Emerging Network Organization and Work Systems

Case Examples from Health Care and Technology

Organization Design Forum
Austin, Texas
May 2011

Stu Winby
Context

Concepts and Propositions
Craft Work
Local, Familiar, Socially Embedded, Social Ties
Craft to Industrial Work
The second Organizational shift

The Nature of the Firm
By R. H. Coase

Economic theory has suffered in the past from a failure to state clearly its assumptions. Economists in building up a theory have often omitted to examine the foundations on which it was erected. This examination is, however, essential not only to prevent the misunderstanding and needless controversy which arise from a lack of knowledge of the assumptions on which a theory is based, but also because of the extreme judgment in choosing the assumptions. For instance, it is suggested in economics may be built up by the “plain man,” in economic theory by an individual firm and be more necessary not only the firm” should be a firm in the “real world.” Mrs. Robinson has not been asked of a set of assumptions and the question is: Does the firm work? Though, as Mrs. Robinson may well be branches of the same firm, both manageable and tractable, it is important to understand the following paper that a definition of a firm may be obtained which is not only realistic in that it corresponds to what is meant by a firm in the real world, but is tractable by two of the most powerful instruments of economic analysis developed by Marshall, the idea of the margin and that of

“ The main reason why it is profitable to establish a firm is …the cost of using a price mechanism (transaction costs)… ”

Evolution of Organizational Design

Vertical Integrated Systems
Organization
Information Processing View

“A basic proposition is that the greater the uncertainty of the task, the greater the amount of information that has to be processed between decision makers during the execution of the task”

Organization design establishes its design methodology.
Today’s Modern Organization
Vehicles, horizontals, four to six dimensions, heavy matrixes

- Scale
- Aggregation
- Anonymity
- Efficiency
Complexity
Rapidly increasing and run away complexity
Information technology has .......
Reduced coordination and transaction costs
Forces Driving Organizational Design
Complexity and rapid change

Destabilizing Event(s)

- "strategic" uncertainty
- Globalization
- Technological Innovation
- Knowledge Work Tacit Interactions
- Explosion in Innovation
- “Thoughtocracy” of cyberspace

Organizational Design Requirements
- Agility and Speed
- Collaboration
- Markets more flexible and efficient than hierarchies
- Strategic: sense – response capability
- Decentralization decision making
- Broad horizontal networks mobilize quickly
Organization
Third Organizational shift where networks more effective processors of information

Vertical
lateral
Network
**Work Transformation Phases**

Evolution of work system models

- Small Guild based Production – *Craft Production System*
- Small Batch Production – *Flexible Specialization System / STS*
- Optimized “lean” Production – *Toyoda Production System*

Net Work Production - *Adaptive Work System*

Social Production – *Web-based knowledge tools for production*
Adaptive Model

Overview
Adaptability:
It is not the strongest of the species that survives, nor the most intelligent; it is the one that is most adaptable to change. (Charles Darwin)
Adaptive Work System Model
Networks are communities, groups of individual processors

The Adaptive Work System is a type of organizational network that is configured to operate as a high performing work system at multiple levels of global - enterprise or unit levels of design. Performance characteristics such as agility, speed, flexibility, and re-configurability are typically delivered by the adaptive work system.

The adaptive model incorporates into its design the principles of innovation, network sciences, and socio-technical systems theory and practice into a new model of work organization.
Star Model
Adaptive Work System – Organizational Design View

The Agility and Speed Star Model

- Agility, flexibility, speed, and re-configurability

Strategy

- Network (foreground)
- Structure (background)
- Ambidextrous
- Network clusters and nodes

People

- Stakeholders
- Communities
- Network Leader
- New design skills
- Collaborative culture

Rewards

- Customized compensation
- Bonus
- Career – market value
- Recognition
- Metrics

Processes

- Decision Accelerator
- Technology enablers/system
- Rapid prototyping
- Strategic Horizons Process
- Plan-of Record / market dynamics
- Performance management
- Dashboards for learning

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Functional Framework
Adaptive Work System – Functional View
Functional View
Adaptive Work System – Platform and Applications

Applications
(work-system Design)
Biz Model Design  Product Design  Service Design  Experience Design  STS - Work Design  Transformational Design

Platform

ADAPTIVE WORK SYSTEM
1.) LEADERSHIP  2.) STRATEGY  3.) DECISION ACCELERATOR  4.) WORK SYSTEM DESIGN  5.) OPERATING NETWORK  6.) FEED-FORWARD  7.) REVIEW AND ADJUST  8.) FEEDBACK AND RE-CONFIGURABILITY
Adaptive Model

Structure
Structure

Ambidextrous Model

Ambidextrous Model
Enterprise Structure
Adaptive Work System
Design Environment
Structure

Networks are Ambidextrous Organizations

A = Optimization Focus
B = Design Focus
Network Organization
Ambidextrous design: design for both optimization and adaption

Growth Incubator

Informal Networks

Adaptive Work System Network

Adaptive Work System Network

Office of Innovation

Design Center

CEO

Sr. VP Transformation
Regardless of Dominant Organization Structure

Functional
Product
Process
Geography
Market
Channels

Design network for Value Delivery

Keep in Background

Bring to the Foreground
Processes
Design Environment

Production Room
Ideation – Deep Dive
Virtual Design
Decision Accelerator
Knowledge Center, Wall, Towers
Green Room
Technology Enabled

Central control Panel

Inside the cage
Adaptive Model

Features and Functionality
Features and Functionality
Design architecture of the work system

Decision Accelerator

Team Units

Practices

Adaptive Planning

Re-configurability

Teams - self organizing nodes
**Feature and Functionality**

Decision Accelerator

The Decision Accelerator is a powerful management tool/intervention which improves both execution performance and innovation capability. We define the DA as a creative, knowledge rich, technology enabled, highly collaborative environment where clients participate in work sessions to create solutions to complex business problems.

The DA is an organizational capability whose characteristics and benefits generally do not exist in traditional organizations and thus provides a source of advantage – reduced time to value (speed), maximizes productivity of resources (costs), accelerates stakeholder commitment (empowerment), significantly increases social capital (integration), and solves complex business problems with concrete solutions.
# Decision Accelerator

## Decision Accelerator - A Network in Action

<table>
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<tr>
<th>Production Runs</th>
<th>Nodes and Deliberations</th>
<th>Integration Team</th>
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<td>1</td>
<td>Inputs –</td>
<td>Outputs</td>
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<tr>
<td>2</td>
<td>Inputs –</td>
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<td>12</td>
<td>Inputs –</td>
<td>Outputs</td>
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Final Deliverable
Decision Accelerator
Decision Accelerator – Information processing

In the first 24 months, we have to build the innovation team and get projects going in 16 months. We’d create a charter and a mission statement. We’d staff the center. We’d advertise the center through the system. We have to create accountability structure. If I were on the advisory board, I’d get access from someone from Proctor and Gamble, a mom, scientists, etc. They have 350 projects catalogued. They can track detail from the projects and see correlations and send emails out from that system. At five years, we’d have ten projects completed and ten more going. We’d increase awareness. We’d establish a good tracking system. We would have figured out our batting average and regional recognition. Now a member of the advisory board needs to meet three times a year. And now we’ve gotten calls from Kimberly-Clark who wants to be part of this. And Mark and Andy are playing tug of war with whose idea this was. Now Intel wants to be part of this. In ten years, we want 50 projects done and 50 going. We’d have project submissions and other care networks to our center to accomplish innovation. Now there are top requests from all over. Engaging families and kids are involved in this process too.

Whiteboards - Click Images to Enlarge

Report Out

MILESTONES:
- external submissions / external fellows
- core competency of FHS
- CEO reports metrics annually nationwide consumer recognition
- 3/4 Billion AHC Funding.
Features and Functionality

Teams: Definition

Work teams are the implementation arm of an adaptive work system. These cross functional self organizing teams are activated when DA outputs and design requirements are defined.

Owners are identified to structure, resource, and oversee the implementation phase.

Work Teams operate within a highly dynamic project management framework which can absorb iterative inputs to rapidly produce successive approximations of required solutions. Teams and network is reconfigurable.

Work Teams are ideal for fast cycle time innovation of products, processes, services as well as strategic organizational transformation.
Delivery Framework
Rapid iteration, re-configurability, and delivering value

1 – N Iterations

Iterative Delivery (30 Days)

Iteration Planning → Design / Develop → Review & Adapt

Mobilize Network → Design Brief → Iterative Delivery → Steady – State → Close
Case Examples

With a subtitle box
## Processes
Some of the DAs in Health Care

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<th>Access Quality Accelerator</th>
<th>Blue Cross Blue Shield DA</th>
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<td>Board – Facility Planning DA</td>
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<td>Activate Omaha Kids – Physical Activity Plank</td>
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<td>Advocacy DA</td>
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<td>AHC Ambulatory EMR DA</td>
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<td>AHC Bellevue DA</td>
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<td>AHC Branding DA</td>
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<td>AHC Finance Committee DA</td>
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<td>AHC Leadership Steering Committee</td>
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<td>AHC Revenue Enhancement DA</td>
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<td>Alegent Physician Implementation Team</td>
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<td>Aligning Alegent Health with the Future</td>
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<td>Ambulatory Charette</td>
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<td>Ambulatory Generation Patient Kickoff</td>
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<td>Ambulatory Human Experience Synthesis</td>
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<td>Ambulatory Ideation DA</td>
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<td>American Red Cross DA</td>
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<td>Aroma Therapy Course</td>
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<td>Association of Healthcare Philanthropy</td>
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<td>Back &amp; Spine DA</td>
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<td>Bed Board Diffusion Session QA</td>
<td>Consumer Directed Healthcare DA</td>
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<td>Behavioral Health DA</td>
<td>Core Nurse Staffing DA</td>
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<td>Behavioral Human Experience: Need Finding Workshop</td>
<td>Corporate Communications Engagement Survey</td>
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<td>Behavioral Service Line Retreat</td>
<td>Corporate Cycling Challenge Distribution</td>
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<tr>
<td>Bemis Center for the Arts DA</td>
<td>Corporate Health Management DA</td>
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<tr>
<td>Bergan Generation Patient Ambulatory DA</td>
<td>Council Bluffs Chamber DA</td>
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<td>Bergan Mercy Magnet DA</td>
<td>Critical RN Recruitment</td>
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<tr>
<td>Bergan Primary Care CA</td>
<td>Culturally &amp; Linguistically Competent Care DA</td>
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</table>
Processes
Some of the DAs in Health Care

Diversity DA
eHealth Strategy Development
eICU DA
eICU Integration
eICU Kickoff
eICU Workflow Design DA
Evidence Based Order Set Designs
Executive Dashboard Planning Session
Facility Planning DA
Faith Community DA
Future of Cardiology
FY07 Operational Planning DA
FY08 Campus Planning Session
FY2007 Capital Budget DA
Generation Patient – Reg/Sched/IT DA
Generation Patient Update: Behavioral
Generation Patient Update: Oncology
Generation Patient Update: Women’s & Children’s
Health Science Expansion DA
Heart Failure DA
HESOCO DA
Homeless (OACCH) DA
Hope Center for Kids Strategic Planning
Hope Recovery Center
HR Leadership Training
IDEO Service Center DA
IFH Strategic Planning DA
Imaging DA
IMC Generation Patient DA
IMC Magnet Gap Analysis
Information Technology DA
Innovation Learning Network
Inpt MedSurg Human Experience Need Finding Workshop
Institutional Review Board
Interdisciplinary Care Planning Style Guide DA
Iowa West Foundation DA
IT Deep Dive DA
Junior Achievement Mtg
Juvenile Mental Health DA
Labor Relations DA
Leadership Council – Engagement Impact Planning
Leadership Omaha Retreat
Long Term/Annual Incentive Plan DA
Lutheran Mission Leaders DA
M Technique Training
Market, Strategy & Operational Plan DA
Marketing FY08 Budget
Marketing Summit
Master Black Belt Qualification Training for Change Mgmt
MD Health Evolution
Medication Reconciliation Design Session
Mercy Higher Education
Midlands Data Center Value Management
MyCost Design
National Association of Catholic Chaplains DA
NeHII DA
Neuroscience DA
Newt Gingrich Visit
Nonprofit Executive Institute
Nursing Leadership Academy

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Processes
Some of the DAs in Health Care

Nursing Total Rewards Workshop
O! Omaha Public Art Project
Older Adult DA
Omaha Business Group on Health DA
Omaha Children’s Museum DA
Omaha Public Library DA
Omaha Steaks DA
Omaha Venture Group
OMMRS ACF Training
Oncology DA
Oncology Ideation
Oncology: Pont Forward Incubation session
One World DA
Open House & CDHC DA
Orthopedics DA
Patient Experience Project
Patient-Centered Care Workshop Pilot
Payroll/AP/Acctg/Reimb Employee Engagement
Physician Alignment DA
PICIS Design Session
Planned Giving Council of Nebraska
Plastic Surgery DA
Point Forward Workshop
Power to the Patient My Cost DA
Pricing Transparency Integration
Quality Accelerator
Quality Accelerator Access
Quality Accelerator Bed Board Validation Session
Quality Accelerator Design Session
Quality DA
Quality Design Session
Regional Network DA
Regional Network Planning DA
Regional Strategy DA
Retail DA
RightTrack Office DA
Sales Force Development
Salvation Army DA
Senior Services DA
Senior Services Planning Session
Service Center Design
Service Center Meeting
State of the Board
STD DA
Strategic Plan Review/Retreat
Sustainability DA
The People Equation DA
Total Joint Replacement DA with Premier
Uninsured DA
United Cerebral Palsy DA
Voice Care QA
Voice Care QA Design Session
Voice Care Session
Women’s & Children DA
Women’s & Children Design Team Kickoff
Women’s & Children’s Design Session
Women’s & Children’s Design Team
Women’s & Children’s Ethnography Study
Workforce Planning Brainstorm
Workforce Planning Team Training
Case
Service Design – Access Project

Description
As a result of a successful implementation of over 40 innovative medical home based clinics there was a decline in patient access. It was decided that a new patient centric access solution was needed to be invented to replace the existing systems and better align with the new clinic innovations.

Methodology
27 individuals consisting of patients, physicians, executives, and care providers met for two days to invent a new access solution. Prior to the session ethnographic research was conducted on over 80 subjects. Four design teams were involved.

Results
Two new access systems were modeled consisting of numerous new features and functionality. There designs are now being piloted/ prototyped in four clinics.
Process Overview

- **Introduction**
  - Introduction
  - Empathy Map
  - Design criteria
  - Vision / Story-telling

- **Round 1**
  - Ideation/Brainstorm
  - Concept development
  - Criteria test
  - Review models and discuss

- **Round 2**
  - New approach to brainstorming
  - Repeat process

- **Day One - AM**
  - User Insights
  - Requirements

- **Day One - PM**
  - Ideation
  - Prototype
  - Test

- **Day Two - AM**
  - Ideation
  - Prototype
  - Test

- **Day Two - PM**
  - Learning Plan
  - Iteration Plan
  - Pilot plan
  - Learning plan
Case
Cisco – socio-technical integration

Description
Services Board needed to re-invent its VSER and re-structures its services to Cisco. Wanted a way to rapidly and virtually complete these objectives. Existing work system is a 4th generation technology and a 2ed generation social system

Methodology
Objective was to redesign the social structure to optimize with the virtual based technical system, and produce high quality output in a short time frame.

Results
“Best board meeting we every had by far”
“Totally new way to work that gives us breakthrough productivity, superb quality, low cost, in half the time”
Case
Adaptive Design – FMG WIN Project

Description
Health care reform (reduced costs, improved clinical outcomes, and better patient experience) required transformational change of the entire provider system. A key first step is to transform primary care into a “medical home” model. This required discontinuous change of the existing clinic system.

Methodology
Project started with care model Innovation for three clinics as lead prototypes. Used an STS and design methodology. 42 clinics then went through a transformational design process using the adaptive work system model. A work Innovation Network model for rapid diffusion was then employed.

Results
42 clinics certified by the state as medical homes in 10 months. Competitors achieved on average less than 10 in the same amount of time.
Case

Business Model Design – Senior Management Team

Description
A health care provider needed to increase growth and revenues due to reduced hospital admissions. Growth needed to be non-traditional because of a mature market.

Methodology
A business model design application with the senior team over several design sessions to explored market adjacencies and white space opportunities.

Results
Two growth initiatives resulted: (1) “Project Stork” – Joint project with Target to increasing growth through reducing risk of pregnant employees; and (2) Joint venture with Provider and Payer (Medica Insurance) to develop new insurance product for individual and family members (non-employer status). Both these initiatives have been extensions of this effort through the adaptive approach.
Case Experience Design – Ovarian Cancer

**Description**
The increase of ovarian cancer was causing alarm in the Minnesota medical school and with state provider groups. Several providers decided to jointly explore new care treatment models and improve the patient experience.

**Methodology**
Twenty – four ovarian cancer patients and a like number of physicians and specialists got together for two two-day experience provider-patient co-creation design events. Following design sessions pilot adaptive units were put in place to track implementation progress.

**Results**
Ovarian cancer touch points were redesigned and many implemented between participating providers.
Case
Adaptive Design – Governor Project

Description
Governor of Minnesota needed to reduce health care costs in state and challenged health care provider CEO to do so.

Methodology
Established a network of CEOs, Chief medical Officers, and CFOs and designed plan in DA session. Four adaptive teams met over a period of four weeks.

Results
A proposal was on the governors’ desk in four weeks. Action was taken on a number of recommendations resulting in decreased state health care costs.
On February 25, 2009, nearly 60 health care industry leaders gathered to collaborate on a challenge: how can hospitals, other providers, payers and the State of Minnesota come together to fundamentally redesign the way we deliver care and reduce per capita costs in the Medicaid and other state programs?

The challenge was posed by Governor Tim Pawlenty during a meeting with healthcare leaders in mid-February. Senator Berglin and DLF leadership have also asked for industry input. With the state’s dire economic picture and the massive proposed cuts to health care as the backdrop, the conversation built on a mutual agreement that the delivery and payment system needs to be redesigned. Ultimately, the Governor asked hospital leaders to think with their payer colleagues to “put something on the table.”

The February 25 meeting aimed to do that. Leaders participated in a four-hour meeting that was centered on the following outcomes:

- Manage the health of a defined population (subset of Medicaid population)
- Improve clinical outcomes
- Create an exceptional experience for enrollees
- Reduce per capita costs

The group that assembled represented all the major providers and payers, serving predominantly the greater Twin Cities area.
Cases
Transformational Design
“We shall not cease from exploration
And the end of all our exploring
Will be to arrive where we started
And to know the place for the first time.”

T.S. Elliot
Little Gidding
Thank You