficiency, reliability and performance of its assets
 - Operational excellence is achieved when it is extensively addressed by processes.
 - The companies have standardized processes to minimize centralized coordination costs
 - Local innovation is not encouraged, confident design IT from the corporate center out
 - Strategic decisions are taken by corporate staff

6. Governance of IT and business strategy

- Examples of operational excellence:
 - UPS, which develops continuously improves products
 - MeadWestvaco, which makes commodities in the paper industry, competing on price, quality and reliability
 - BIC, whose success depends on high quality, low price and strong distribution network
 - ING Direct, which offers lower and higher interest rates through low-cost standardized services committees.
- All these firms also work to improve customer service and innovate products, but are leaders in their markets for its operational excellence

6. Governance of IT and business strategy

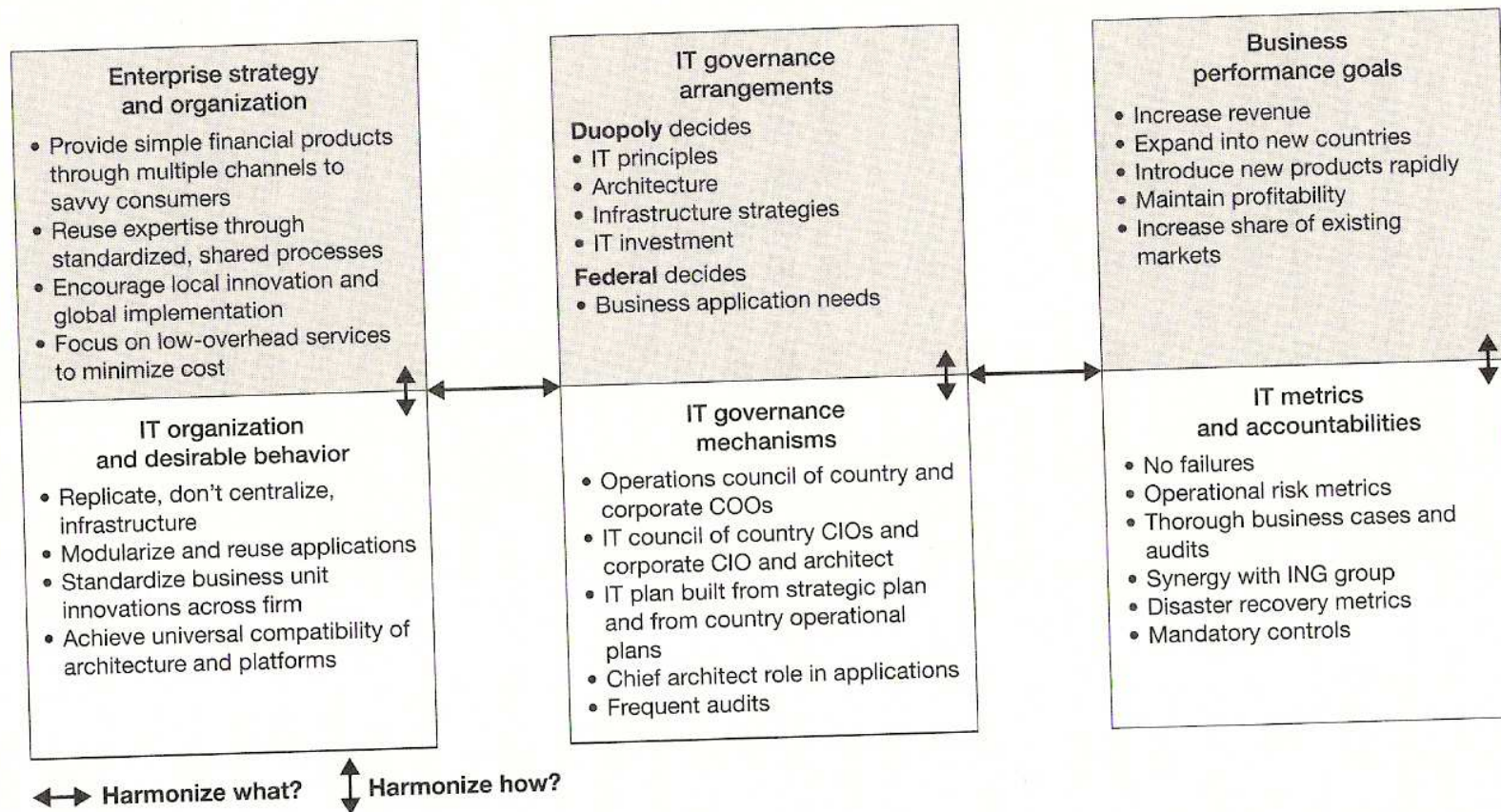
- Operational excellence for IT
 - IT is highly centralized and designed to serve a large volume of low-priced transactions in process
 - The processes are built with systems that play a crucial role in ensuring the predictability of business processes: ERP, In-house systems, applications with standardized modules, ...
 - Centralized database.
 - ERP components interact consolidating operations.
 - In an ERP system data they are captured and must be consistent, complete and common.
 - Companies that implement often have to modify some of its processes to align with ERP system
 - They have very standardized architectures core and a layer of very important shared infrastructure
 - Few exceptions to the standards: are expensive



6. Operational excellence example

FIGURE 6-4

ING Direct's Governance



6. Governance of IT and business strategy

- Customer intimacy:
 - They emphasize flexibility and responsiveness in customer service, managing customer market
 - Their strategies are consistent with the performance targets and high profitability
 - They must have the ability to identify and nurture valuable customer relationships
 - They should very well understand customers and business costs of the same
 - Develop customized solutions for individual customers or discrete market segments with products tailored to measure
 - Depend on powerful data bases and ultimately exploit big data, digital marketing, ...

6. Governance of IT and business strategy

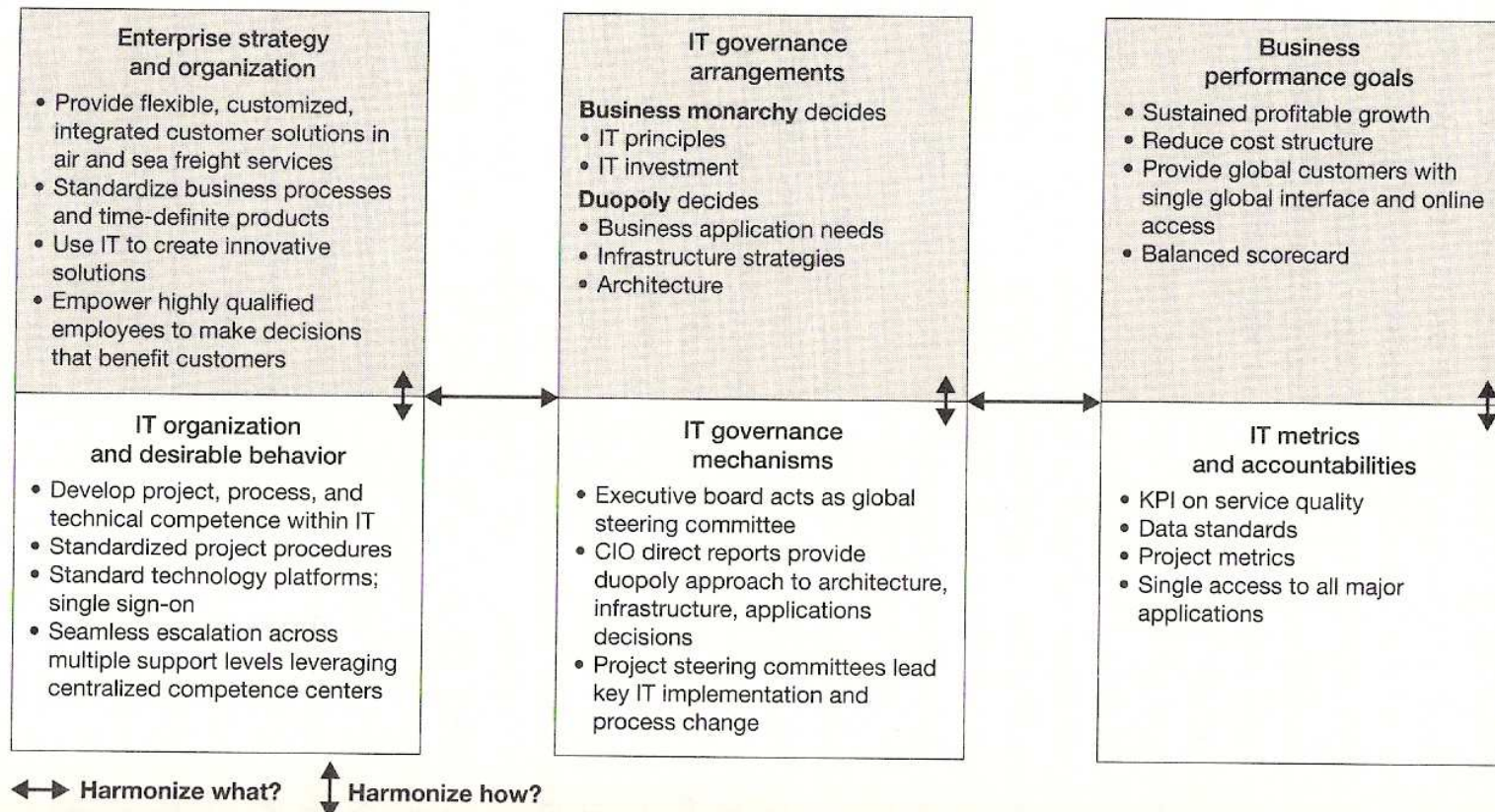
- Examples of customer intimacy:
 - Federal Express, which develops differentiated services to the unique needs of customers
 - USAA, a brand of diversified financial services targeted US military personnel and their families
 - Capital One, a credit card company that targets customers in very specific sets
 - Panalpina, which provides transport solutions (freight services) customized



6. Customer intimacy example

FIGURE 6-5

Panalpina's IT Governance



6. Governance of IT and business strategy

- Leadership of product or service:
 - Focus on time-to-market
 - Encourage R & D, knowledge sharing, experimentation and modernization
 - The earnings growth through innovation requires successes and failures, management focuses on ensuring a controlled balance of risk

6. Governance of IT and business strategy

- Examples of product leadership:
 - DuPont, constant innovation in its product lines
 - Pfizer R & D in a separate business unit
 - Motorola, designs software and electronics and telecommunication
- These firms can not ignore the requirements of efficiency or responding to customers, but their first strategies focus on designing new products and services

6. Governance of IT and business strategy

- The information needs of these firms leading product, are based on a core R & D, creating knowledge and disseminating it.
 - IT provides usability test laboratories and marketing
 - IT should provide virtual collaboration tools, modeling and experimentation tools, simulators, etc.
 - Also needed are tools of rapid commercialization of products.

6. Governance of IT and business strategy

FIGURE 6-3

Three Value Disciplines

	Operational excellence	Customer intimacy	Product leadership
Business processes	<ul style="list-style-type: none"> • End-to-end supply chain optimization • Emphasis on efficiency and reliability 	<ul style="list-style-type: none"> • Customer service, marketplace management • Emphasis on flexibility and responsiveness 	<ul style="list-style-type: none"> • Product development, time to market and market communications • Emphasis on constant innovation
Organization and skills	<ul style="list-style-type: none"> • Central authority, low level of empowerment • Critical skills at core of organization (e.g., process management) 	<ul style="list-style-type: none"> • Empowerment close to point of customer contact • Critical skills at boundary of organization (e.g., customer service) 	<ul style="list-style-type: none"> • Ad hoc, organic, and cellular • Critical technical skills abound in loose-knit structures
Management systems for coordination (e.g., incentives and IT architectures)	<ul style="list-style-type: none"> • Command and control, standard operating procedures • Quality management 	<ul style="list-style-type: none"> • Customer equity measures like lifetime value • Satisfaction, share management 	<ul style="list-style-type: none"> • Rewarding individuals' innovative capacity • Risk and exposure management
Information and information systems	<ul style="list-style-type: none"> • Integrated low-cost transaction systems • The system is the process 	<ul style="list-style-type: none"> • Single view of customer databases • Tools to identify segments and new offerings 	<ul style="list-style-type: none"> • Systems for collaboration • Modeling and simulation tools
Our study	Larger increases in ROA	Lower margins	Higher market cap growth and smaller increases in ROI and ROA

Source: Partially derived from M. Treacy and F. Wiersema, *The Disciplines of Market Leaders* (Reading, MA: Addison-Wesley, 1995).



STATE STREET

Specialized focus on serving institutional investors



FIGURE 6-7

State Street Corporation's IT Governance

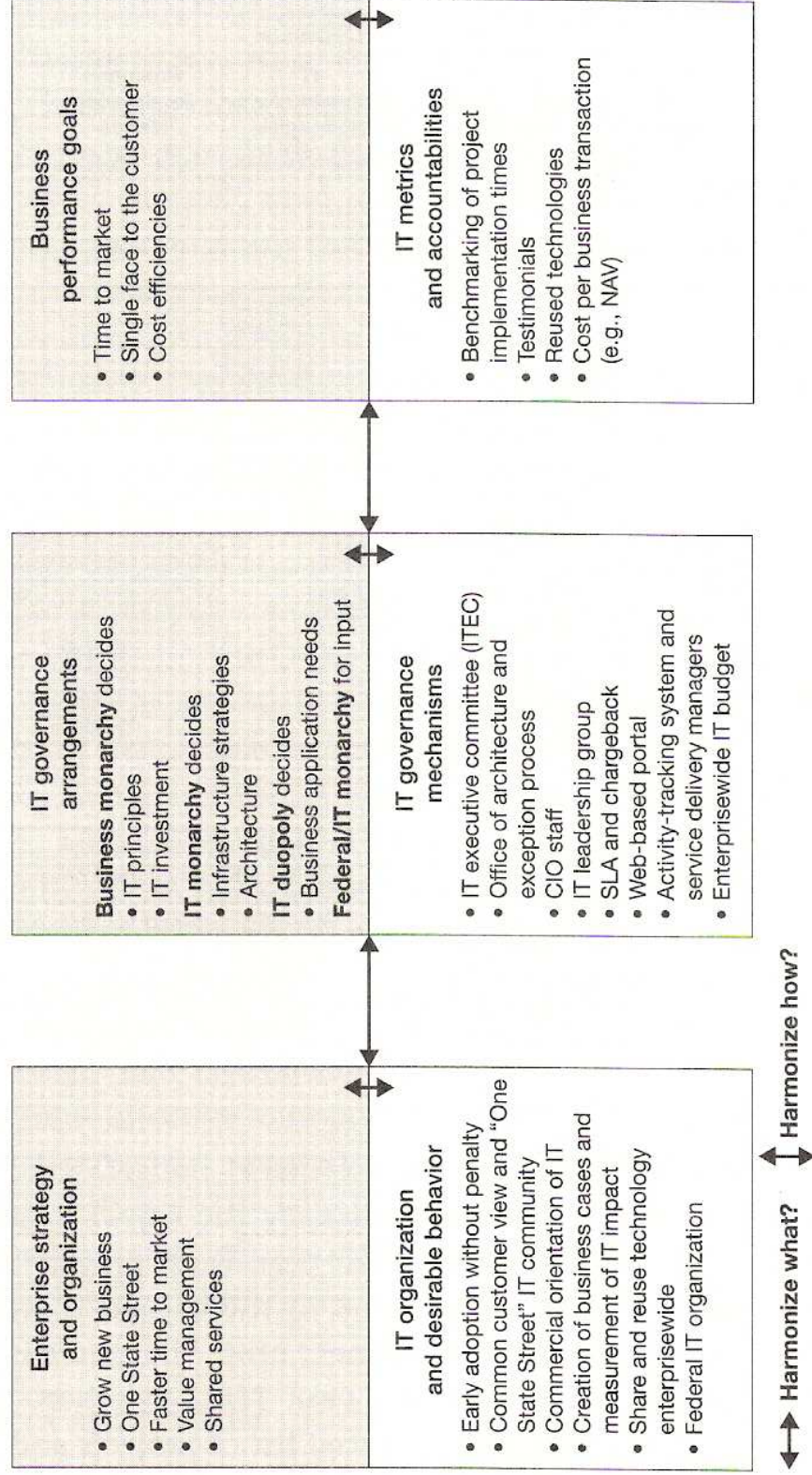


FIGURE 6-8

State Street Corporation's IT Governance Arrangements Matrix

GOVERNANCE ARCHETYPE	DECISION											
	IT Principles		IT Architecture		IT Infrastructure Strategies		Business Application Needs		IT Investment			
	Input	Decision	Input	Decision	Input	Decision	Input	Decision	Input	Decision		
Business Monarchy		ITEC									ITEC	CIO
IT Monarchy			Arch. office	CIO IT leaders		CIO IT leaders						
Feudal												
Federal	CIO IT leaders IT org. Business leaders				IT org. Arch. office Business leaders					Budgets SLA Activity tracking IT leaders		
Duopoly									Business leaders IT org. IT leaders			

Most common pattern for all firms.

Governance mechanisms:

Activity tracking—Activity-tracking system

Arch. office—Office of architecture

Budgets—Enterprisewide IT budget management

CIO—CIO staff

ITEC—Information Technology Executive Committee

IT leaders—IT leadership group

IT org.—Federated IT organization (vertical and horizontal IT units)

SLA—Service delivery agreements and chargeback

Specialized focus on serving institutional investors

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6. Recap

- It should harmonize desired strategy, structure and results
- Make difficult choices:
 - Synergy or autonomy
 - Operational excellence, customer intimacy or product leadership
- => Every company has conflicting objectives, but the essential thing is to focus on the most critical objectives

6. Recap

- Determine where the organizational structure limits the desired behaviors and design governance mechanisms to overcome these limitations
 - Even when companies succeed by choosing a small set of strategic priorities and problems remain ...
 - ... IT governance must transcend organizational structures to enable objectives would be inconsistent with the design of the organization

6. Recap

- IT governance allows the corporate governance to evolve with learning rulers of IT
 - Accept the responsibility of governance to maximize the value of IT
 - Increase agility and flexibility they demand and the ability to rethink business strategy based on changing markets

6. Next

- Develop metrics to formalize strategic choices
 - that capture progress towards strategic objectives
 - indicating whether the IT governance works