Organization Design: The Past, Present and the Future

Thorbjorn Knudsen & Phanish Puranam

DRUID, 2008
Agenda

• How important is Organization Structure/Design as a research topic?
  – A quantitative answer
  – A qualitative answer

• What are some emerging topics/areas of research into the structure and design of organizations?
  – Some (idiosyncratic) speculations
How important is Organization Structure/Design as a research topic?

• A “quantitative” answer
  – Joint work with Marlo Goetting

• Count of articles in five important management journals since 1970
  – AMR, AMJ, ASQ, SMJ, OS
  – Keywords: “Organization* Structure/Design”
Note: data for 2006-2008 is censored
Papers with OS/OD in Abstract as a Fraction of Total Papers published by Journal

- SMJ.SUM
- AMJ.SUM
- AMR.SUM
- ASQ.SUM
- OSc.SUM

Years:
- 1970-2
- 1973-5
- 1976-8
- 1979-81
- 1982-4
- 1985-7
- 1988-90
- 1991-3
- 1994-6
- 1997-9
- 2000-2
- 2003-5
- 2006-8
OS/OD as a Fraction of Total Papers published per Journal based on unlimited full text search

- SMJ.SUM
- AMJ.SUM
- AMR.SUM
- ASQ.SUM
- OSc.SUM

Year Range:
- 1970-2
- 1973-5
- 1976-8
- 1979-81
- 1982-4
- 1985-7
- 1988-90
- 1991-3
- 1994-6
- 1997-9
- 2000-2
- 2003-5
- 2006-8
Papers on OS/OD as a Fraction of Total Papers in all 5 Journals based on unlimited full text search

- OS+OD
- OS only
- OD only
Fraction of papers with OD/OS in full text + citing Lawrence & Lorsch, by Journal
How important is Organization Structure/Design as a research topic?

• Some (tentative) conclusions

  – While papers have become somewhat less likely to frame their primary contributions in terms of organizational structure/design…

  – ..ideas about Org. Structure and Design continue to have enormous and widespread importance to the literature on organizations and strategy

  – Evidence of revival of interest in these ideas in the recent past

  – Organization Science is leading the charge among the top journals in pushing research on these topics (Thanks, Linda!)
How important is Organization Structure/Design as a research topic?

A Qualitative answer
Ideas in OS/OD remain critical to understanding phenomena such as

- Alliances/JV’s/Outsourcing arrangements
- Re-organizations and job rotation
- Product and organizational modularity
- Subsidiary parent relationships in MNC’s
- Ambidexterity
- M&A integration
- Industry dis-aggregation / redefinition
- ........
Some “hot” areas in the study of organization structure and design

• How does the formal organization shape the informal organization?

• How does organizational structure shape the emergence of specialization?

• How does organizational structure influence organizational adaptation?

• ...
1. Formal-Informal organization

- Traditional approaches to organizational structure/design have paid only limited attention to the informal organization.

- In contrast, much current (networks influenced) thinking sees the informal organization as “how things get done”. This can be misleading:
  - Employee behaviour is shaped by both the formal and informal organization
  - though managers can typically control only the former

- Formal vs. Informal: Designed vs. Emergent patterns of interaction and behaviour.
RECENT RESEARCH ON THIS TOPIC

- The “thermostat” model; Oscillating between discrete formal structures helps maintain appropriate informal organization which is ultimately what influences employee behavior.

Gulati & Puranam (2009): Renewal through reorganization: the value of inconsistencies between formal and informal organization
- Both formal and informal organization influence employee behavior— inconsistency between them may be useful to generate “compensatory fit”

- Considers how social networks can shape management’s ability to implement formal changes and organization member’s ability to resist

Allatta and Singh (2008)
- Studies e-mail networks before, during and after M&A integration

Kleinbaum, Stuart, Tushman (2008): Communication (and Coordination?) in the modern complex organization
- Study email networks and how divisional boundaries affect them
2. Org. structure – Endogenous specialization

• Traditional approaches to organizational structure/design treat specialization as a given and “solve” the problems of incentives/coordination given a pattern of specialization

• However, organizational structures are not only best responses to a given division of labour - they actively promote specialization

• Treating specialization as a given can be misleading:
  – Organizational structure leads to increasing specialization in ability
  – Ability has a compensatory element -- which becomes increasingly important with specialization

• Organizational structure and specialization: given vs. endogenous specialization

• A view of structure not just in terms of “how best to use our current capabilities” but also in terms of the “capabilities (and disabilities) structure creates”
RECENT RESEARCH ON THIS TOPIC

*Hammerstein (2002), and Hofbauer and Sigmund (1988): Coupled interaction influences evolutionary dynamics.*

- Co-evolutionary models; Coupled dynamics in predator – prey interaction, symbiant interactions (cleaner fish and client interactions), mutualisms, and more.


- Organizational structure serves to structure the attention of industry (and political) players and influences what the organization will focus on. However, unclear how structure influences the emergence of ability. *I WOULD SUGGEST REPLACING THESE WITH THE JACOBIDES AND WINTER PAPER – WHICH IS CLOSER TO THE IDEA OF ENDOGENOUS SPECIALIZATION*


- The structuring of work among teams and team leaders matters greatly for learning of new technology (for cardiac surgery). These studies do not pin down exactly how organizational structure influences learning.


- Changing classroom organization to a multigroup structure stimulates a joint learning process with notable positive effects on achievements. Unclear how exactly the structuring of interaction in classrooms influences student learning.

*Siggelkow and Rivkin (2006): Structure influences what information is available to actors.*

- Information processing capacity at one level may screen out the options and information available at a higher level. This may influence exploration. Implications for learning unclear.
1. Organization Structure-Adaptation

- The idea that structure can aid adaptation (as opposed to the idea that changes in structure are a form of organizational adaptation) is at least as old as Burns and Stalker and Lawrence and Lorsch.

- However, recent advances in modeling organizational adaptation through agent-based learning models suggest some novel insights into the role of structure in enabling adaptation.

- Learning within and by organizations comprising bounded rational agents tends to:
  - Be myopic
  - Lead to entrapment on local peaks
  - Generate risk avoidance
  - Be confounded by Nature/other interdependent learners

- How structure can help (or hurt) organizational adaptation, given the limitations of learning by individuals.
RECENT RESEARCH ON THIS TOPIC

• Structure among activities influences greater versus less adaptation. Org. structure influences the effectiveness of incremental, local adaptation within a given structure.

• Organizational design influences adaptation (e.g. speed of improvement and diversity of search) under different environmental contingencies (e.g. turbulence and complexity).

• Structure and decomposability of modules influences effectiveness of search and adaptation.

• Organizational structure shapes search and problem solving activities. This, in turn, influences decisions about adaptation.

• Structure influences who interacts with whom – and how. This gives rise to emergent learning dynamics that can explain biases, illusionary correlations in beliefs, and more.
Thank you!