Chapter 3
Organizational Strategy: Managerial Levers

Managing and Using Information Systems: A Strategic Approach

by Keri Pearlson & Carol Saunders
Learning Objectives

• Understand how the use of information technology impacts an organization.
• Identify the type of organizational structure that tends to be most willing to embrace technological change and sophistication.
• List the advantages and disadvantages of the networked organizational structure.
• Discuss how IT has changed the way managers monitor and evaluate.
• Define and explain the concept and importance of virtual organizations.
• Identify the challenges that are faced by virtual teams.
Real World Examples

• Cognizant Technology Solutions grew fast to become a $1.4 billion revenue company providing IT outsourcing services.
• This quick growth required that they reinvent their organization – move from a cost based to a relationship based structure.
• Managers had to interact with customers and with developers in different locations.
• A tremendous strain was put on managers because they had to work day and night.
• However, some of the units adopted a matrix structure that shared managerial responsibilities.
ORGANIZATIONAL STRATEGY
Key Characteristics

• Includes the organization’s design, as well as the managerial choices that define, set up, coordinate, and control its work processes

• Optimized organizational design and management control systems support optimal business processes which reflect the firm’s values and culture

• This chapter builds on the managerial levers model discussed in chapter 1.

• Figure 3.1 summarizes complementary design variables from the managerial levers framework.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Organizational variables</strong></td>
<td></td>
</tr>
<tr>
<td>Decision rights</td>
<td>Authority to initiate, approve, implement, and control various types of decisions necessary to plan and run the business.</td>
</tr>
<tr>
<td>Business processes</td>
<td>The set of ordered tasks needed to complete key objectives of the business.</td>
</tr>
<tr>
<td>Formal reporting relationships</td>
<td>The structure set up to ensure coordination among all units within the organization.</td>
</tr>
<tr>
<td>Informal networks</td>
<td>Mechanism, such as ad hoc groups, which work to coordinate and transfer information outside the formal reporting relationships.</td>
</tr>
<tr>
<td><strong>Control variables</strong></td>
<td></td>
</tr>
<tr>
<td>Data</td>
<td>The information collected, stored, and used by the organization.</td>
</tr>
<tr>
<td>Planning</td>
<td>The processes by which future direction is established, communicated, and implemented.</td>
</tr>
<tr>
<td>Performance measurement and evaluation</td>
<td>The set of measures that are used to assess success in the execution of plans and the processes by which such measures are used to improve the quality of work.</td>
</tr>
<tr>
<td>Incentives</td>
<td>The monetary and non-monetary devices used to motivate behavior within an organization.</td>
</tr>
<tr>
<td><strong>Cultural variables</strong></td>
<td></td>
</tr>
<tr>
<td>Values</td>
<td>The set of implicit and explicit beliefs that underlie decisions made and actions taken.</td>
</tr>
</tbody>
</table>

**Figure 3.1 Organizational design variables.**
INFORMATION TECHNOLOGY AND ORGANIZATIONAL DESIGN
Decision Rights

• Who in the organization has the responsibility to initiate, supply information for, approve, implement, and control various types of decisions.

• Ideally the person with the most information and in the best position should have these rights.

• Organizational design is all about making sure that decision rights are properly allocated.

• For Zara, decision rights moved to the store managers, providing for quicker responses to their local customer base.
Formal Reporting Relationships and Organization Structures

• Organization structure is the way of designing an organization so that decision rights are correctly allocated.

• The structure of reporting relationships typically reflects the flow of communication and decision making throughout the organization.

• Traditional organizations are hierarchical, flat or matrix in design (Fig. 3.2).
• In hierarchical organizations, middle managers tell subordinates what to do and tell superiors the outcomes. IS supports this hierarchy.

• In flat structured organizations, work is more flexible and employees do whatever is needed. IS allows offloading extra work and supports intra-firm communications.

• In matrix organizations, work is organized into small work groups and integrated regionally and nationally/globally.
  – IS reduces operating complexities and expenses by allowing information to be easily shared among different managerial functions.
Figure 3.2 Hierarchical, flat, and matrix organization structures.
Hierarchical Organizational Structure

• Based on the concepts of division of labor, specialization, and unity of command.
• Functional and divisional organizational forms are based upon this structure.
• Key decisions are made at the top and filter down through the organization
• Middle managers do the primary information processing and communication function
• IS is typically used to store and communicate information along the lines of the hierarchy and to support the info management function of the managers
Flat Organizational Structure

• Decision-making is centralized
• As everyone does whatever needs to be done, they can respond quickly to dynamic, uncertain environments
• However, this organizational structure often becomes less flexible as the org. grows
• Routine IS work is often off-loaded but, as a hierarchy develops, becomes the ‘glue’ tying parts of the organization that would not otherwise communicate
Matrix Organizational Structure

• This typically assigns workers with two or more supervisors in an effort to make sure multiple dimensions of the business are integrated.
• Each supervisor directs a different aspect of the employee’s work.
• Matrix organizations often fail to enable managers to achieve their business strategies.
• Employees may be frustrated and confused since they are often subjected to dual authority.
Networked Organizational Structure

• Made possible by new information systems.
• They feel flat and hierarchical at the same time.
• Decision rights are decentralized in this structure.
• Defined by their ability to promote creativity and flexibility while maintaining operational process control, which is achieved by substituting hierarchical controls with controls based on IS
• Extensive use of communication technologies and networks also makes it easier to coordinate across functional boundaries
T-Form

• Form of the networked organizational structure.
• “T” stands for “technology-based” or “technology-oriented.”
• IT is combined with traditional organizational components to form new types of components such as:
  – electronic linking
  – production automation
  – electronic workflows
  – electronic customer/supplier relationships
  – self-service Internet portals.
<table>
<thead>
<tr>
<th></th>
<th>Hierarchical</th>
<th>Flat</th>
<th>Matrix</th>
<th>Networked</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
<td>Bureaucratic w/ defined levels of management</td>
<td>Decision-making pushed down to lowest level</td>
<td>Workers assigned to 2 or more supervisors</td>
<td>Formal/informal communication networks that connect all</td>
</tr>
<tr>
<td><strong>Characteristics</strong></td>
<td>Division of labor specialization, unity of command</td>
<td>Informal roles, planning and control; often sm.,young orgs.</td>
<td>Dual reporting based on function/purpose</td>
<td>Known for flexibility and adaptability</td>
</tr>
<tr>
<td><strong>Type of Environment Best Supported</strong></td>
<td>Stable Certain</td>
<td>Unstable Uncertain</td>
<td>Unstable Uncertain</td>
<td>Unstable Uncertain</td>
</tr>
<tr>
<td><strong>Basis of Structuring</strong></td>
<td>Primary function</td>
<td>Primary function</td>
<td>Functions and purpose</td>
<td>Networks</td>
</tr>
<tr>
<td><strong>Power Structure</strong></td>
<td>Centralized</td>
<td>Centralized</td>
<td>Distributed</td>
<td>Distributed</td>
</tr>
<tr>
<td><strong>Key Tech. Supporting this</strong></td>
<td>Mainframe, centralized data and processing</td>
<td>Personal computers</td>
<td>Networks</td>
<td>Intranets and Internet</td>
</tr>
</tbody>
</table>

Figure 3.3 Comparison of Organizational Structures
Figure 3.4  The networked organization.
Informal Networks

- Informal relationships exist and can play an important role in the functioning of an organization.
- Some informal relationships are designed by management:
  - Working on a project.
  - Job rotation program, etc.
- Unintended networks are formed throughout an organization by:
  - Proximity
  - Shared interest
  - Family ties, etc.
- Some even cross organizational boundaries.
INFORMATION TECHNOLOGY AND MANAGEMENT CONTROL SYSTEMS
Management Control

• IT profoundly affects the way managers control their organizations.
• People and processes are monitored in ways that were not possible only a decade ago.
• Managers need to control work done at the process level.
• The organizational structure will determine the level of control that a manager must exercise.
• IS plays three important roles in management control processes:
  − Data collection, Evaluation, and Communication.
Planning and Information Technology

• Information technology can play a role in planning in three ways:
  – IS can provide the necessary data to develop the strategic plan
  – Some IS actually automate the planning process
  – IS can lie at the heart of a strategic initiative and can be used to gain strategic advantage
Data Collection and IT

• Monitoring work can take on a completely new meaning with the use of information technologies.
• IS make it possible to collect such data as:
  – number of keystrokes
  – precise time spent on a task
  – exactly who was contacted
  – specific data that passed through the process
• Organizational design challenge in data collection is to:
  – embed monitoring tasks within everyday work
  – reduce the negative impacts to workers being monitored.
Software Monitoring Products

- Many are available to monitor employees
- They are installed to record specific data about what employees are doing.
- Monitoring can backfire and cause stress in employees.
- Monitoring products must be carefully managed and productively used to reward employees, and not just punish them.
- Productivity and morale may fall
Performance Measurement, Evaluation and IT

- IS make it possible to evaluate data against reams of standard or historical data.
- Models can be built and simulations designed.
- Managers can more easily understand work progress and performance.
- However, analysis paralysis (too much data/information) can cause managers to become overwhelmed.
- How the information is used is important to performance measurement.
• How feedback is communicated in the organization plays a role in affecting behavior.
• Many companies do a “360-degree” feedback, into which the individual’s supervisors, subordinates, and coworkers all provide input.
• Key is making sure that the information is handled discreetly and appropriately.
Incentives and Rewards and IT

• Ways organizations encourage good performance.
• Done properly, can make employees feel good without paying them more money.
• Organizations use their Web sites to recognize high performers.
• Others reward them with new technology.
• IS makes it easy to design complex reward systems (shared or team based).
• Managers must consider both the metrics and qualitative data in assigning compensation and rewards.
INFORMATION TECHNOLOGY AND CULTURE
CULTURE

- Culture is the third managerial lever.
- Plays an increasingly important role in IS development and use.
- It is defined as a shared “set of values and beliefs about what is desirable and undesirable in a community of people”.
- Culture is not static but always changing.
- Different levels of culture.
CULTURE

• National culture differences may affect system development and use.
• Hofstede is one of the best known researchers in the values across national cultures.
• The GLOBE (Global Leadership and Organizational Behavior Effectiveness) research program was a team of 150 researchers who have collected data on cultural values and practices and leadership attributes from over 18,000 managers in 62 countries.
• The GLOBE dimensions and their relationship to Hofstede’s dimensions are found in Figure 3.5.
<table>
<thead>
<tr>
<th>GLOBE DIMENSIONS</th>
<th>DESCRIPTION</th>
<th>RELATIONSHIP TO HOFSTEDE DIMENSION</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNCERTAINTY AVOIDANCE</td>
<td>EXTENT TO WHICH MEMBERS OF AN ORGANIZATION OR SOCIETY STRIVE TO AVOID UNCERTAINTY BY RELIANCE ON SOCIAL NORMS, RITUALS, AND BUREAUCRATIC PRACTICES TO ALLEVIATE THE UNPREDICTABILITY OF FUTURE EVENTS.</td>
<td>SAME AS UNCERTAINTY</td>
</tr>
<tr>
<td>POWER DISTANCE</td>
<td>DEGREE TO WHICH MEMBERS OF AN ORGANIZATION OR SOCIETY EXPECT AND AGREE THAT POWER SHOULD BE EQUALLY SHARED.</td>
<td>SAME AS POWER DISTANCE</td>
</tr>
<tr>
<td>COLLECTIVISM I: SOCIETAL COLLECTIVISM</td>
<td>DEGREE TO WHICH ORGANIZATIONAL AND SOCIETAL INSTITUTIONAL PRACTICES ENCOURAGE AND REWARD COLLECTIVE DISTRIBUTION OF RESOURCES AND COLLECTIVE ACTION.</td>
<td>SAME AS INDIVIDUALISM/ COLLECTIVISM</td>
</tr>
<tr>
<td>COLLECTIVISM II: IN-GROUP COLLECTIVISM</td>
<td>DEGREE TO WHICH INDIVIDUALS EXPRESS PRIDE, LOYALTY AND COHESIVENESS IN THEIR ORGANIZATIONS OR FAMILIES</td>
<td>TYPE OF COLLECTIVISM FOCUSED ON SMALL IN-GROUPS</td>
</tr>
<tr>
<td>GENERAL EGALITARIANSIM</td>
<td>EXTENT TO WHICH AN ORGANIZATION OR SOCIETY MINIMIZES GENDER ROLE DIFFERENCES AND GENDER DISCRIMINATION</td>
<td>MODIFIED VERSION OF MASCULINITY/FEMINITY</td>
</tr>
<tr>
<td>ASSERTIVENESS</td>
<td>DEGREE TO WHICH INDIVIDUALS IN ORGANIZATIONS OR SOCIETIES ARE ASSERTIVE, CONFRONTATIONAL AND AGGRESSIVE IN SOCIAL RELATIONSHIPS</td>
<td>MODIFIED VERSION OF MASCULINITY/FEMINITY</td>
</tr>
<tr>
<td>FUTURE ORIENTATION</td>
<td>DEGREE TO WHICH INDIVIDUALS IN ORGANIZATIONS OR SOCIETIES ENGAGE IN FUTURE-ORIENTED BEHAVIORS SUCH AS PLANNING, INVESTING IN THE FUTURE, AND DELAYING GRATIFICATION</td>
<td>SIMILAR TO CONFUCIAN WORK DYNAMISM BY HOFSTEDE AND BOND (1988)</td>
</tr>
<tr>
<td>PERFORMANCE ORIENTATION</td>
<td>EXTENT TO WHICH AN ORGANIZATION OR SOCIETY ENCOURAGES AND REWARDS GROUP MEMBERS FOR PERFORMANCE IMPROVEMENT AND EXCELLENCE</td>
<td></td>
</tr>
<tr>
<td>HUMANE ORIENTATION</td>
<td>DEGREE TO WHICH INDIVIDUALS IN ORGANIZATIONS OR SOCIETIES ENCOURAGE AND REWARD INDIVIDUALS FOR BEING FAIR, ALTRUISTIC, FRIENDLY, GENEROUS, CARING AND KIND TO OTHERS.</td>
<td>SIMILAR TO KIND HEAREDNESS BY HOFSTEDE AND BOND (1988)</td>
</tr>
</tbody>
</table>

**Figure 3.5 – National Cultural Dimensions**
CULTURE

• Cultural differences have not totally disappeared.
• Convergence is a challenge for an organization that employs people from a variety of countries and cultures.
• Having an understanding and appreciation for cultural values, practices and subtleties can help in smoothing the challenges.
• Awareness of the Hofstede or GLOBE dimensions may help improve communications and reduce conflict.
• Effective communication means listening, framing the message in a way that is understandable to the receiver and responding to feedback.
FOOD FOR THOUGHT: IMMEDIATELY RESPONSIVE ORGANIZATIONS
Immediate Responsive Organizations

To accomplish the goal of instant “customization”, an organization must master five disciplines:

1. **Instant value alignment** – ready to provide exactly what the customer wants
2. **Instant learning** – building learning directly into the company's tasks and processes
3. **Instant involvement** – using IT to ensure that everyone is ready to deliver products, services, etc
4. **Instant adaptation** – creating the culture to support this
5. **Instant execution** – During It to cut cycle times to appear instant to the customer
SUMMARY
Summary

• Incorporating IS as a fundamental organizational design component is critical to company survival.
• Organization structures can facilitate or inhibit information flows.
• Organizational design should take into account decision rights, organization structure and informal networks.
• Flat, hierarchical, and matrix structured organizations are being enhanced by IT resulting in networked organizations.
• IT affects managerial control mechanisms.
• Management control at the individual level is concerned with monitoring, evaluating, providing feedback, compensating, and rewarding.
• Organizational and national culture should be taken into account when designing and using IS.