Learning to Coordinate:
A Relational Model of Organizational Change

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Context for this study

- Challenging economic environment
- Organizations face intense pressure to reduce their costs while increasing quality performance
- But many organizations are still traditional bureaucracies with employees who work in silos, with poor coordination between them, achieving low quality at high cost
In this paper

- We use cases in health and human service sector to build relational model of organizational change
- We argue three *types of interventions* are needed
  - Relational
  - Work process
  - Structural
- We argue four *levels of leadership* are needed
  - Client leadership
  - Frontline leadership
  - Mid-level leadership
  - Executive leadership
Existing theory tells us

- Coordination is a key competence that drives organizational performance.
- Coordination is also a highly relational process.
- Organizational structures can be redesigned to increase relational coordination, connecting workers across silos and enabling them to deliver improved quality at lower cost.
- But relationship patterns are deeply engrained in organizational cultures and professional identities.
- Lack of psychological safety makes it difficult to learn new ways to coordinate.
Learning to coordinate

- How do organizations learn to coordinate?
- If coordination is relational, people need to learn new patterns of interrelating
- How does this happen in an intentional way?
- What is the sequencing or interplay between changing relationships, and changing the structures that reinforce them?
Flight departure process: A coordination challenge
“Here you don’t communicate. And sometimes you end up not knowing things…On the gates I can’t tell you the number of times you get the wrong information from operations…The hardest thing at the gate when flights are delayed is to get information.”
“Here there’s constant communication between customer service and the ramp. When planes have to be switched and bags must be moved, customer service will advise the ramp directly or through operations…Operations keeps everyone informed. It happens smoothly.”
“If you ask anyone here, what’s the last thing you think of when there’s a problem, I bet your bottom dollar it’s the customer. And these are guys who work hard everyday. But they’re thinking, how do I stay out of trouble?”
“We figure out the cause of the delay. We don’t necessarily chastise, though sometimes that comes into play. It’s a matter of working together. Figuring out what we can learn. Not finger-pointing.”
“Ninety percent of the ramp employees don’t care what happens. Even if the walls fall down, as long as they get their check.”
“I’ve never seen so many people work so hard to do one thing. You see people checking their watches to get the on-time departure. People work real hard. Then it’s over and you’re back on time.”
Employees revealed little awareness of the overall process. They typically explained their own set of tasks without reference to the overall process of flight departures.
Employees had relatively clear mental models of the overall process -- an understanding of the links between their own jobs and the jobs of their counterparts in other functions. Rather than just knowing what to do, they knew why, based on shared knowledge of how the process worked.
“There are employees working here who think they’re better than other employees. Gate and ticket agents think they’re better than the ramp. The ramp think they’re better than cabin cleaners -- think it’s a sissy, woman’s job. Then the cabin cleaners look down on the building cleaners. The mechanics think the ramp are a bunch of luggage handlers.”
“No one takes the job of another person for granted. The skycap is just as critical as the pilot. You can always count on the next guy standing there. No one department is any more important than another.”
Relationships shape the communication through which coordination occurs ... (Gittell 2003)
For better...

Shared goals
Shared knowledge
Mutual respect

Frequent communication
Timely communication
Problem-solving communication
... Or worse

Functional goals
Specialized knowledge
Lack of respect

Infrequent communication
Delayed communication
“Finger-pointing”
This process is defined as

relational coordination

“Communicating and relating for the purpose of task integration“ (Gittell 2002)
Investigated performance effects of relational coordination

- Nine site study of flight departures over 12 months of operation at Southwest, American, Continental and United
- Measured relational coordination among pilots, flight attendants, gate agents, ticket agents, baggage agents, ramp agents, freight agents, mechanics, cabin cleaners, fuelers, caterers and operations agents
- Measured quality and efficiency performance, adjusting for product differences
# Relational coordination and flight departure performance

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<td>-.42***</td>
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<td>Flights/day</td>
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<td>R squared</td>
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Relational coordination and flight departure performance

Quality/efficiency performance index

Relational coordination
Does relational coordination matter in other industries?
Patient care: A coordination challenge

Case Managers

Nurses

Attending Physicians

Physical Therapists

Nursing Assistants

Social Workers

Technicians

Referring Physicians

Administrators

Patient care: A coordination challenge
Institute of Medicine report

“The current system shows too little cooperation and teamwork. Instead, each discipline and type of organization tends to defend its authority at the expense of the total system’s function.” (2003)
Physicians recognize the problem

“The communication line just wasn’t there. We thought it was, but it wasn’t. We talk to nurses every day but we aren’t really communicating.”
Nurses observe the same problem

“Miscommunication between the physician and the nurse is common because so many things are happening so quickly. But because patients are in and out so quickly, it’s even more important to communicate well.”
Same study conducted in hospital setting

- Nine hospital study of 893 surgical patients
- Measured relational coordination among doctors, nurses, physical therapists, social workers and case managers
- Measured quality and efficiency performance, adjusting for patient differences
Relational coordination and surgical performance

<table>
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<tr>
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<th>Freedom from pain</th>
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<td>.26***</td>
<td>.08*</td>
<td>.06+</td>
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<td>Patient age</td>
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<td>.00</td>
<td>.01</td>
<td>.04</td>
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<td>.07</td>
<td>.01</td>
<td>.04</td>
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<td>Pre-op status</td>
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<td>.01</td>
<td>.20***</td>
<td>.28***</td>
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<td>Surgical volume</td>
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<td>.10*</td>
<td>.06+</td>
<td>.03</td>
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<td>R Squared</td>
<td>.82</td>
<td>.63</td>
<td>.50</td>
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Observations are patients (n=878) in hospitals (n=9). Model also included gender, marital status, psychological well-being and race. Standardized coefficients are shown.
Relational coordination and surgical performance

Quality/efficiency performance index

Relational coordination

Hosp1

Hosp2

Hosp3

Hosp4

Hosp5

Hosp6

Hosp7

Hosp8

Hosp9
Findings extended to other healthcare settings

- Medical care units in Boston suburban hospital
- Medical, surgical and intensive care units in Pennsylvania rural hospitals
- Nursing homes in Massachusetts
- Chronic care in California multi-specialty groups
- Chronic care in Netherlands
Relational coordination also matters for worker outcomes

- Increased job satisfaction
- Increased career satisfaction
- Increased professional efficacy
- Reduced burnout, emotional exhaustion
Relational coordination *pushes out* the quality/efficiency frontier while improving worker well-being.
There are other useful responses to coordination challenges...

- Reengineering
- Total quality management
- “Lean” strategies
- Redesigning work flows
Addressing technical issues is necessary but not sufficient

“We’ve been doing process improvement for several years, and we think we’re on the right track. But we’ve tried a number of tools for process improvement, and they just don’t address the relationship issues that are holding us back.”

-- CMO, Tenet Healthcare Systems
Why does relational coordination matter?

Relationships of shared goals, shared knowledge and mutual respect provide an *organizational culture* that supports process improvement.
Why does relational coordination matter?

Relationships of shared goals, shared knowledge and mutual respect help workers to connect *around* their clients.
Relational coordination: Connecting workers around the client
When does relational coordination matter most?

- **Task interdependence**
  - What you do affects my ability to do my job, and vice versa

- **Uncertainty, unpredictability**
  - We can’t know everything we need to know

- **Time constraints**
  - We can’t waste time
Relational coordination and organizational performance

Relational Coordination
- Shared goals
- Shared knowledge
- Mutual respect
- Frequent
- Timely
- Accurate
- Problem-solving
- Communication

Quality Performance
Efficiency Performance
Worker Well-Being

Task interdependence
Uncertainty
Time constraints
How do organizations support relational coordination?
Impact of organizational structures
Gittell, Seidner & Wimbush, 2010

• Organizations can support relational coordination – or undermine it – through the design of their structures

• Organizational structures include selection, training, performance measurement, rewards, conflict resolution, information systems, etc.

• These structures can be designed to foster
  – Human capital (knowledge, skills, abilities)
  – Commitment to the organization
  – Social capital, relational coordination
Organizational structures that support relational coordination

- Invest in frontline leadership
- Resolve conflicts proactively
- Reward team performance
- Measure team performance
- Select for teamwork
- Make job boundaries flexible
- Create boundary spanners
- Develop shared protocols
- Broaden participation in team meetings
- Develop shared info systems
- Partner with suppliers

Relational Coordination

- Shared goals
- Shared knowledge
- Mutual respect
- Frequent problem-solving
- Timely communication
- Accurate performance
- Quality performance
- Efficiency performance
- Worker well-being
Getting from here to there
Learning to coordinate

- Structure/process/outcomes model may be an accurate description of the current state, but a naïve model of organizational change.
- Patterns of behavior are *deeply embedded* in organizational cultures and professional identities.
- These patterns of behavior are based on assumptions that may need to be *examined and questioned* before they can be changed.
Changing structures is not enough
(Fletcher, Bailyn, Blake-Beard 2009; Kellogg 2009)

- Change rarely occurs simply by changing organizational structures
- Need to identify and question current assumptions
- Need ‘discursive’ or ‘relational’ space for doing this
Organizational learning (Edmondson 2002)

- Organizational learning is interpersonal and relational, and often involves learning to coordinate work in a new way.
- Psychological safety – the perception that it is safe to express disagreement and be fallible – is a necessary condition for this kind of interpersonal, relational learning to occur.
- Psychological safety enables participants to identify and question current assumptions.
How to start the learning process (Schein 2010)

- Individuals or groups can participate in a ‘relational space’ or a ‘cultural island’ that enables examination of past practices, cultural norms and constraints to learning
- Goal is to identify and commit to shared goals with the organization and each other
Learning from case studies

- Texas primary care
- Canadian obstetrics
- Maine Dept. of Health & Human Services
Texas primary care

- Intervention team from UT Health Science Center in San Antonio worked with 40 rural primary care clinics to improve chronic care for their patients

- Team helped clinics to measure
  - their outcomes
  - their structures for chronic care delivery
  - relational coordination
  - reciprocal learning
Texas primary care (continued)

- Coaching visits every 2-3 weeks for one year to
  - facilitate meetings
  - support work process improvements
  - support relational improvements
- “We share the data with them and let them decide what they wanted to do about it. We give advice, like meeting with each other, doing regular huddles to coordinate care – but we are there to help them do what they want to do”
  
  Raquel Romero, Intervention Team Leader
Texas primary care (continued)

- Base-line cross-sectional data show that relational coordination and reciprocal learning predict adoption of the chronic care model
- Instead of structures predicting process, process predicts structures
- Suggests relationships may be needed before new structures will be adopted
- Now analyzing longitudinal data to assess impact of changes over time
Canadian obstetrics

- Canadian obstetrician and obstetrics nurse discovered through their own work experience that relational approaches between providers and with patients seemed to result in fewer errors, better quality outcomes, less waste, fewer liability claims.

- With support from a Canadian insurance association, they formed a consulting practice to teach their methods to obstetrics units throughout the country.
First they help providers to improve their work processes and relational dynamics

Then they ask for leadership support for new structures to support the new ways of working

“We didn’t know what to call what we were doing, but after reading organizational theory in the late 1990s, I realized we were doing relational coordination.”

Ken Milne, CEO, Salus Global Consulting
Canadian obstetrics (continued)

- So far:
  - 260 Canadian hospitals
  - 30 U.S. hospitals
  - achieving reductions in liability claims, and increases in satisfaction and other quality outcomes

- Underway:
  - rolling out the model to other hospital units (surgery, ER, ICU), that have requested intervention
Maine Dept. of HHS

- Leaders in Maine’s Office of Lean Management have been implementing lean principles in government for 6 years.
- They respond to requests for training and for assistance with work process improvement.
“It is a blame/shame environment. During the training we started to see the goal alignment, the shared knowledge and the respect they were developing for each other. We saw it but didn’t know what it was.”

“We realized that when the lean training works, it’s because they are changing their relationships in really important ways”

Walter Lowell, Director, Office of Lean Management
“We designed a coaching intervention to foster relational coordination, and we called it the soft side of lean.”

“But people can get really discouraged when they go back to work – some say it was great training but within a couple of months they are back in their old boxes. Nothing has changed to support their new ways of working together.”

Kelly Grenier, Consultant, Office of Lean Management
Proposition 1:
Three kinds of interventions are needed for sustainable change

- Relational intervention
- Work process intervention
- Structural intervention
A Relational Model of Organizational Change

**Structural Intervention**
- Selection
- Training
- Conflict resolution
- Performance measures
- Rewards
- Boundary spanners
- Meetings
- Protocols
- Information systems

**Relational Coordination**
- Shared goals
- Shared knowledge
- Mutual respect
- Frequent communication
- Timely communication
- Accurate communication
- Problem-solving communication

**Relational Intervention**
- Psychological safety
- Relationship mapping
- Coaching/role modeling

**Performance Outcomes**
- Quality
- Efficiency
- Worker well-being

**Work Process Intervention**
- Value stream mapping
- Goal and role clarification
- Structured problem solving
Relational intervention

- Bring together all work groups
- Create a relational space to allow new ways of communicating and relating
- Create psychological safety for people to speak up
- Create psychological safety for people to admit they don’t know everything
Work process intervention

- Identify and map the work process
- Use methods such as value stream mapping
- Identify and clarify all roles in the process
- Identify key performance outcomes
- Identify areas for improvement
- Use tools for structured problem solving
Relational intervention

- Create relationship map, including all roles
- Assess relational coordination
- Create conversations to build
  - shared goals – *what are we trying to accomplish here?*
  - shared knowledge – *how is our work connected?*
  - mutual respect – *how does each role contribute to meeting our goals?*
- Coach and model relational behaviors
Mapping relational coordination

- Physicians: 3.70
- Day nurses: 4.42
- Nurse mgrs: 4.57
- Secretaries: 4.57
- Night nurses: 4.43

Relationships and scores:
- Physicians to Nurse mgrs: 3.23
- Nurse mgrs to Secretaries: 3.72
- Secretaries to Night nurses: 4.26
- Night nurses to Day nurses: 3.95
- Day nurses to Physicians: 4.36
- Physicians to Secretaries: 3.78
- Nurse mgrs to Day nurses: 4.24
- Nurse mgrs to Night nurses: 3.71
Mapping relational coordination after six month intervention

- Physicians: 4.22
- Day nurses: 4.30
- Night nurses: 4.39
- Nurse mgrs: 4.17
- Secretaries: 4.14

Shaded numbers indicate significant positive change.
Structural intervention

- Assess current organizational structures
- Which ones support relational coordination? Which ones do not?
- Which new ones are needed?
- Develop plan of action to redesign
- Leadership support appears to be critical
Proposition 2: Four levels of leadership are needed for sustainable change

- Client leadership
- Frontline leadership
- Mid-level leadership
- Executive leadership
A Relational Model of Organizational Change

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**Work Process Intervention**
- Value stream mapping
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- Structured problem solving

**Client leadership**
- Performance outcomes
  - Quality
  - Efficiency
  - Worker well-being

**Executive leadership**

**Front line leadership**

**Mid-level leadership**
Testing the relational model of organizational change

- What is the best research design for testing this model?
- When all three interventions are implemented, what changes occur in...
  - Relational coordination?
  - Quality? Efficiency? Worker well-being?
- Are those changes sustained over time?
- How to measure leadership involvement and assess its impact?