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15.571 Generating Business Value from Information Technology
Spring 2009

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Unification Model — UPS: Building the IT-Enabled Enterprise

*15.571 Generating Business Value from IT
Spring 2008 – Session Four*

Professor Peter Weill
Director, Center for Information Systems Research (CISR)
MIT Sloan School of Management



United Parcel Service Inc.

- United Parcel Service, Inc. provides package delivery and supply chain solutions.
- The primary business of the Company includes time-definite delivery of packages and documents.
- Other services of UPS include supply chain solutions, such as freight forwarding, customs brokerage, fulfillment, returns, financial transactions, repairs and less-than-truckload (LTL) transportation services.
- The Company operates in three segments: U.S. Domestic Package operations, International Package operations, and Supply Chain & Freight operations.
- UPS delivered an average of more than 17.7 million* pieces per day worldwide. In addition, its supply chain solutions capabilities are available to clients in 175 countries and territories.



UPS – Globalization

- 2006 international package volume up 13.9% vs. 6.4% domestic increase
- Higher operating margins
 - 19.0% in international markets vs. 15.7% domestic
- 38 consecutive quarters of strong growth in exports; 10.4% in 07Q4
- Continuing overseas expansion
 - New construction doubled European sorting capacity
 - Expects fastest growth to be in Asia
- Built significant infrastructure around major industrial centers in Shanghai and Beijing to support handheld devices
 - CIO: “We build a global network so our customers don’t have to”

Source: *CEO of UPS sees a new world where business is 'one-to-one'*, Jill Lerner, Business Journal, February, 10, 2006.



UPS Performance and IT

- Named in the Top 10 “Customer Service Champs” (*Business Week, 2007*)
- Invested \$20B over 20 years to become leaders in use of IT => new IT Governance
- **UPS Delivery Intercept:** Recognized as one of the top 100 IT projects undertaken by tech leaders committed to pushing their companies forward
- **Package Flow Technology:** Saved an estimated 30M miles through efficient package and vehicle routing
- **Paperless Customs:** Ships 30k packages a month through 100 global customs offices without forms

Source: *In for the Long Haul*, Chris Murphy, Information Week, January, 9, 2009.



UPS – Company overview

Headquarters: Atlanta, GA

Chairman and CEO: Davis, Scott

Company: The company is the world's largest package delivery company and a leading global provider of specialized transportation and logistics services.

Financials (TTM)

Revenue: \$ 51.49 (Billion)
Gross Profit: \$ 39.66 (Billion)
Income after tax: \$ 3.00 (Billion)

Stock price: \$ 44.84
52Wk High: \$ 75.08
52Wk Low: \$ 41.40

Market Cap: \$ 44.62 (Billion)

Revenue vs. % Net income - Last 5 years

Operating Revenue (\$M)	49,692	47,547	42,581	36,582	33,485
% Net Income	1%	9%	9%	9%	9%

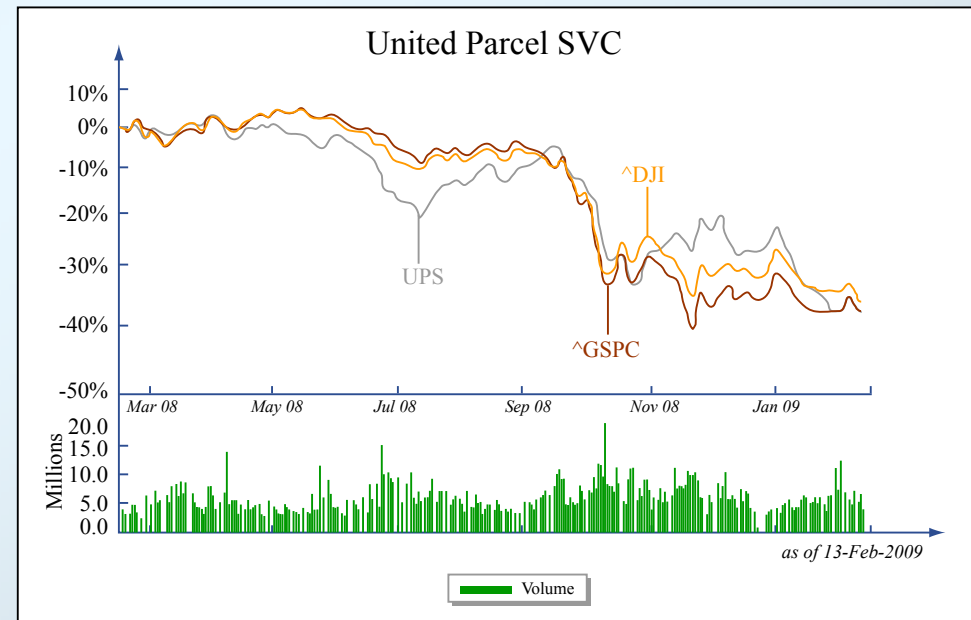


Figure by MIT OpenCourseWare.



UPS - News

[UPS Making it Even Easier to Return Retail Goods](#)

[UPS Extends "Green" Approach to its Operations by Adopting HP Paperless Printing Solution](#)

[New UPS Services Making it Easier to Go Global, Go Green](#)

Case Discussion Questions for UPS

1. Describe UPS and its business environment
2. Critique UPS' strategy for on-line business and its business\operational model.
3. Critique UPS' approach to managing IT. How well does UPS' IT infrastructure prepare the firm for: (1) extending the core business and, (2) entering new businesses?
4. What are the major IT enabled business opportunities facing UPS going forward?
5. How effectively does UPS govern IT? What are the key mechanisms?
6. Lessons learned?

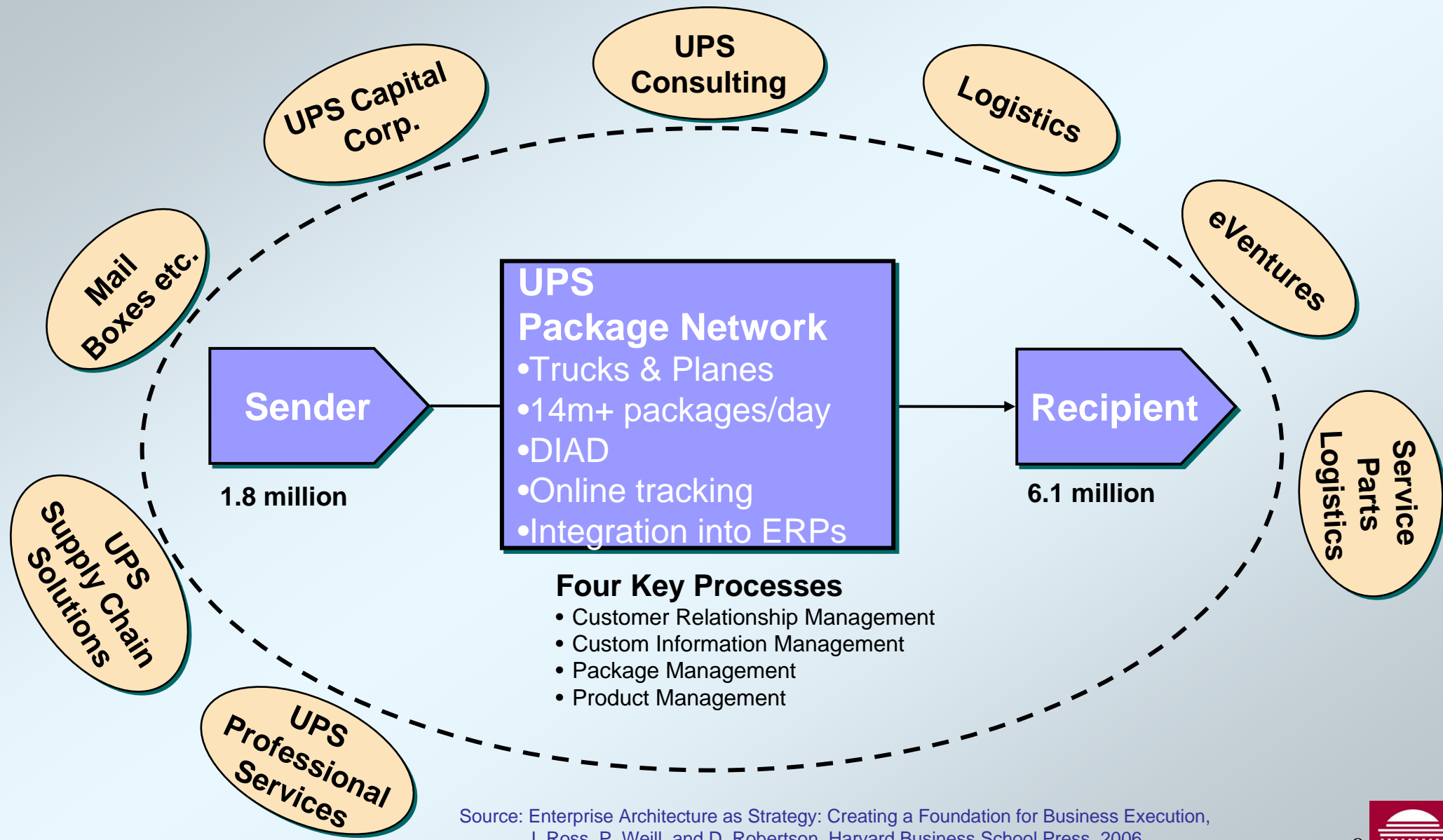
Four Operating Models

Business Process Integration

<p>High</p>	<p>Coordination</p> <ul style="list-style-type: none"> Shared customers or suppliers Independent transactions with a need to know customer interactions Operationally unique business units Autonomous business management Business unit control over business process design Shared customer/supplier data Consensus processes for designing IT infrastructure services; IT application decisions are made in business units 	<p>Unification</p> <ul style="list-style-type: none"> Customers and suppliers may be local or global Globally integrated business processes often with support of enterprise systems Business units with similar or overlapping operations Centralized management often applying functional/process/business unit matrices High-level process owners design standardized process Centrally mandated databases IT decisions made centrally
<p>Low</p>	<p>Diversification</p> <ul style="list-style-type: none"> Few, if any, shared customers or suppliers Independent transactions Operationally unique business units Autonomous business management Business unit control over business process design Few data standards across business units Most IT decisions made within business units. 	<p>Replication</p> <ul style="list-style-type: none"> Few, if any, shared customers Independent transactions aggregated at a high level Operationally similar business units Autonomous business unit leaders with limited discretion over processes Centralized (or federal) control over business process design Standardized data definitions but data locally owned with some aggregation at corporate Centrally mandated IT services
	<p>Low</p>	<p>High</p>
<p>Business Process Standardization</p>		

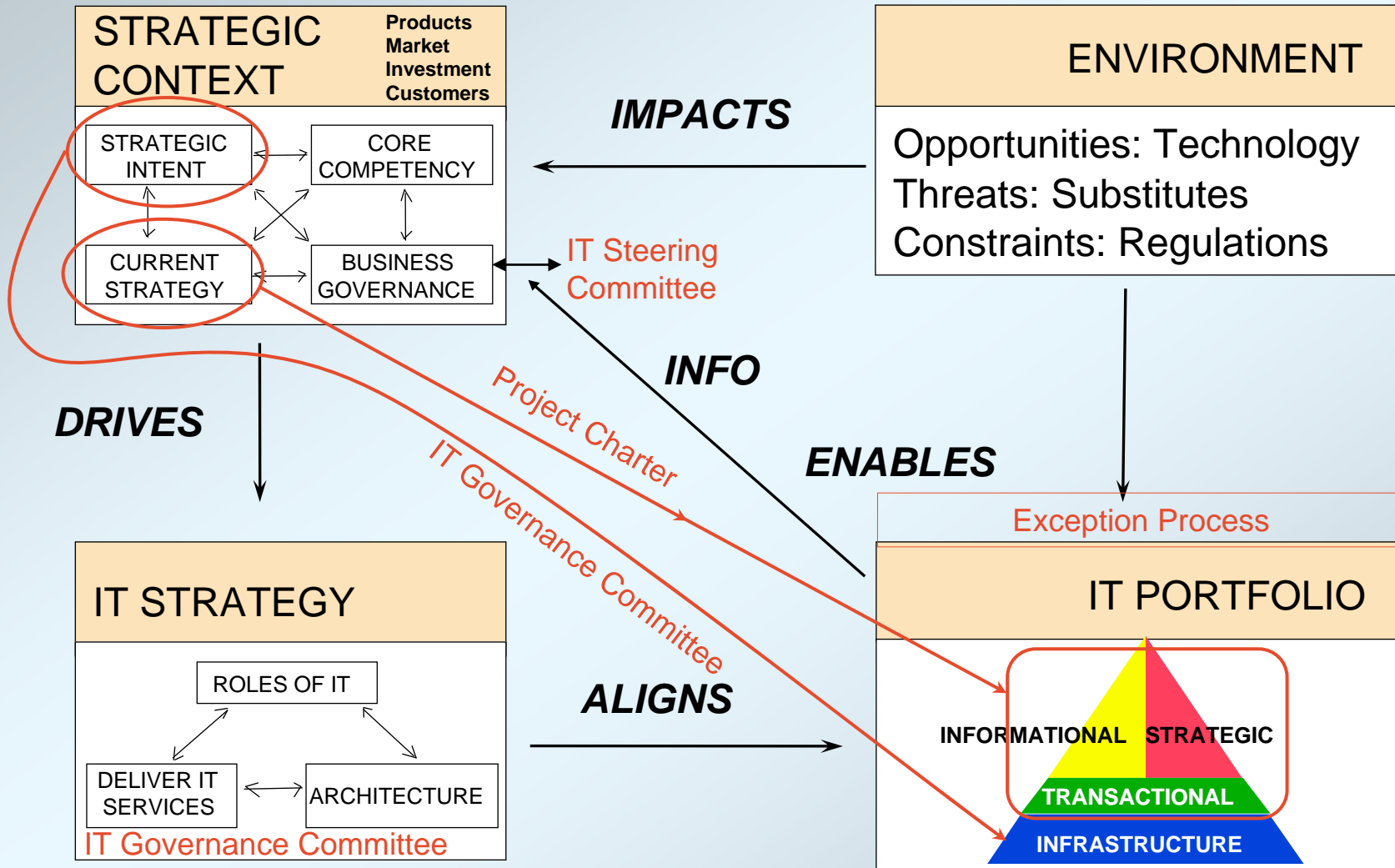
Source: Enterprise Architecture as Strategy: Creating a Foundation for Business Execution, J. Ross, P. Weill, and D. Robertson, Harvard Business School Press, 2006.

The UPS Business Model



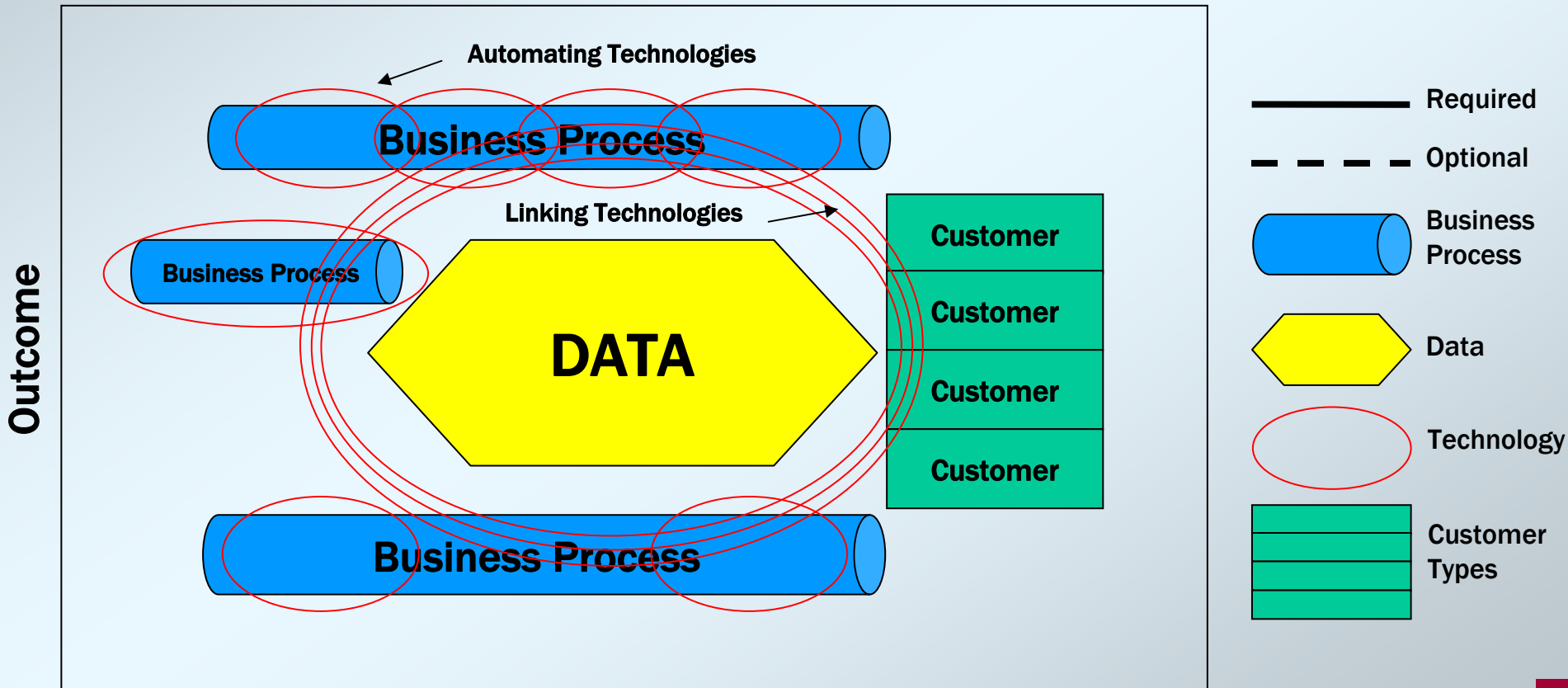
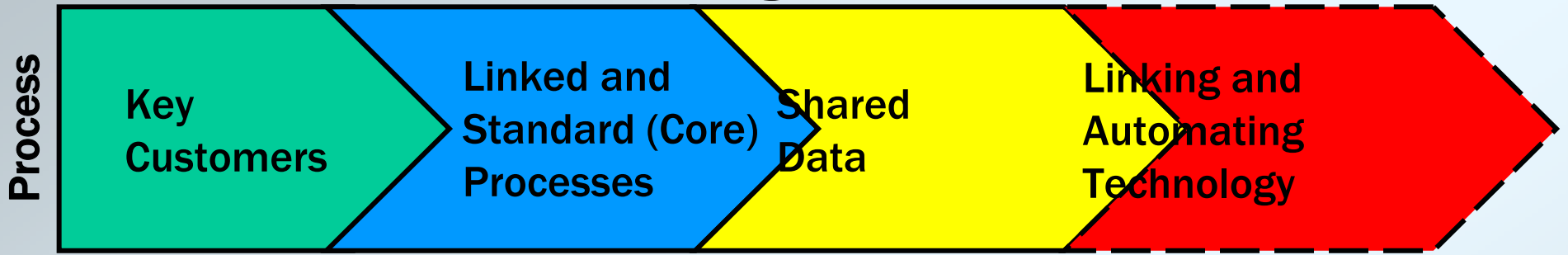
Source: Enterprise Architecture as Strategy: Creating a Foundation for Business Execution, J. Ross, P. Weill, and D. Robertson, Harvard Business School Press, 2006.

Governance Mechanisms Linking IT and Business Strategy at UPS



*IT Architecture: An integrated set of technical choices and standards to guide the organization in satisfying business needs.
E.g., data ,computing, applications and communications*

Unification Core Diagram



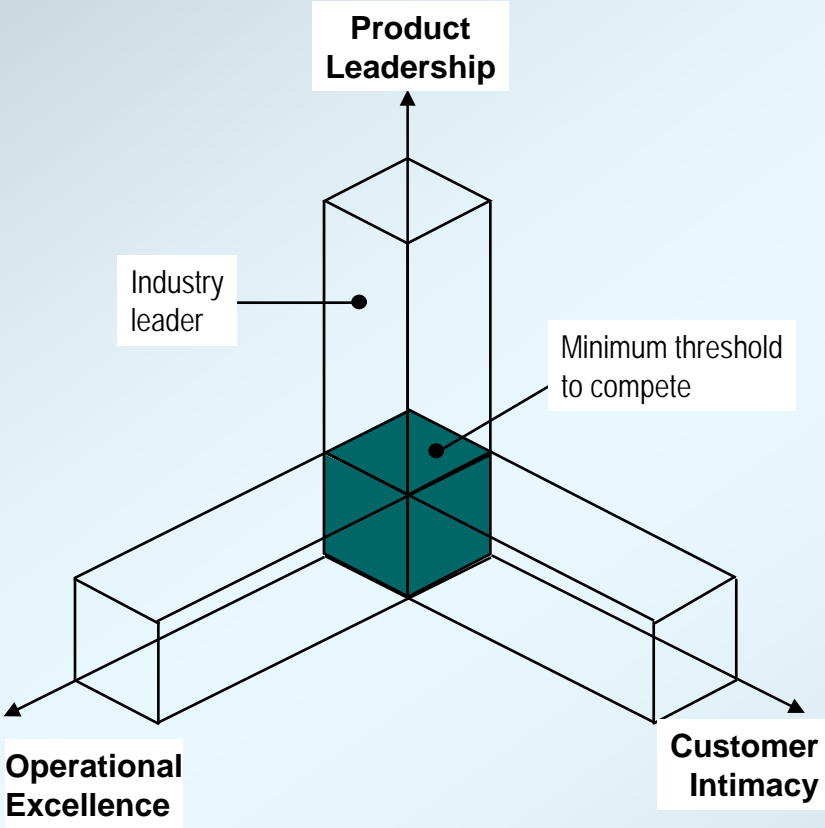
Source: Enterprise Architecture as Strategy: Creating a Foundation for Business Execution, J. Ross, P. Weill, and D. Robertson, Harvard Business School Press, 2006.

Strategic Implications of the Operating Models

Business Process Integration	High	<p><i>Coordination</i></p> <ul style="list-style-type: none"> ▪ Organic: Stream of product innovations easily made available to existing customers using existing integrated channels ▪ Acquisition: Can acquire new customers for existing products; must integrate data 	<p><i>Unification</i></p> <ul style="list-style-type: none"> ▪ Organic: Leverage economies of scale by introducing existing products/services in new markets; grow product line incrementally ▪ Acquisition: Can acquire competitors to leverage existing foundation; must rip and replace infrastructure
	Low	<p><i>Diversification</i></p> <ul style="list-style-type: none"> ▪ Organic: Business unit synergies may stimulate their markets ▪ Acquisition: Unlimited opportunities; must ensure shareholder value 	<p><i>Replication</i></p> <ul style="list-style-type: none"> ▪ Organic: Replicate best practices in new markets; extend innovations globally ▪ Acquisition: Can acquire competitors to expand market reach; must rip and replace
		Low	High
		Business Process Standardization	

Source: Enterprise Architecture as Strategy: Creating a Foundation for Business Execution, J. Ross, P. Weill, and D. Robertson, Harvard Business School Press, 2006.

Value Disciplines



For further information see: Treacy, M. and F. Wiersema.
The Discipline of Market Leaders, Addison-Wesley, 1995.

IT Governance at UPS

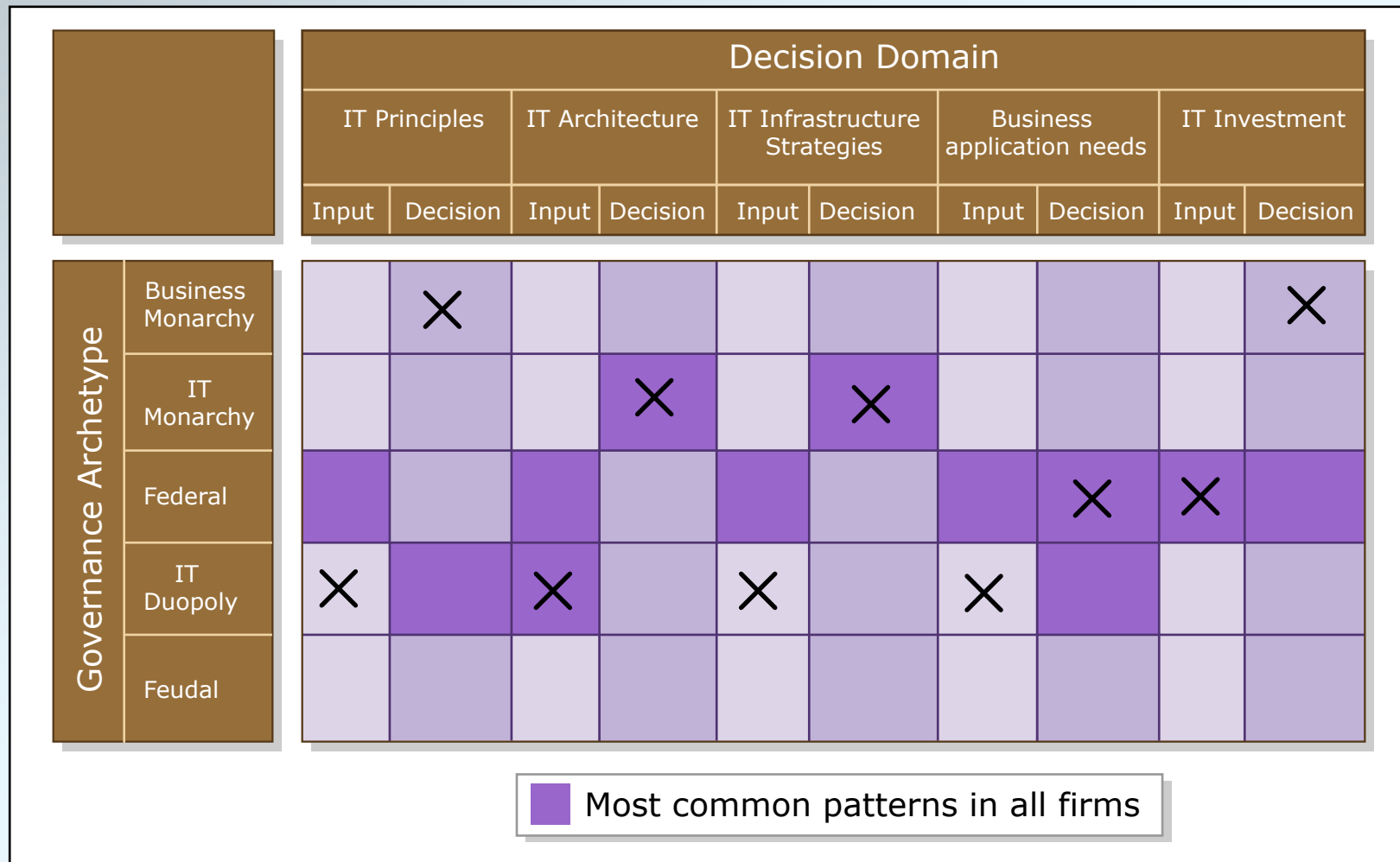


Figure by MIT OpenCourseWare.