

# **Interorganizational Governance Value Creation: The Role of Information Visibility and Flexibility in Supply Chains**

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# Agenda

- ◆ The DS paper
  - Introduction
  - Theoretical Background
  - Research Model
  - Methodology
  - Results
  - Conclusion
- ◆ Effective strategy for your research
- ◆ Q & A

# Introduction

- ◆ Increasing demand diversity and environmental uncertainty
  - new practices based on IT to deliver better products/services to customers
  - Interorganizational relationship (IOR) management in supply chains
- ◆ How to generate interorganizational governance value is essential for supply chain partners when seeking advantages from interfirm collaboration.
  - IOR value creators : Information visibility, flexibility

# Research question

- ◆ What kinds of governance mechanisms can create value based on both effectiveness and efficiency in supply chain context?
- ◆ What are the impacts of governance mechanisms on supply chain value creators, i.e., information visibility and supply chain flexibility?

# Interorganizational governance in supply chains

- ◆ Interm relationships have been analyzed under transaction cost economics that views the relationships as governance structures based on the level of transaction cost.
  - The emphasis of research in TCE shifts from markets and hierarchies to hybrid forms
  - To employ control mechanisms against opportunistic behaviors for safeguarding specific investment in transactions
- ◆ Interorganizational relationships can be a source of competitive advantage.
  - Increasing the collaborative aspects of governance can enhance the ability to adapt to uncertain environments.

# Supply chain value creation

- ◆ Interorganizational relationship: control or collaboration?
  - Transaction cost economics (cost efficiency)
  - Resource-based perspectives (value creation)
  
- ◆ IOR value creation
  - Governance mechanisms: relational governance and virtual integration
  - Supply chain value creators: information visibility and supply chain flexibility

# Relational Governance

- ◆ The extent to which supply chain partners use mechanisms such as relational norms and joint actions to maintain their relationship based on collaborative goals
- ◆ Mechanisms like trust, commitment, coordination and joint problem solving constitute a safeguard against exploitative use of transaction-specific assets.
- ◆ Trust and commitment to the continuity of relationship can reduce uncertainty and monitoring effort, thus providing material incentives for collaboration

# Virtual Integration

- ◆ The degree of linkage between manufacturer and its suppliers through information technology (IT)
  - The substitution of ownership with partnership to integrate a smaller set of suppliers through information technology (IT) (Clemons et al., 1993)
  - Collaborative operation execution and collaborative process planning and control
- ◆ IT can reduce transaction cost and mitigate the potential for opportunism
  - Lowering information asymmetry
  - Providing effective monitoring capabilities.
- ◆ A credible commitment



# Information Visibility and Supply Chain Benefits (1/2)

- ◆ *Information Processing Perspective*
  - Increasing the capacity of information processing and reducing uncertainty.
  - information sharing models - bullwhip effect
- ◆ *Transaction Cost Perspective*
  - Reducing transaction cost and mitigating the potential for opportunism
- ◆ *Coordination/Integration Perspective*
  - Integrating supply chain activities

# Information Visibility and Supply Chain Benefits (2/2)

- ◆ *Learning Perspective*

- Facilitating interorganizational learning and then quickly responding to changing environment.

- ◆ *Resource-based Perspective*

- Information visibility combining with other complementary interorganizational resources may create valuable, scarce, and difficult to implement resources as the potential for competitive advantage.

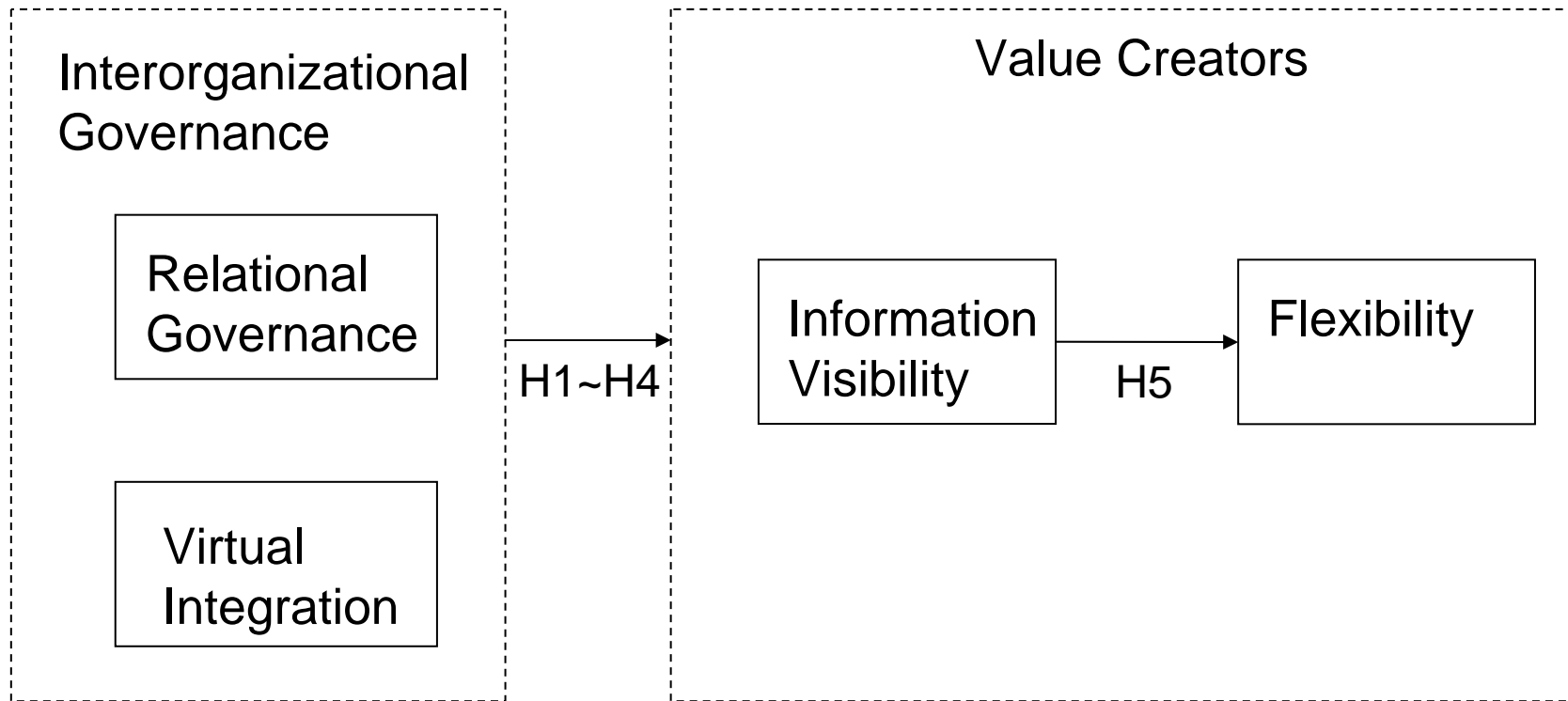
# Supply chain flexibility and Supply Chain Benefits (1/2)

- ◆ The loosely-coupled supply chain system
  - Few companies can rely solely on themselves to develop the required capabilities for rapid adaptation.
  - To realize effective independent reactions and keep disturbances local
  - Local adaptations of the manufacturer and suppliers are easier as autonomy and rich local knowledge allow experimentation and preserve independent environment sensing mechanisms (Orton and Weick, 1990)

# Supply chain flexibility and Supply Chain Benefits (2/2)

- ◆ Flexibility is the most important capability against environmental uncertainty
  - How timely the manufacturer can react to new market conditions
- ◆ With greater flexibility, supply chain members can redesign the chain structure to make the resources in the chain fully explored to increase their adaptability.
- ◆ With the capability to quickly respond to environment turbulence, firms can take a better strategic position to serve customers and gain competitive advantage.

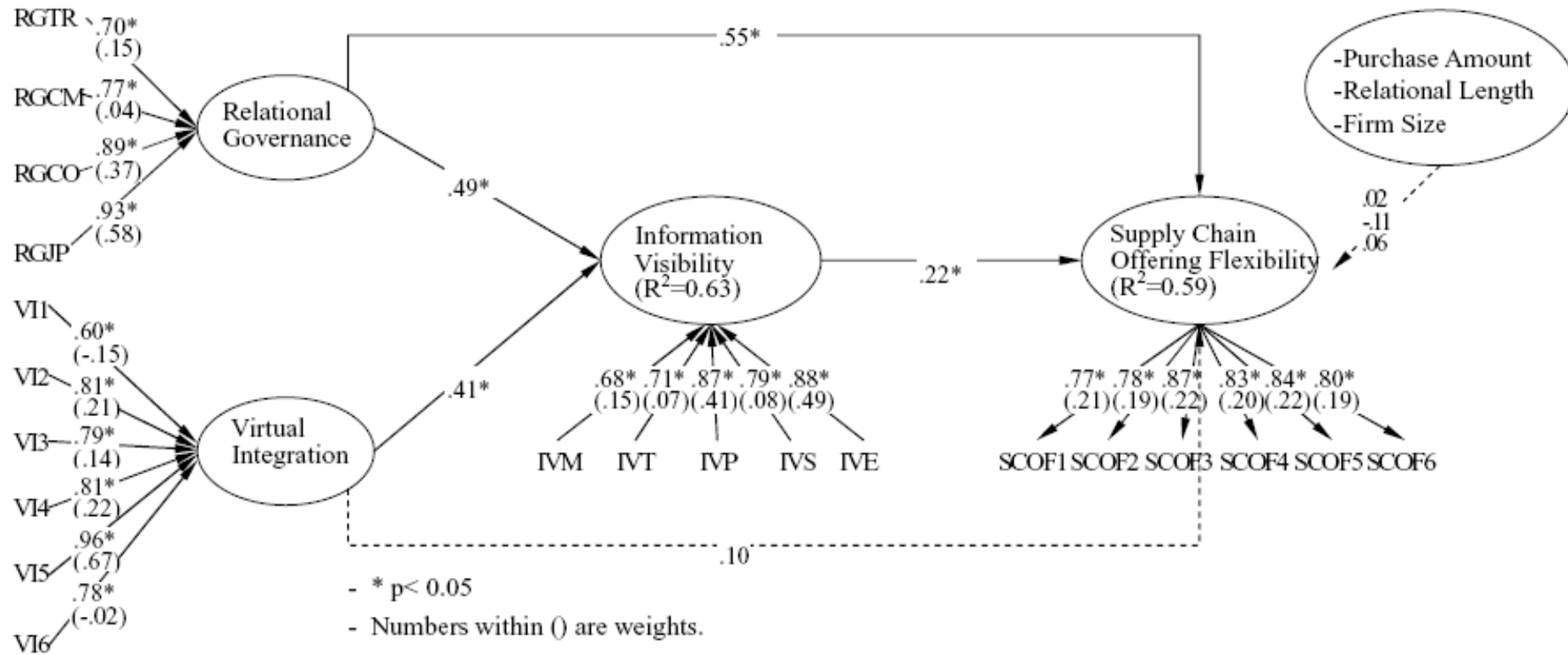
# Research Model



# Data Collection

- ◆ Mail survey was distributed to the operation managers of 980 manufacturing firms
- ◆ Among the 980 informants, 153 returned the questionnaire after one call-backs. 150 (15.3%) was valid for the use of data analysis.

# PLS Results for Research Model



# Conclusion

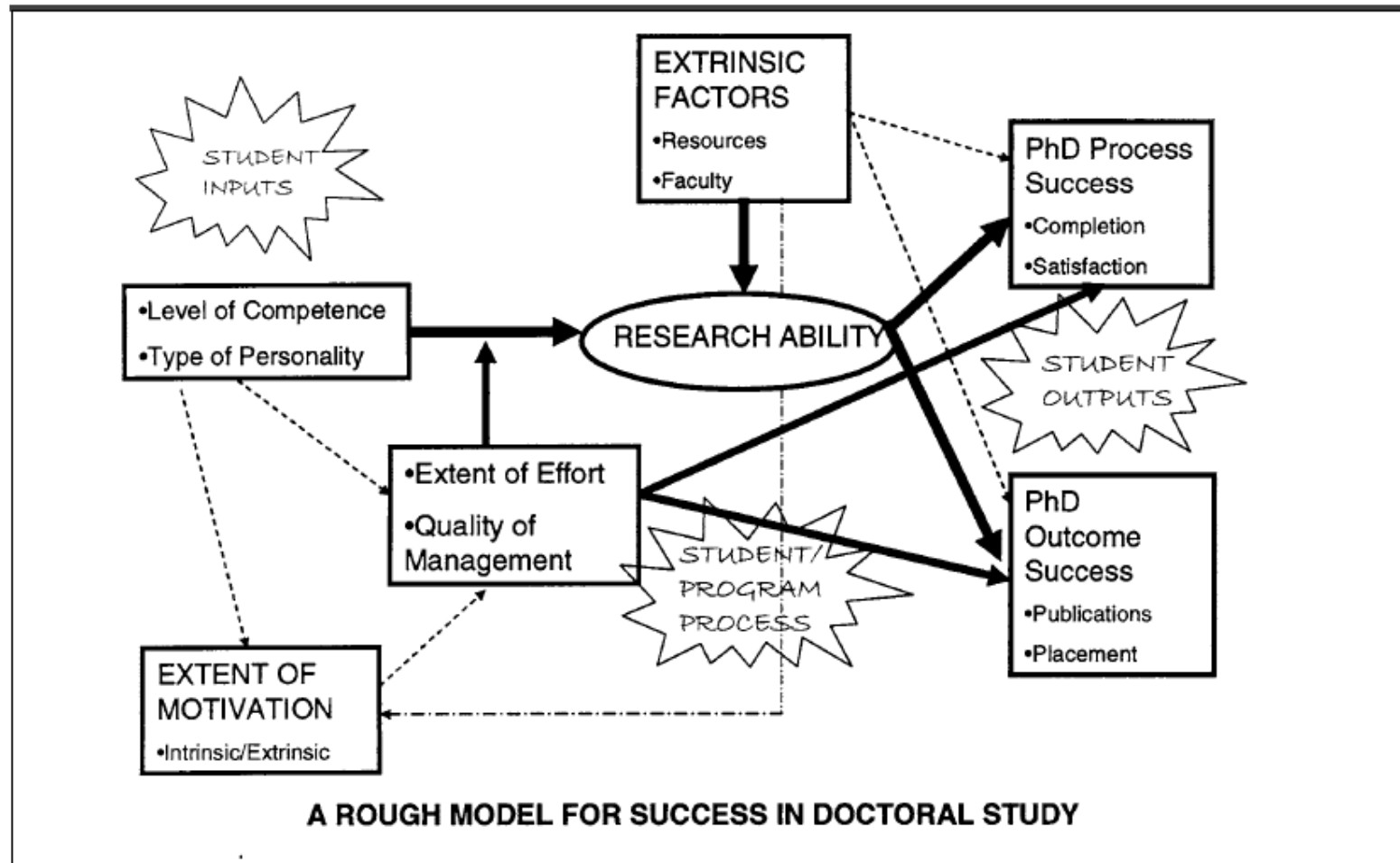
- ◆ Hybrid governance with both control and collaboration mechanisms can gain the valuable interorganizational capability, then creating better performance.
  - Both relational governance and virtual integration have significant and positive impacts on information visibility.
  - Relational governance is positively related to supply chain offering flexibility.
- ◆ Value creation through increasing visibility in SCM
- ◆ The influence of virtual integration on flexibility is mediated by information visibility.



# Effective Strategy for Your Paper

- ◆ Read Top-tier journal regularly
- ◆ Target top-tier journal as beginning
- ◆ Keep writing
- ◆ Collect opinions
- ◆ Manage your submitted manuscript efficiently

# Success in Doctoral Study (by Varun Grover)



# **Building Multidisciplinary Foundation**

- ◆ **Take courses outside your core area**
- ◆ **Read journals outside the core area**
- ◆ **Attend multidisciplinary conferences**

Thank you !

Q & A