



IT-Enabled Management of Interfirm Relationships for Value Co-Creation

Arun Rai

Regents' Professor & Harkins Chair

Center for Process Innovation & CIS Department

Robinson College of Business

Georgia State University

Atlanta, GA 30303

arunrai@gsu.edu

Web site: arunrai.us

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早上好

非常高兴来到武汉这座美丽的城市



并且感谢会议主办方的热情接待!



What is Distinctive About All These Firms?

P&G
Procter & Gamble



Walmart
Save money. Live better.



amazon.com



Value (HOW)	Value Co-Creation
Value (WHAT)	Renewal
IT	Process X Spontaneous X Intelligence
Governance	One Shoe Does Not Fit All

Insights on Value Co-Creation from Research Program



Key Takeaways

- ◆ Expanding sources of value co-creation—efficiency, innovation and complementarities
- ◆ How can value be co-created effectively:
 - ◆ Novel coordination
 - ◆ Renewal through efficiency **and** innovation
 - ◆ Leveraging IT innovations with governance
 - ◆ Orchestrating ecosystems of customers, products, and partners/suppliers

Expanding Sources of Value Co-Creation: Efficiency, Innovation and Complementarities

Industry	Value Co-Creation Opportunities
Automotive	<ul style="list-style-type: none">▪ The car as a “platform” technology▪ Warranty cost/vehicle at \$ 700 from deficient integration of vendors’ systems/software
Electronics	<ul style="list-style-type: none">▪ Rapid consumerization of IT▪ Poor coordination of mass production with customization across contract mfg, distributors, retailers
Healthcare	<ul style="list-style-type: none">▪ Novel mHealth services for chronic disease mgt▪ Fragmented processes across payers, providers & hospitals.
Retail	<ul style="list-style-type: none">▪ Under-utilized real-time Big Data from track-and-trace innovations (e.g., RFID)

Rai & Tang, IT-Enabled Business Models, *Information Systems Research*, in press

Rai & Sambamurthy, *Information Systems Research*, 2007

The Emerging Services Science, IBM Research, 2004



Co-Creating Value Through Novel Coordination

IT-Enabled Process Capabilities for Coordination

ERP
SCM
CRM

X

Process
Interface
Standards

X

Service-
Oriented
Architectures

ROSETTANET

POWERED BY C51-115

Integrated/Reconfigurable B2B IT Resources

Lower
Coordination
Costs

Process
Integration

X

Partnering
Flexibility

Lower
Switching
Costs

Disruptive Technologies Redefining Coordination

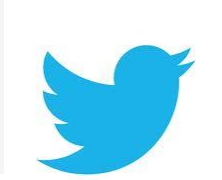
Mobile Internet



Internet of Things

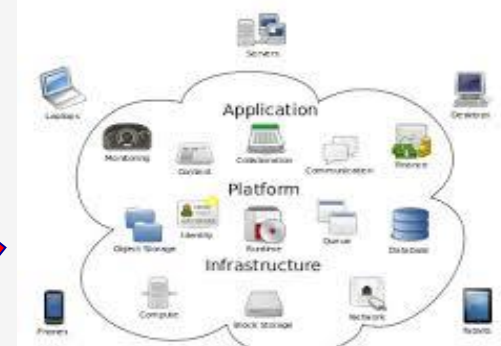


Social Networks



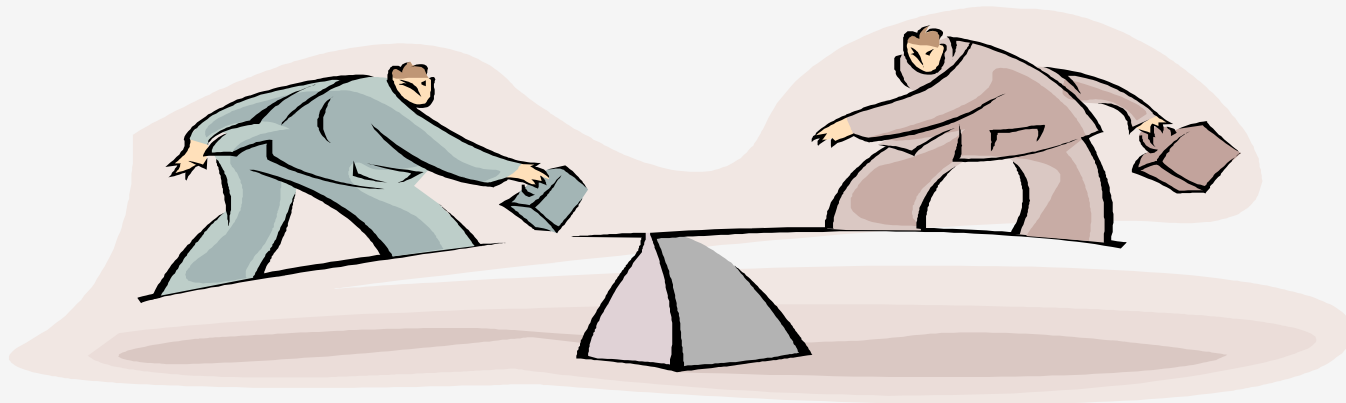
*New Routines
Spontaneous
Coordination*

The Cloud



Cloud Computing

Continuous Renewal of Value Co-Creation



Efficiency

Innovation

The Innovation-Efficiency Tension

	Value Co-Creation Mode	
	Efficiency	Innovation
Change	Incremental	Radical
Motivation	Process problems	Environmental change
Purpose	Improvement Standardization Variance reduction	Flexibility Exploration Variance enhancement

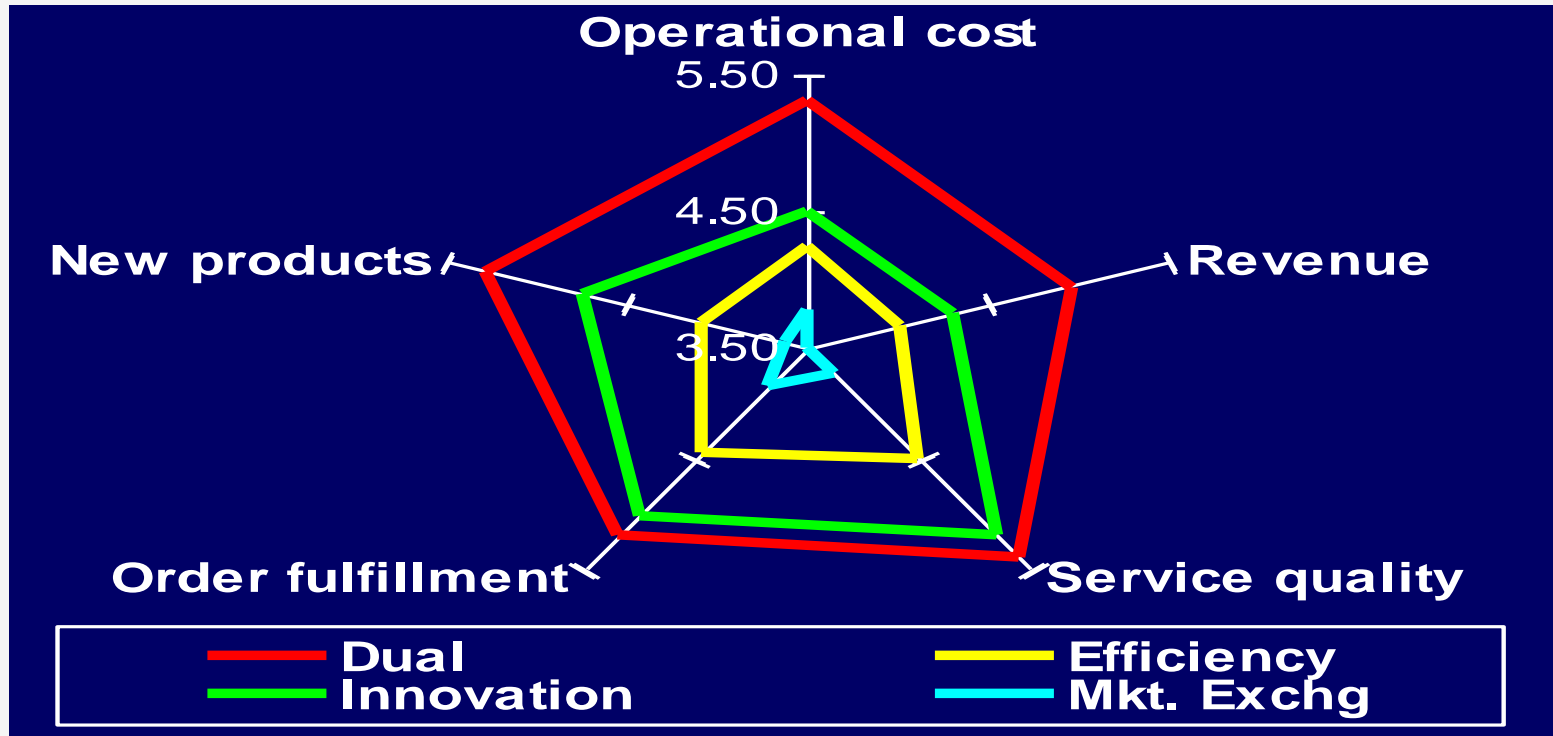
Differences in Learning Requirements

	Nature of Interfirm Collaboration Objectives							
	<i>Business Opportunity</i>		<i>Goal Orientation</i>		<i>Risk</i>		<i>Scope</i>	
Learning Orientation	<i>New</i>	<i>Existing</i>	<i>Short Term</i>	<i>Long Term</i>	<i>High</i>	<i>Low</i>	<i>End-to-End</i>	<i>Narrow</i>
Efficiency		●	●			●		●
Innovation	●			●	●		●	
Dual	●	●	●	●	●	●	●	●

N = 238 buyer-supplier logistics relationships

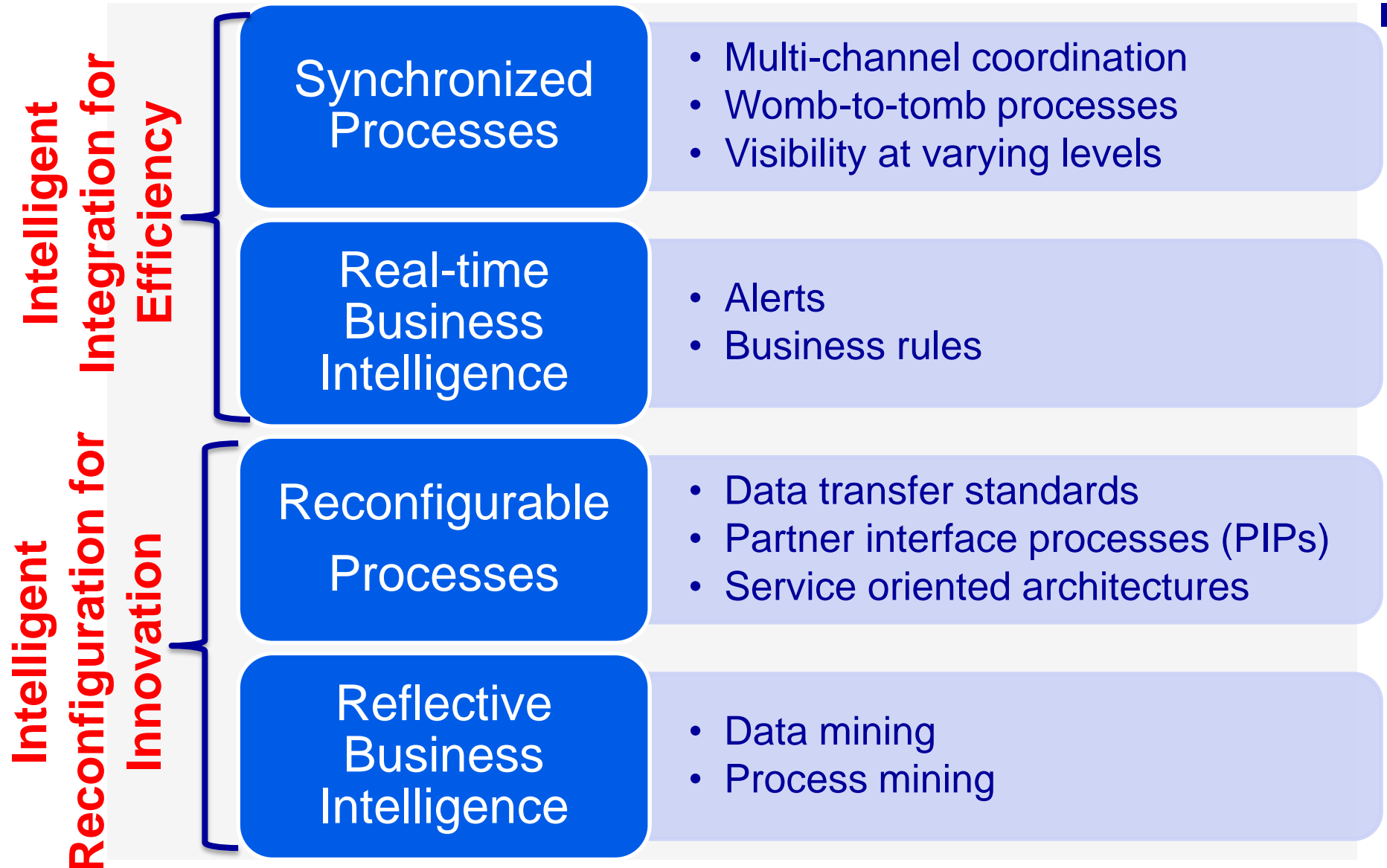
Im and Rai, *Management Science*, 2008
 Rai, Im and Hornyak, *MISQ Executive*, 2010

Consequences of Learning Orientation



*The dual segment—where IT is used for both learning about efficiency and innovation—outperforms the other segments on **all performance parameters***

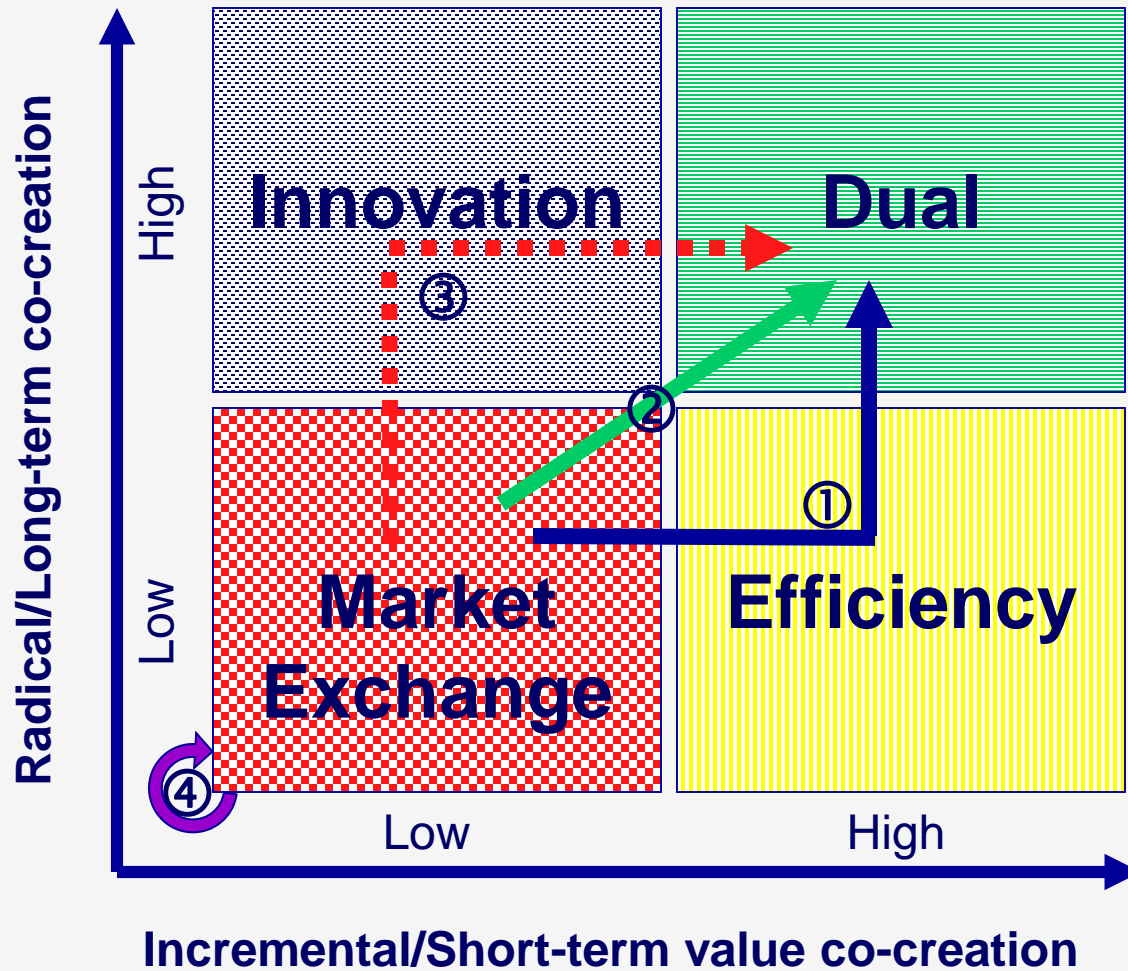
IT Capabilities: Intelligence x Process



IT Capabilities for Renewing Value Co-Creation

	Value Co-Creation Objectives		
	Efficiency	Innovation	Dual
Intelligent Integration	√		√
Intelligent Reconfiguration		√	√

IT Capabilities for Value Co-Creation Transitions





Leveraging IT Innovations with Governance

Developing Inter-Firm IT Capabilities

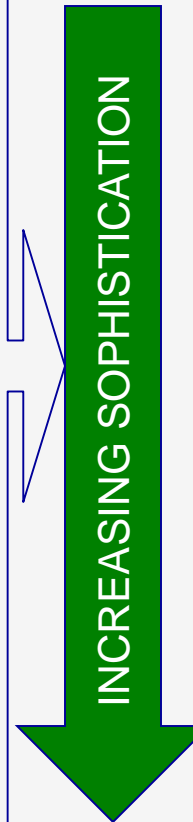
Embed IT functionalities in processes



Combine IT functionalities with other resources



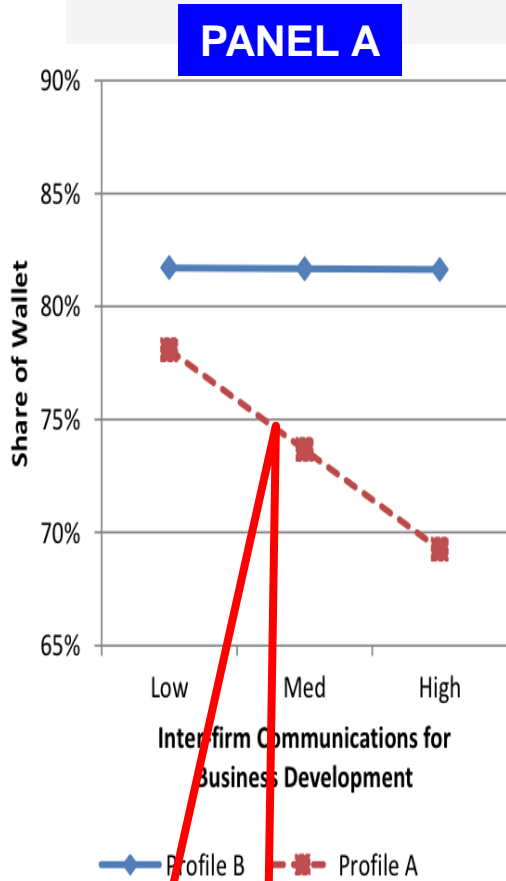
Expand IT functionalities



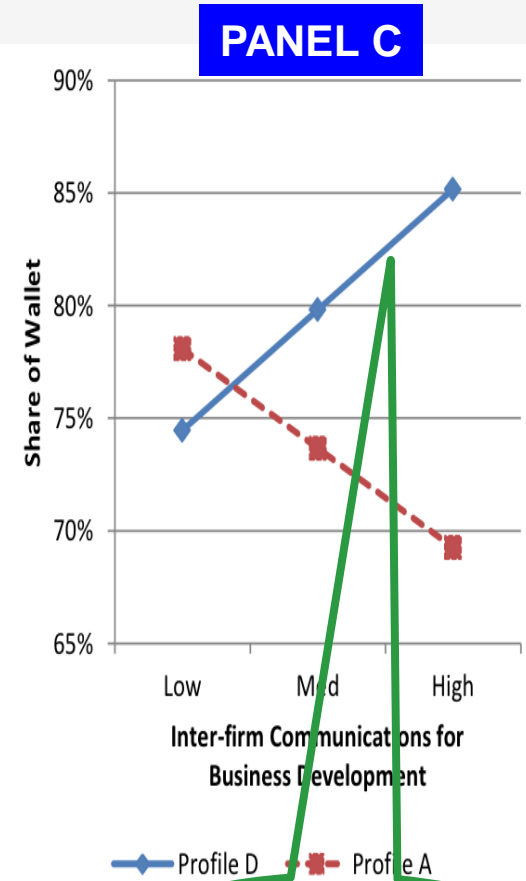
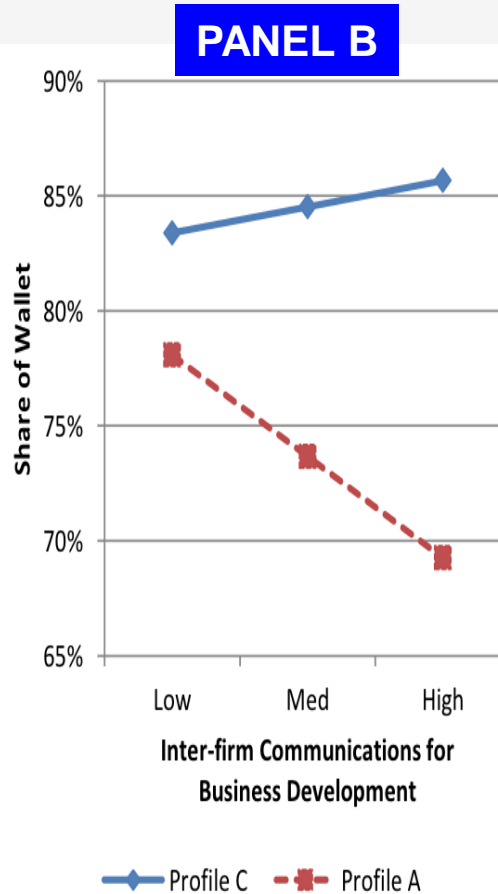
Logistics IT Capability Profiles	IT Functionalities Implemented & Used
Automation	➤ Single-site shipping
Coordination	➤ Single-site shipping ➤ Multi-site shipping coordination
Integration	➤ Single-site shipping ➤ Multi-site shipping coordination ➤ Supply chain visibility
Synchronization	➤ Single-site shipping ➤ Multi-site shipping coordination ➤ Supply chain visibility ➤ Financial settlement

82% SOW

Business Development (BD) x IT Capabilities: A System of Complements for Value Co-Creation



**HIGH BUS. DEV.
X
LOW IT
CAPABILITY**



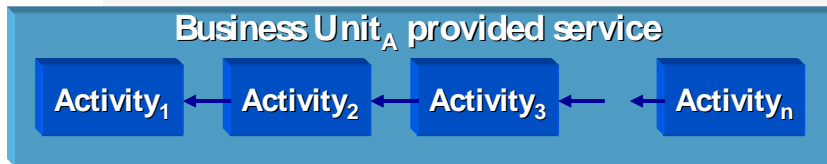
**HIGH BUS. DEV.
X
HIGH
IT
CAPABILITY**

Differentiated Governance of Relationship Portfolios

Long-term Contracts (Core Processes)

IT-enabled Efficiency & IT-enabled Innovation

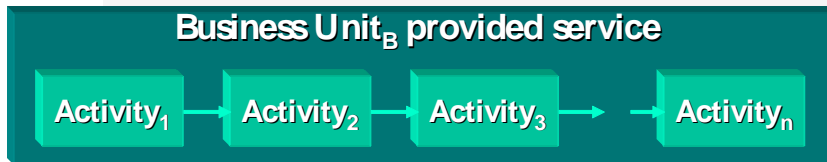
Contract Mfg ($n = 4$) & Logistics ($n = 12$)



Spot/Short-term Contracts - Context

IT-enabled Efficiency

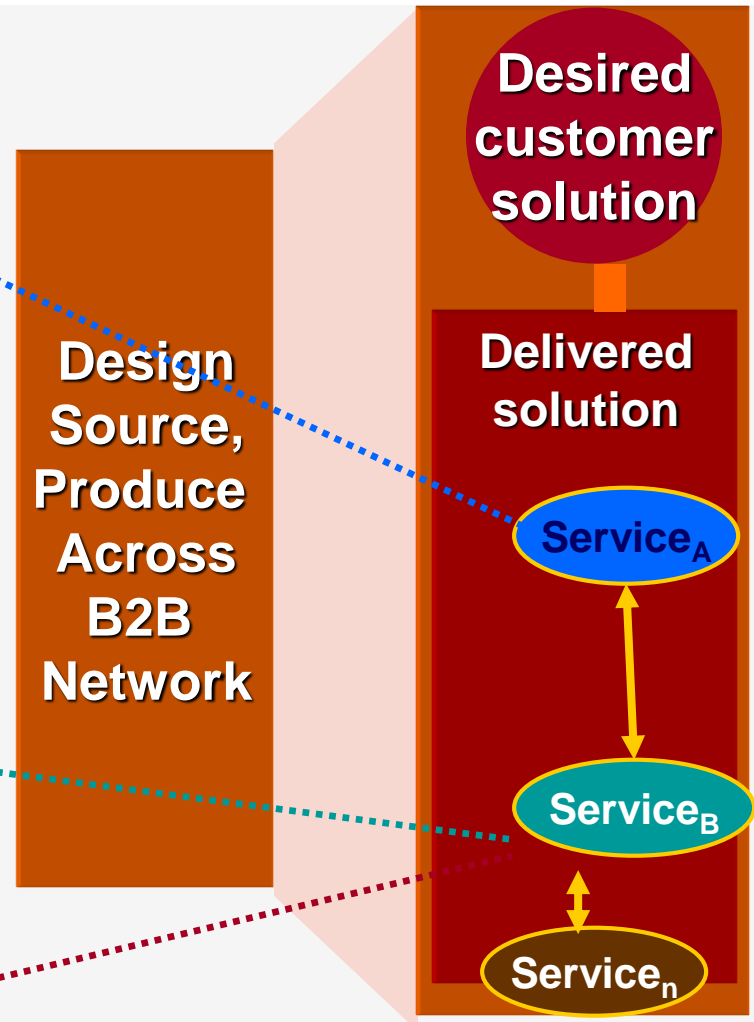
Commodity Services ($n = 600$)



Insourced (Core Processes)

IT-enabled Efficiency & IT-enabled Innovation

Design, Relationship Mgt



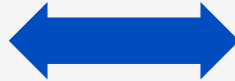
Three-Way Complementarity

IT
Capabilities



Value Co-
creation

Relationship
Objectives



Governance
Mode



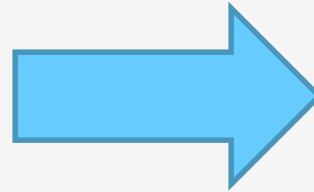
Orchestrating Ecosystems of Customers, Products, and Partners/Suppliers

How Much Do Vibrant Ecosystems Matter?

Blackberry



iPhone



RIM Market Cap (May 2013):
\$7.88 bil

Apple Market Cap (May 2013):
\$431.5 bil

Orchestrating Ecosystems

Value Creation

X

Value Appropriation

Efficiency

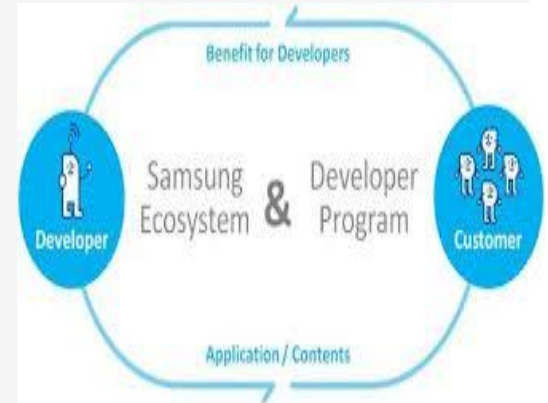
Bundling

Novelty

Lock-in

Complementarities

Barriers to Imitation



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非常感谢



Comments
welcome!

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