

Supporting Collaboration

Chapter 12

Outline

- Introduction
 - ◆ Teams: The Basis of Organizations
- Understanding Groups
 - ◆ Characteristics of Groups
 - ◆ Types of Groups
 - ◆ Communities of Practice
 - ◆ Network Armies

Introduction

- The company of the future could be a collection of online communities:
 - ◆ Some are internal and others reach outside the organization's boundaries into one's business ecosystem
 - ◆ Some are designed and formed outright and others just grow on their own
- A main job of executives and managers is to foster these communities and the collaboration they engender
- A major job of CIO is to provide the technology to support online communities and online collaboration

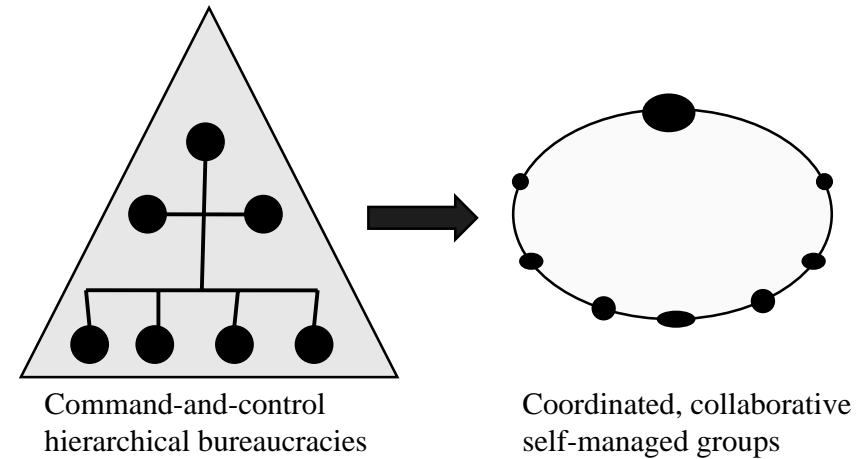
Teams: The Basis of Organizations

- A symphony orchestra, not a manufacturing organization will be the new organizational paradigm when organization becomes information-based
 - ◆ Teams of specialists who direct their own performance
- Three factors driving the move
 - ◆ Knowledge workers naturally resist command-and-control form of organization
 - ◆ Companies are forced to be more innovative and entrepreneurial
 - ◆ IT is forcing the shift
- Systems that contain support groups are important because most people spend 60 – 80% of their time working with others

Evolution in the Structure of Management

- We are in the third evolution in the structure of management:
 - ◆ Around 1900 – Separated business ownership from management
 - ◆ 1920s – Created the command and control corporation
 - ◆ Now – Organization of knowledge specialists
- Organizations are becoming flatter, with fewer ‘Head Quarter’ staff and many specialists out in operating units
- Groupware is the electronic tools that support teams of collaborators which represents a fundamental change in the way people think about using computers

Organization Structure – Demise of Hierarchy



Characteristics of Groups

- Collaboration is all about getting work done in a group rather than individually
- Characteristics that differentiate groups include:
 - ◆ Membership
 - ◆ Interaction
 - ◆ Hierarchy
 - ◆ Location
 - ◆ Time
- These characteristics illustrate that providing computer-based support for groups is not uniform
 - ◆ From inter-company groups to global teams



Characteristics of Groups

- Characteristics that differentiate groups include:
 - ◆ Membership
 - ◆ Some groups are open, some are closed.

Characteristics of Groups

- Characteristics that differentiate groups include:
 - ◆ Interaction
 - ◆ Some groups are loosely coupled (salespeople with their own territories)
 - ◆ Others work closely together (project team)

Characteristics of Groups

- Characteristics that differentiate groups include:
 - ◆ Hierarchy
 - ◆ Some groups have a chain of command (tiers of committees)

Characteristics of Groups

- Characteristics that differentiate groups include:
 - ◆ Location
 - ◆ Some members are co-located, some are dispersed

Characteristics of Groups

- Characteristics that differentiate groups include:
 - ◆ Time
 - ◆ Some groups are short-lived, some are ongoing
 - ◆ Some group member works full time on the group's work, other groups only require intermittent work

Types of Groups

- Authority Groups
- Intradepartmental Groups
- Project Teams
- Interdepartmental Work Groups
- Committees and Task Forces
- Business Relationship Groups
- Peer Groups
- Networks
- Electronic Groups
- Communities of Practice
- Network Armies



Authority Groups

- Involve formal authority (and often hierarchy), such as boss and subordinates
- Membership closed
- Coupling tight

Intradepartmental Groups

- Can have members all doing essentially the same work, often under the same boss
- Membership closed
- Interaction can range from tight to loose coupling

Project Teams

- Work full-time to accomplish a goal within a specific schedule
- Membership closed
- Coupling tight

Interdepartmental Work Groups

- Pass work from department to department (purchasing, receiving, accounts payable) in a chain
- Membership closed; coupling tight; no hierarchy

Committees and Task Forces

- Committees are ongoing and task forces deal with the issue, then disband
- Generally no full-time work requirement
- Membership not too closed
- Interaction generally not tightly coupled

Business Relationship Groups

- Relationships with customers, groups of customers, suppliers, and so on
- Membership often closed; interaction loosely coupled; no hierarchy

Peer Groups

- Meet to exchange ideas and opinions
- Activities of each member are largely independent of the activities of the other members
 - ◆ Membership can range
 - ◆ Interaction loosely coupled
 - ◆ No hierarchy

Networks

- Groups of people who socialize, exchange information, and expand the number of their personal acquaintances

Electronic Groups

- Include chat rooms, multi-user domains, user groups, and virtual worlds, all forms of groups that have formed on the Internet to socialize, find information, entertain themselves, gain comfort, or just experiment with the new online world
 - ◆ Membership wide open
 - ◆ No hierarchy
 - ◆ Loosely coupled

Communities of Practice

- Communities of Practice (CoP) are groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly
- CoPs are all about managing knowledge, capturing and spreading know-how, ideas, innovations, and experience
 - ◆ In some enterprises, CoPs form the foundation of their knowledge management efforts

Characteristics of CoPs

- Three characteristics of CoPs are crucial
 - ◆ The domain
 - ◆ An CoP has an identity defined by a shared domain of interest.
 - ◆ The community
 - ◆ CoP members engage in joint activities and discussions, help each other, and share information
 - ◆ The practice
 - ◆ Members of a community of practice are practitioners. They develop a shared repertoire of resources: experiences, stories, tools, ways of addressing recurring problems—in short a shared practice

Profound Effect of CoPs

- Though informal, some CoPs have had a profound effect on their enterprise
 - ◆ Driving strategies
 - ◆ Creating new lines of business
 - ◆ Spreading best practices, and
 - ◆ Solving seemingly intractable problems

Nurture CoPs

- CoPs resist being managed. But some enterprises have seen their value and have learned how to nurture them
 - ◆ Identifying Potential CoPs
 - ◆ CoP consultants to help forming a CoP
 - ◆ Providing a CoP Infrastructure
 - ◆ Executives need to give CoPs legitimacy
 - ◆ Measuring CoPs
 - ◆ Measuring their contributions nontraditionally because their effects may only show up in a team member's department, not in the community's work

Network Armies

- Widely dispersed groups of people form to further a cause
 - ◆ Open source software
 - ◆ Political parties
- A widely dispersed group of people that forms to further a cause
 - ◆ It is as permanent as their common agenda
 - ◆ Their cohesive force is their value system
 - ◆ Their communications are open, taking place in forums that anyone can join
- Hierarchies have a tremendously difficult time fighting network armies because there is no single leader, simply a "hydra with many heads."

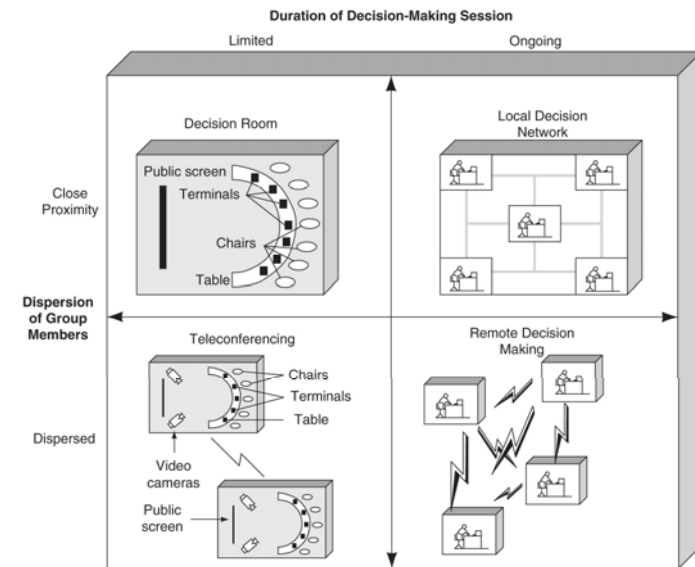
Development of Network Armies

- Network armies have existed for a long time, but they can now suddenly appear with a lot of power because of three developments:
 - ◆ High-speed information flows due to a common language (English) and communication system (Internet)
 - ◆ The geometrically expanding power of networks (adding one person geometrically increases the number of interconnections), and
 - ◆ The international visibility now afforded just about any cause

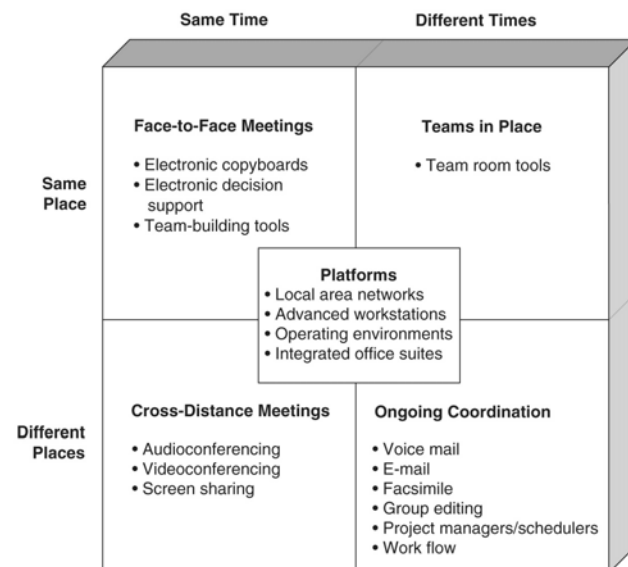
Systems to Support Collaboration

- Group Decision Support Systems (GDSS) have existed for 25 years
- Their intent has been to support the decision making of more than one person, working together to reach a decision
- One framework for categorizing the work of groups has time on one dimension (same time/different time) and place on the other (same place/different place)

Framework for Group Decision Support



Groupware Options



Supporting Same Time/Same Place Collaboration

- The problem with meetings
 - ◆ Meetings can have many shortcomings
 - ◆ Lack of agenda
 - ◆ People arrive late
 - ◆ The necessary information does not arrive, etc
- Information Technology can Help
 - ◆ By eliminating some meetings (e.g. using e-mail instead)
 - ◆ Permitting better preparation (discussing items online beforehand)
 - ◆ IT improves the effectiveness and efficiency of meetings

Supporting Same Time/Same Presentations and Discussions

- Davison and Briggs made seven hypotheses about the potential advantages and disadvantages of attendees using a GSS at the workshops:
 - ◆ More opportunities for discussion
 - ◆ More equal participation
 - ◆ Permanent record of discussion
 - ◆ Improved feedback to presenters
 - ◆ Improved learning
 - ◆ Remote and asynchronous participation
 - ◆ Potential negative effects

U51020 © Peter Lo 2008

Read Case Example P.516-518

Hypotheses of GSS

- More opportunities for discussion
 - ◆ Using a GSS would eliminate the need to divide available airtime among potential speakers because participants could contribute simultaneously

U51020 © Peter Lo 2008

34

Hypotheses of GSS

- More equal participation
 - ◆ Because the GSS provides many parallel communication channels, loud or strong personalities probably would not dominate the discussion

U51020 © Peter Lo 2008

35

Hypotheses of GSS

- A permanent record of discussion
 - ◆ GSS would capture a permanent electronic transcript of the online discussion

U51020 © Peter Lo 2008

36

Hypotheses of GSS

- Improved feedback to presenters
 - ◆ Presenters anticipated more comments as well as more detail in those comments

Hypotheses of GSS

- Improved learning
 - ◆ The GSS was also expected to reduce attention blocking
 - ◆ The loss of attentiveness caused by people trying to remember what they want to say during the presentation

Hypotheses of GSS

- Remote and asynchronous participation
 - ◆ People who do not attend a presentation could benefit by reading and contributing after the event

Hypotheses of GSS

- Potential negative effects
 - ◆ Online discussions during presentations might be a mixed blessing
 - ◆ Human attention is limited, so online discussions might distract participants to the point where they lose the tread of the presentation
 - ◆ Online discussions could digress from the concepts in the presentation or even devolve into flaming

Supporting Different-Place Collaboration

- Supporting dispersed groups
- Development of virtual teams: usually disband after their project is complete
 - ◆ **Same Time/Same Place:** team meets face-to-face initially to develop the basic plan and objectives
 - ◆ **Different Time/Different Place:** then they communicate by e-mail and do data gathering and analysis separately
 - ◆ **Same Time/Different Place:** may have audio or video conferences to discuss developments and progress toward goals

Managing Collaboration in Virtual Organizations

- The increasingly virtual organizations
 - ◆ Network of communities instead of hierarchical bureaucracies
 - ◆ Virtual structures: CoPs, network armies, freelancers etc.
- The key in managing these nontraditional, collaborative and knowledge-based structures
 - ◆ Not to manage them (telling them what to do)
 - ◆ But to lead them (show them the direction where the organization is going)

Motivating a Virtual Workforce

- Inspirations from Open Source Movement
 - ◆ Expanding the kinds of motivators
 - ◆ Money
 - ◆ High reputation among peers
 - ◆ Pride in contribution
 - ◆ Participation in quality software development

Governing Virtual Organizations

- While the open source movement appears to have all the trappings of chaos waiting to happen, it is actually very well disciplined because of its self-governance
- Important governance principles
 - ◆ Managed membership
 - ◆ Well-defined leadership; authority only comes from core teams
 - ◆ Rules and institutions
 - ◆ e.g. Open source license; democracy and publicity on activities
 - ◆ Social Pressures
 - ◆ e.g. flame, spam and shun disobeyers