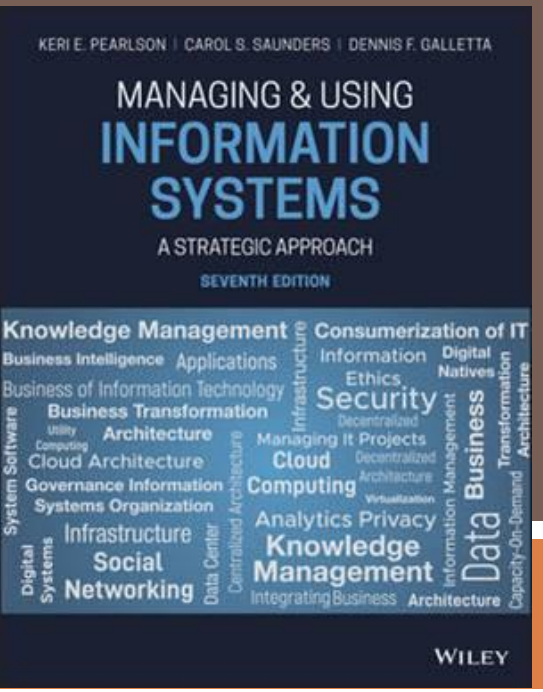
CHAPTER 3
ORGANIZATIONAL STRATEGY AND INFORMATION SYSTEMS



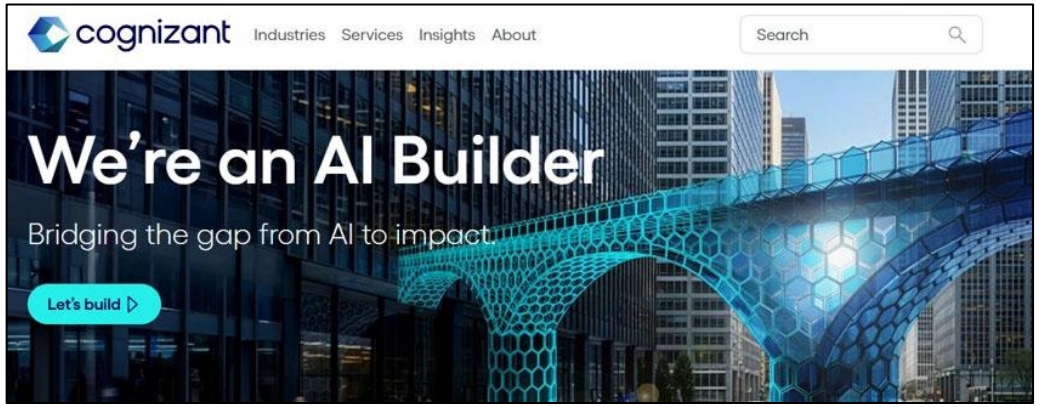
Managing & Using Information Systems: A Strategic Approach (7th Edition), Pearlson, Saunders, & Galletta

Chapter Introduction

- In order for information systems (IS) to support an organization in achieving its goals, the organization must reflect the business strategy and be coordinated with the organizational strategy.
- This chapter focuses on linking and coordinating the IS strategy with the three components of organizational strategy:
  - Organizational design (decision rights, formal reporting relationships and structure, informal networks)
  - Management control systems (planning, data collection, performance measurement, evaluation, incentives, and rewards)
  - Internal culture (values, locus of control)

CASE: Cognizant Technology Solutions (CTS)

- After over 20 years of fast growth, in 2017, Cognizant Technology Solutions (CTS) was a company with $14.81 billion in revenues from providing IS outsourcing services.
- However, growing at such a breakneck speed, it had to reinvent its organizational structure many times to make sure that it facilitated the flow of information.
- Initially, its India-centric structure located managers of each group in India along with software engineers.



카그너전트

문서 토론

위키백과, 우리 모두의 백과사전.

카그너전트 기술 솔루션 회사(영어: Cognizant Technology Solutions Corporation)는 미국 뉴저지주 티넥에 본사를 둔 다국적 정보기술 서비스 및 컨설팅 회사이다. 1994년 인도 첸나이에서 던 앤 브래드스트리트(Dun & Bradstreet)의 기술 부문으로 설립되었으며 1996년부터 외부 고객을 유치하였고 1998년 기업공개하였다.[2]

CASE: Cognizant Technology Solutions (CTS)

- Employees at customer locations worldwide reported to the managers.
- Under the redesigned reporting structure, managers were moved to customer locations, but software engineers remained in India.
- This change improved customer relations but brought about new headaches on the technical side.

CASE: Cognizant Technology Solutions (CTS)

- Under the new arrangement, managers had to spend their days with customers and unexpectedly ended up spending their nights with software engineers to clarify customer requirements and fix bugs.
- This created a tremendous strain (tension, tightness) on managers, who threatened to quit.
- It also hampered the company's business of systems development.

CASE: Cognizant Technology Solutions (CTS)

- Thus, neither of these organizational structures was working well.
- Neither structure was well aligned with the business strategy and the IS strategy.
- However, CTS found that despite these problems, some work teams were working and performing well.

CASE: Cognizant Technology Solutions (CTS)

- Upon an extensive analysis of those groups, the company decided to adopt a matrix structure of co-management throughout the company.
- In this matrix structure, each project has two managers equally responsible for the project in a location.
- One manager is in India and the other is at the client site.

CASE: Cognizant Technology Solutions (CTS)

- They work out among themselves how and when to deal with issues.
- And both managers are equally responsible for customer satisfaction, project deadlines, and group revenue.
- The new structure (Figure 3.1) enables CTS to work more closely with its clients to focus on improving operations.

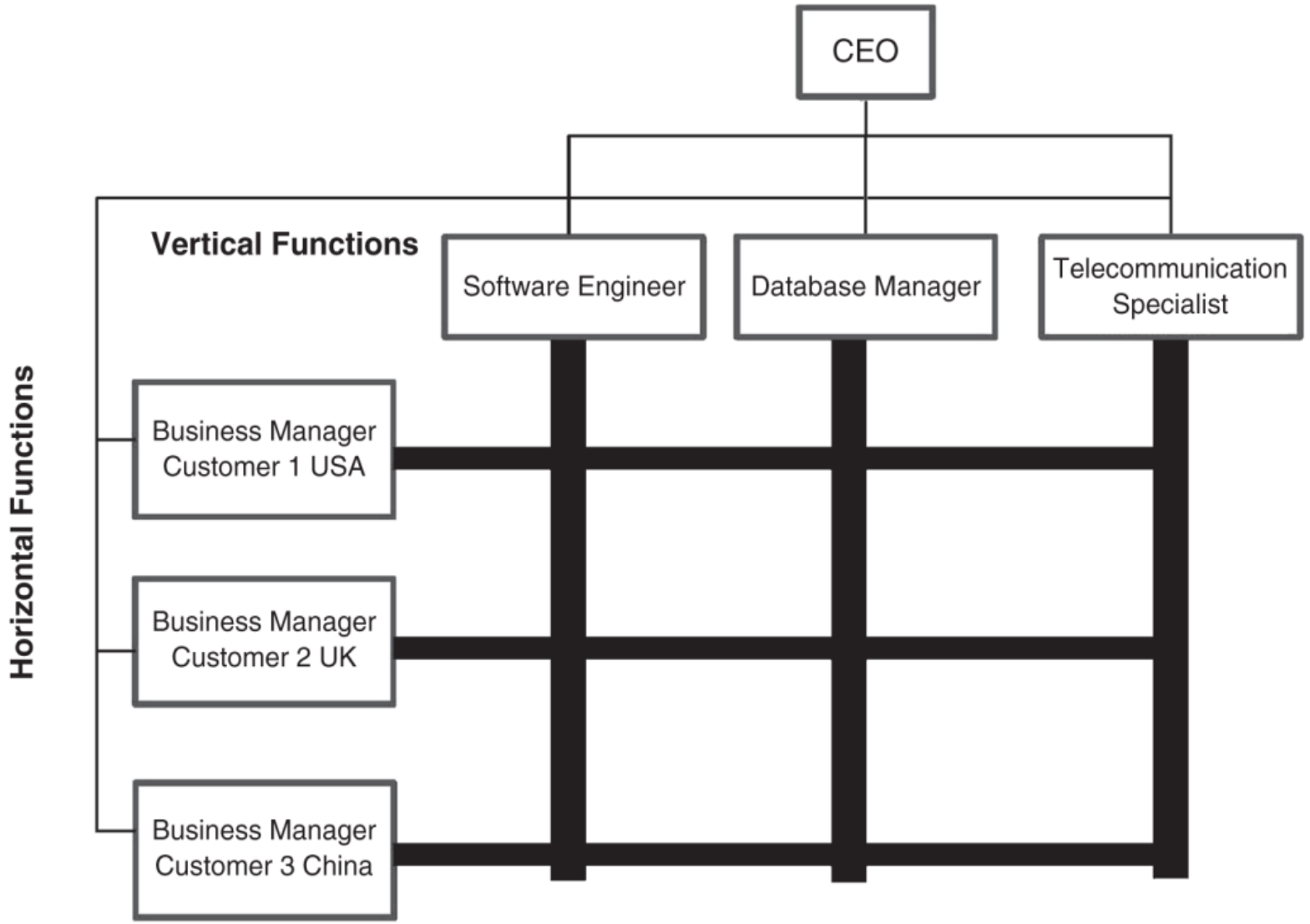


Figure 3.1 Example of Possible CTS Matrix Structure

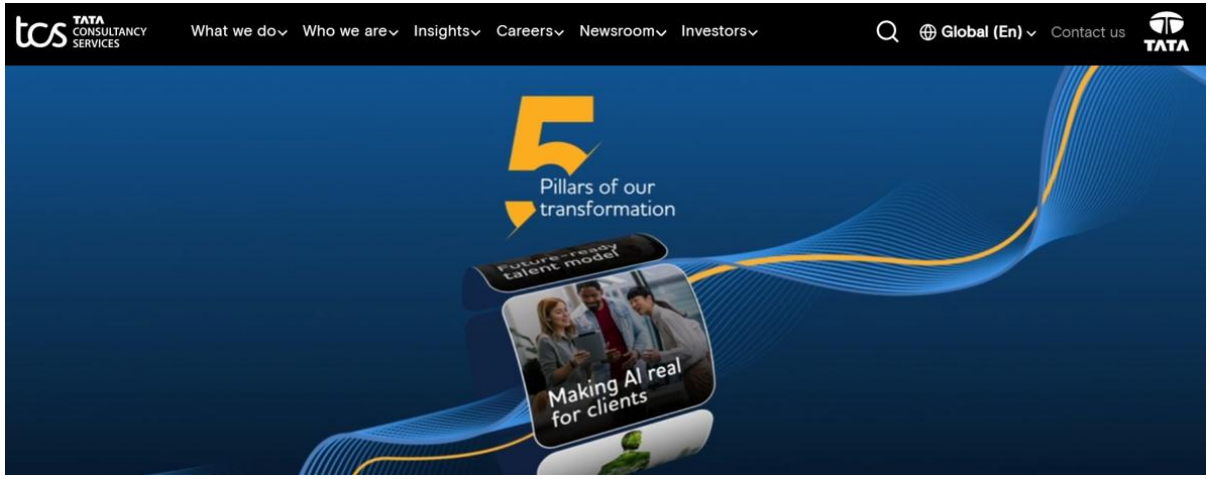
CASE: Cognizant Technology Solutions (CTS)

- That is, the new matrix structure makes it possible to build IS that the customers wanted.
- However, matrix organizations have their downside, as noted by one disgruntled (dissatisfied) employee who claims that the functional manager:
- "most of the time doesn't know what you are working on but still evaluates your performance, and then the project manager/leader who closely works with you but can't assess you [because] you don't report to him.
- It's [a] complicated structure and can get you [ticked] off."

➢ Tick off: to make (someone) angry

CASE: Tata Consultancy Services (TCS)

- During the same time period in 2008, the largest outsourcing company and software exporter in India, Tata Consultancy Services (TCS), also found that the growth led to problems, "As we scale up over 100,000 employees, TCS needs a structure that allows us to build a nimble organization to capture new growth opportunities," said then TCS CEO and Managing Director S. Ramadorai.
- TCS broke its business into industry structure units (ISUs).



CASE: Tata Consultancy Services (TCS)

- Growth led to a high volume of issues that needed the attention of the CEO and COO, and eventually it was difficult to keep up.
- At the same time, there was a need to spend significantly more time investigating new potential markets and new strategic initiatives than the CEO/COO could spare (afford).
- In 2011, the new TCS CEO N. Chandrasekaran modified the structure and added a new layer of leaders to oversee the businesses and free up their time to work on strategy (see Figure 3.2).

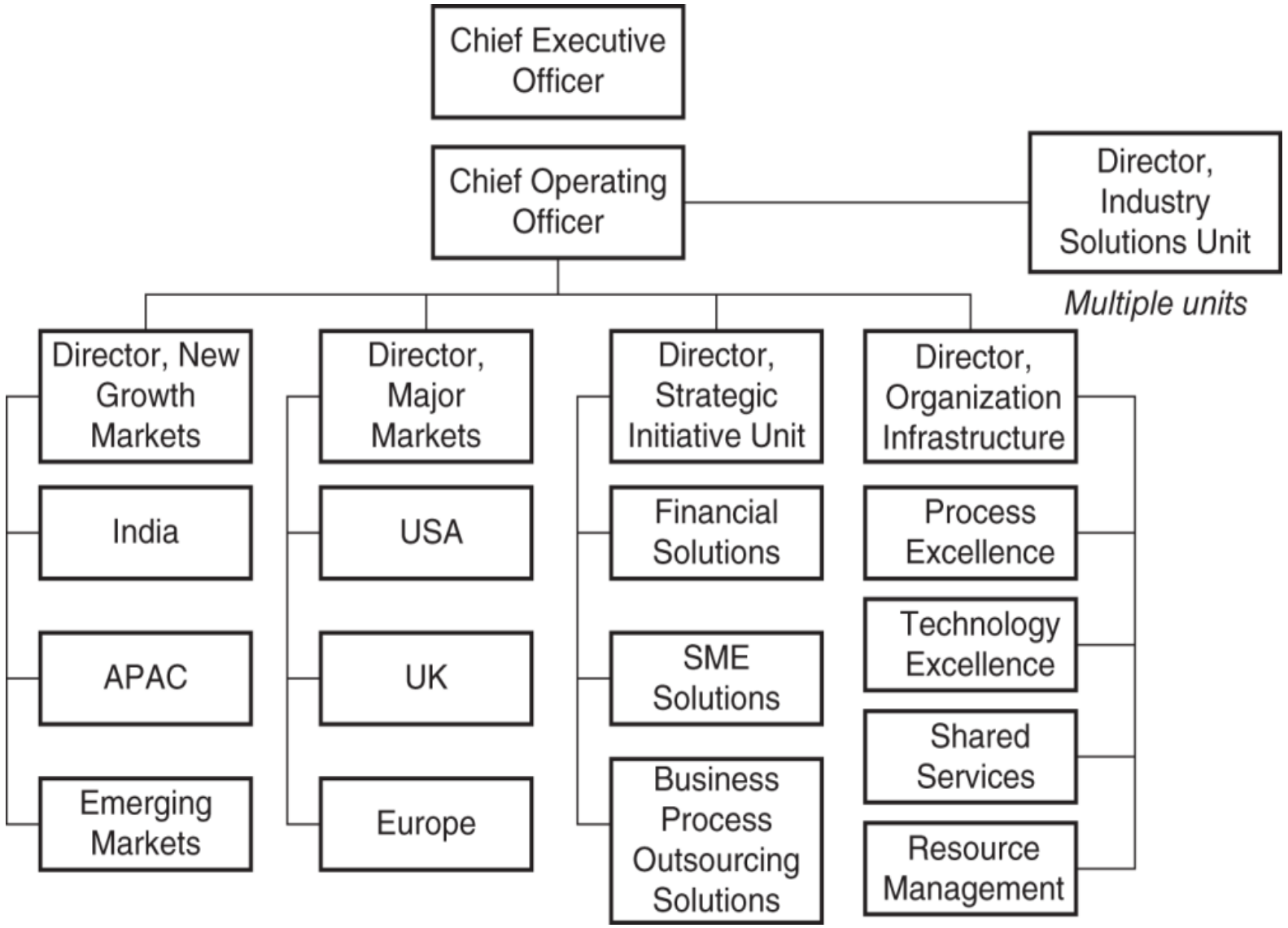
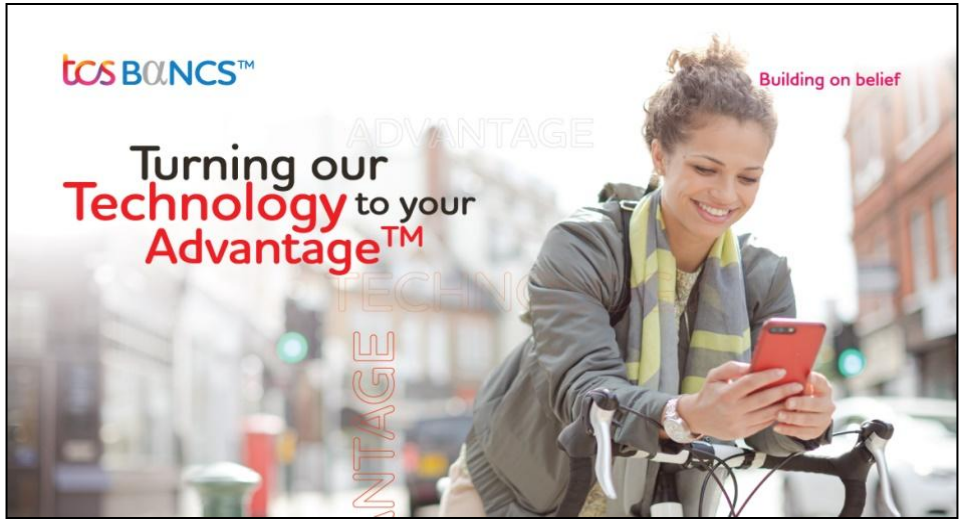


Figure 3.2 Tata Consultancy Services

CASE: Tata Consultancy Services (TCS)

- The new layer focuses on customers and aims to boost revenue growth.
- TCS credits its growth to revenues of $19 billion in FY2018 from $6 billion in FY2009 to its earlier restructuring, especially its ISUs (industry structure units).
- The restructuring continues.



CASE: Tata Consultancy Services (TCS)

- Current CEO Gopinathan explains:
- "We actually doubled down on our earlier strategy of ISUs and have created sub-ISUs.
- We pushed it one level down.
- We now have about 150 sub-P&L (profit & loss) heads who have been set up the same way the old ISUs were set up.“
- This move helped push decision making to lower levels in the ever-expanding company.

➢ Double down on: ~을 늘리다. ~에 전념하다. 몰두하다.

CASE: CTS & TCS

- While both CTS and TCS are large Indian outsourcing companies that found they needed to reorganize to respond to problems resulting from growth, their problems were profoundly different.
- CTS's main problem was its lack of necessary information flows between the software engineers in India and the customer service managers on the client location.
- Its complex problems resulted in a correspondingly complex matrix structure.
- The organizational structure is designed to emphasize these new growth areas and facilitate information flows along these lines in the organization.

CASE: CTS & TCS

- It focused on the delivery of information systems that reflect refined technical solutions to their problems to its customers.
- Its new organization structure both improves customer responsiveness and necessary information flows.
- It focuses on system development and delivery and seeks to address the information flow problem that Cognizant previously experienced in building systems.
- In contrast, TCS's organization chart reflects a focus not only on current customers but also on future markets.

CASE: CTS & TCS

- That is why it added major units called "New Growth Markets" and "Strategic Initiative Unit."
- The Business Process Outsourcing and Small and Medium Enterprise solutions in this latter major unit indicate the strategic directions that TCS wants to take.
- Its focus is on building an ever-bigger market for its IS and the IS services that it provides.
- CTS and TCS are both in the same business but chose different organizational structures to carry out their objectives.

CASE: CTS & TCS

- The point is that different organizational structures reflect different organizational strategies that are used to implement business strategies and accomplish organizational goals.
- These organizational strategies need to be aligned with IS strategies.
- When used appropriately, IS leverage human resources, capital, and materials to create an organization that optimizes performance.
- Companies that design organizational strategy without considering IS strategies run into problems like those Cognizant experienced.
- A synergy results from designing organizations with IS strategy in mind--a synergy that cannot be achieved when IS strategy is just added on.

Organizational Strategy

- Organizational strategy 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.
- Organizational strategy may be considered as the coordinated set of actions that leverages the use of organizational design, management control systems, and organizational culture to make the organization effective by achieving its objectives.

Organizational Strategy

- The organizational strategy works best when it meshes well with the IS strategy.
- Figure 3.3 summarizes complementary design variables from the managerial levers framework (Figure 1.5).

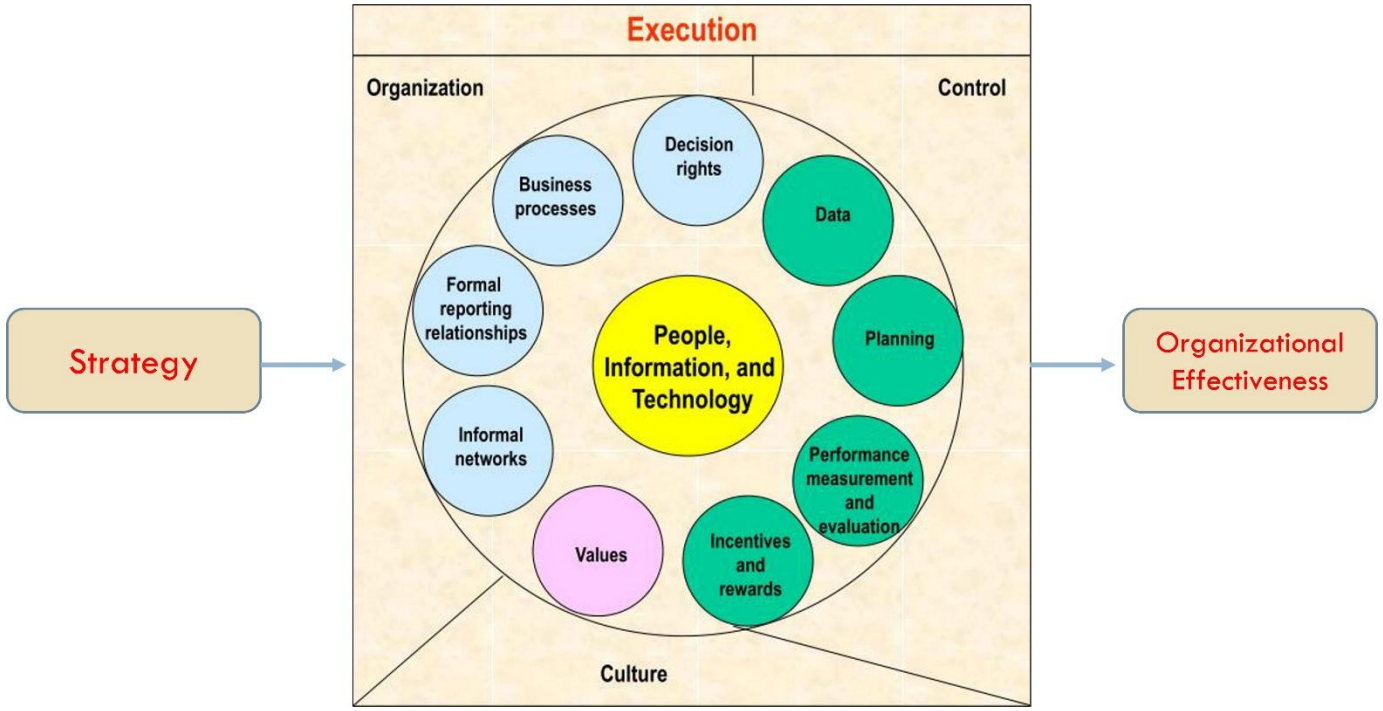


Figure 1.5 Managerial Levers Framework

Variable	Description
Organizational variables	
Decision rights	• Authority to initiate, approve, implement, and control decisions necessary to plan and run the business
Business processes	• Ordered tasks to complete key business objectives
Formal reporting relationships	• Structure set up to coordinate organizational units
Informal networks	• Mechanism, such as ad hoc groups, to coordinate and transfer information outside formal reporting relationships
Control variables	
Data	• Facts collected, stored, and used by the organization
Planning	• Processes by which future direction is established, communicated, and implemented
Performance measurement and evaluation	• Measures to assess successful execution of plans then using the measures to improve the quality of work
Incentives	• Monetary and non-monetary devices to motivate behavior
Cultural variables	
Values	• Implicit and explicit beliefs that underlie decisions and actions
Locus (…의 존재.발생) 장소[중심지]	• The span of culture: local, national, regional, etc.

Figure 3.3 Organizational Design Variables Based on Managerial Levers

Information Systems (IS) and Organizational Design

- IS in the organizational designs
  - Define the flow of information throughout the organization.
  - Facilitate management control at the organizational and individual levels.
- Culture impacts IS and organizational performance.
- IS in the organization's physical structure is designed to facilitate the communication and work processes necessary to accomplish the organization's goals.
- The organization structures of Cognizant Technology Solutions (CTS) and Tata Consultancy Services (TCS), while very different, reflect and support the goals of each company.

Decision Rights

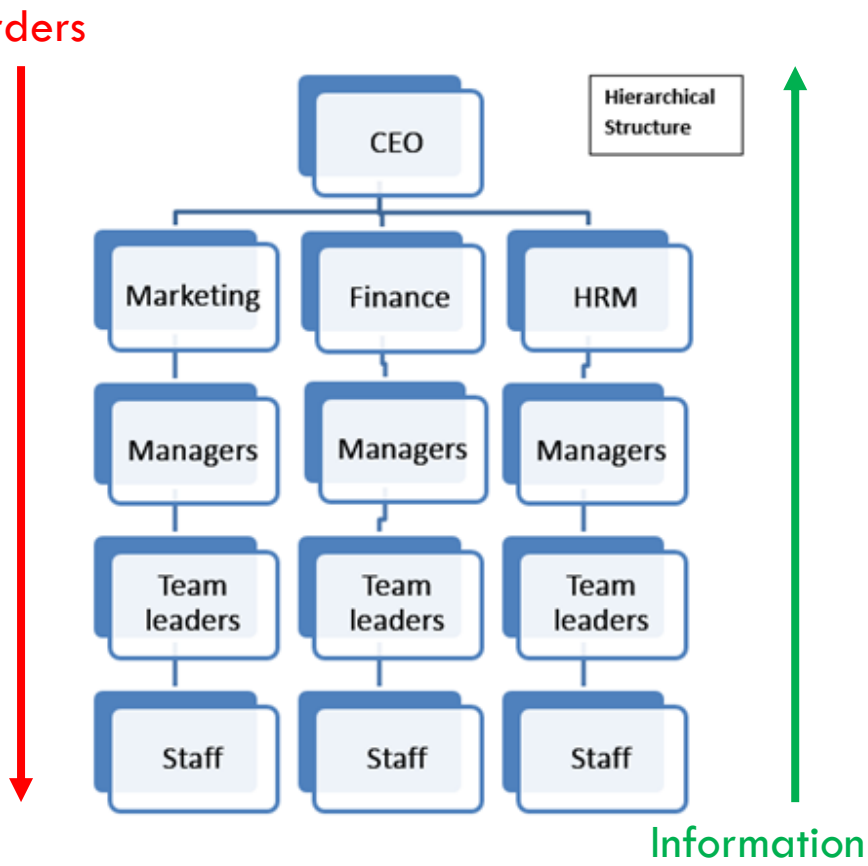
- Who in the organization has the responsibility to initiate, supply information for, approve, implement, and control various types of decisions.
- Ideally the person with the most information and in the best position should have these rights. (i.e. senior leaders).
- Organizational design focuses on making sure that decision rights are properly allocated.
- 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.
- The networked structure is a newer organizational form.
- Social networks and virtual communities.

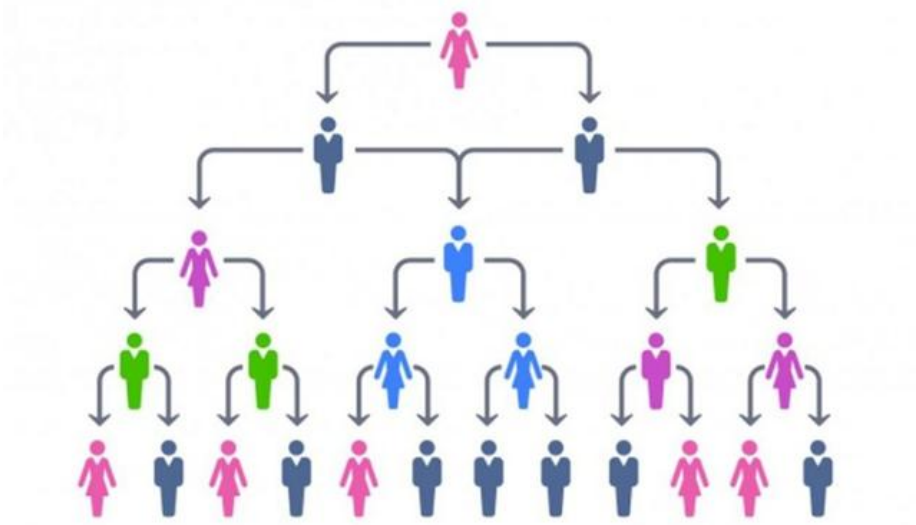
Hierarchical Organizational Structure

- Orders go down and information goes up.
- IT provides communication/memory in both directions.
- Also known as a bureaucracy.
- First observed by Max Weber in the Catholic Church and German army and applied to early factories and offices.



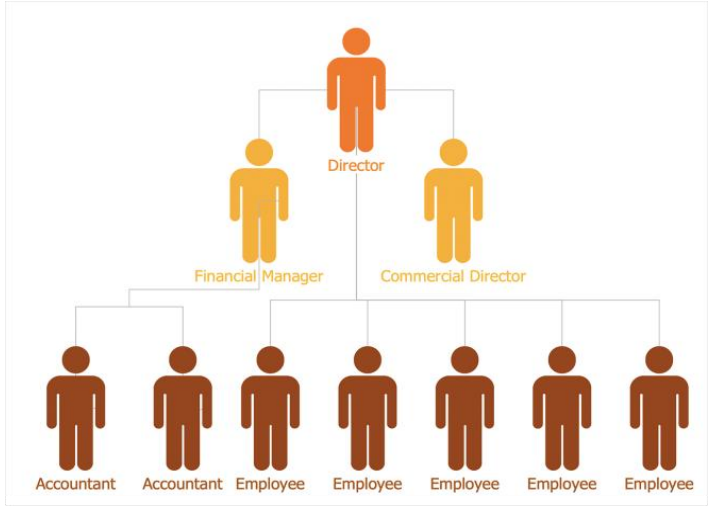
Hierarchical Organizational Structure

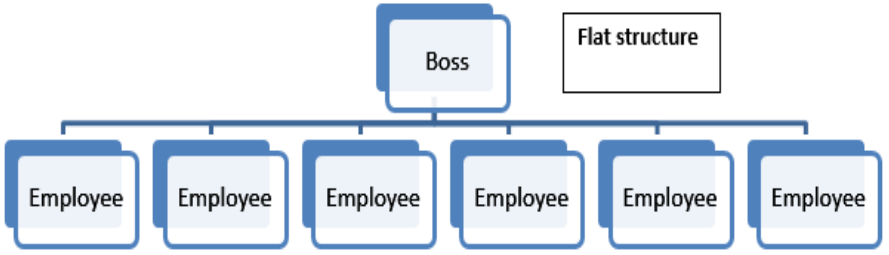
- Features include:
  - Unity of command (one boss for each person)
  - Span of control (measures the number of subordinates for each boss)
  - Clear lines of authority and reporting duties



Flat Organizational Structure

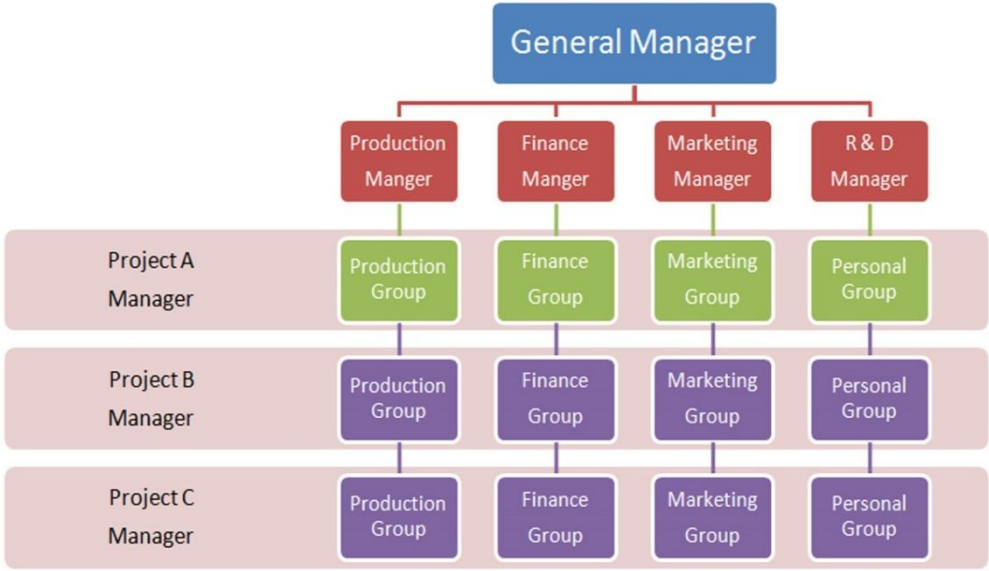
- Also known as horizontal organizational structure.
- Features:
  - Decentralized decision making
  - Less well-defined chain of command
  - Less clear decision rights
  - Few middle managers
- IT glues together the organization.
- IT allows rapid response; supports internal communications.





Matrix Organization

- Assigns employees to two or more supervisors to integrate multiple dimensions of a firm.
- Features:
  - Work is organized into small work teams.
  - Allows organizations to concentrate on functions and purpose.

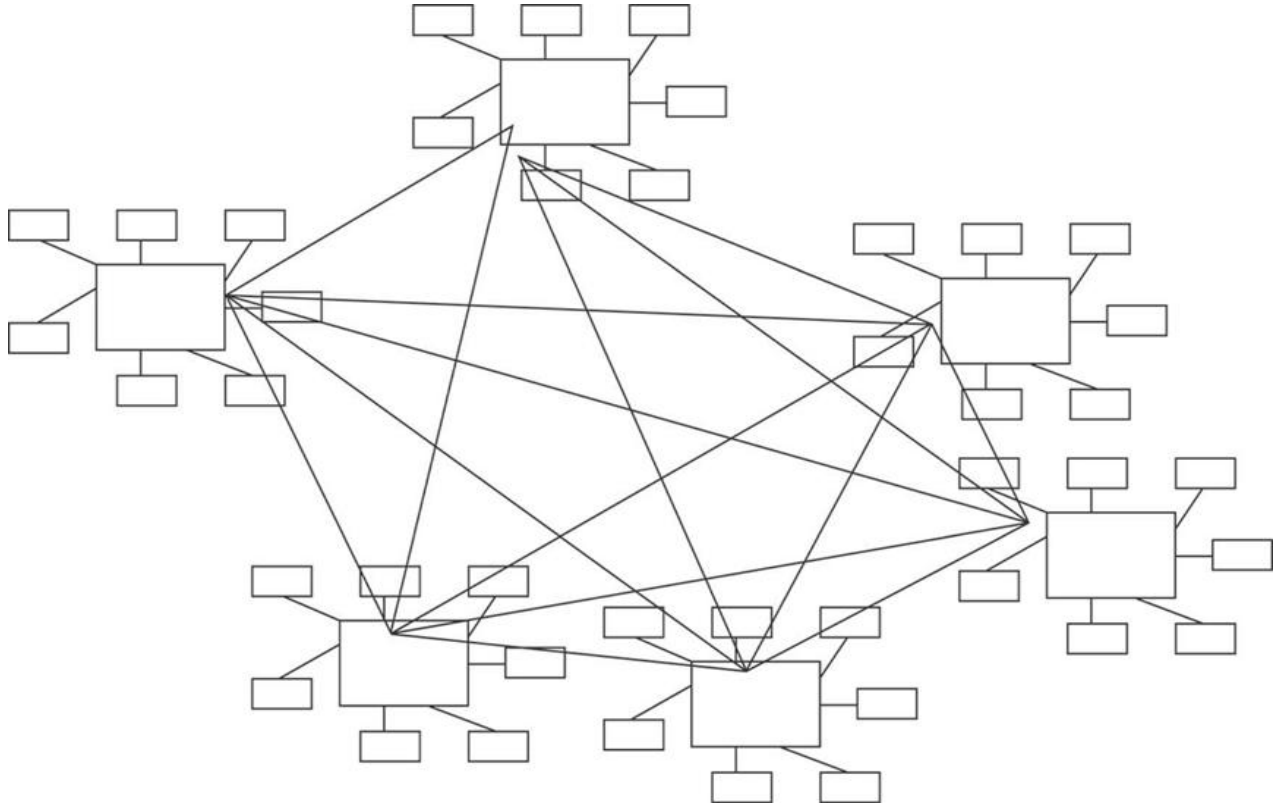


Matrix Organization

- IT reduces operating complexity and expense by allowing information to be easily shared among different managerial functions.
- Shortcomings:
  - Sometimes frustrating and confusing.
  - Require frequent meetings.
  - Information overload.

Networked Organizational Structure

- Feel flat yet hierarchical.
- Work well in dynamic, unstable environments.



Networked Organizational Structure

- Features:
  - Highly decentralized decision rights.
  - Information systems replace hierarchical controls.
  - Formal and informal communication networks connect everyone.
  - Promote creativity and flexibility while maintaining operational process control.
- Extensive use of communication technologies and networks:
  - Allows coordination across functional boundaries.
  - Enables quick and more accurate decision making.

Networked Organizational Structure

- Technological leveling - technology enables individuals from all parts of the organization to reach all other parts of the organization.
- IT can be substituted for layers of management and for a number of management tasks.
- In some bureaucratic organizations, layers of management exist to look at, edit, and approve messages that flow from the layer below them to the level above.

Networked Organizational Structure

- With electronic communications, some of these layers can eliminated.
- In addition, a manager's span of control can be increased since electronic communications can be more efficient than phone or personal contact for certain of tasks, particularly those dealing with administrative matters.
- Technology makes possible to increase the span of control and possibly eliminate layers in the organization, leveling it in the process.

Networked Organizational Structure

- Portions of Zara's organizational structure appear networked.
- Being networked enables the store managers to use technology to communicate with designers.
- Daily trend information is sent by trend teams that go to nightclubs and other fashion-oriented venues (places), as well as by the store managers, to a central database from which the designers draw their inspiration.
- Zara uses the technology-supported structure to coordinate the actions and decisions of tens of thousands of its employees so that they can focus their attention on the same goal of making and selling clothes that people want to buy.

	Hierarchical	Flat	Matrix	Networked
Description	Bureaucratic form with defined levels of management	Decision-making pushed down to lowest level in the organization	Workers assigned to multiple supervisors in an effort to promote integration	Formal and informal communication networks that connect all parts of the company
Characteristics	Division of labor, specialization, unity of command, formalization	Informal roles, planning and control; often small and young organizations	Dual reporting relationships based on function and purpose	Known for flexibility and adaptability
Type of Environment Best Supported	Stable, Certain	Dynamic Uncertain	Dynamic Uncertain	Dynamic Uncertain
Basis of Structuring	Primary function	Very loose	Functions and purpose (i.e., locations, product, customer)	Networks
Power Structure	Centralized	Decentralized	Distributed (matrix mangers)	Distributed (network)

Figure 3.4 Comparison of Organizational Structures

Emerging Organizational Structures

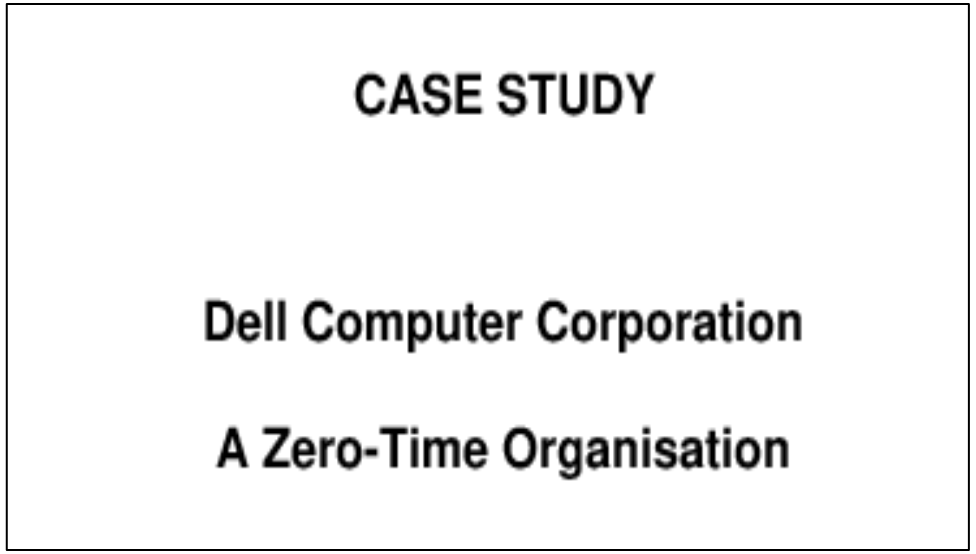
- Hybrid structure
  - In which different parts of the organization use different structures depending on the information needs and desired work processes.
  - For example, the IS department may use a hierarchical structure that allows more control over data warehouses and hardware.
  - Whereas the research and development (R&D) department may employ a networked structure to capitalize on knowledge sharing.

Emerging Organizational Structures

- Adaptive Organization
  - An organization in which the goods or services demand and supply are matched and synchronized at all times.
  - Hewlett-Packard

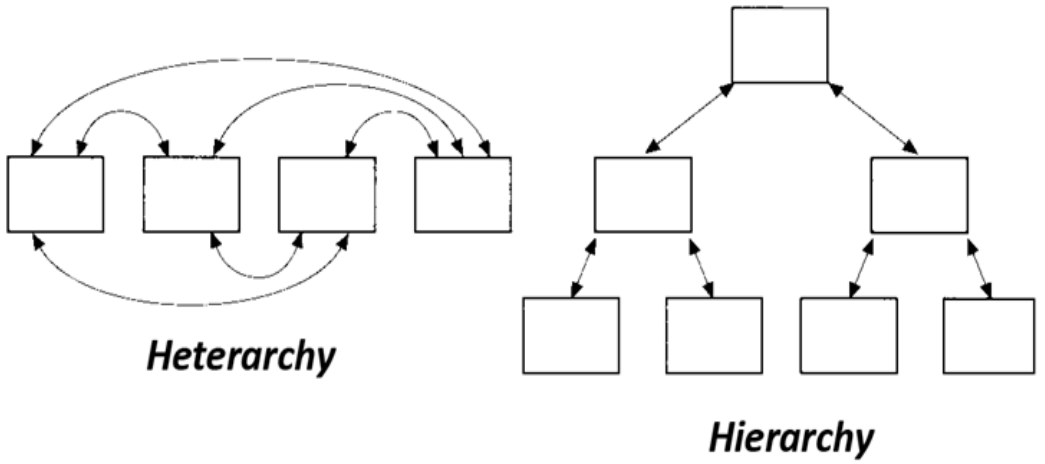
Emerging Organizational Structures

- Zero-Time Organization
  - Successfully removes barriers to operations so that what ever needs to happen can happen in a minimal amount of time.
  - At Dell, a model of "supply on demand" was used to fulfill customer orders.



Emerging Organizational Structures

- Heterarchies (이질적 위계조직)
  - A type of organizational structure with shifting, distributed accountability, dynamic and blurred roles, and fuzzy and permeable (penetrable) boundaries.
  - It is characterized by multiple emergent performance criteria and temporary work teams.
  - In sum, heterarchies are designed to be adaptable and very responsive.



Emerging Organizational Structures

- What is common among those?
  - Agile, responsive organizations that can configure resources and people quickly react to changing needs.
  - Flexible enough to sense and respond to changing demands.
  - Use of IT and networks to enable these configurations.

Informal Networks

- The organization chart reflects the authority derived from formal reporting relationships in the organization's formal structure.
- However, informal relationships also exist and can play an important role in an organization's functioning.
- Informal networks, in addition to formal structures, are important for alignment with the organization's business strategy.

Social Networks

- A form of informal networks
- An IT-enabled network that links individuals together in ways that enable them to:
  - Find experts,
  - Get to know colleagues, and
  - See who has relevant experience for projects across traditional organization lines.

Social Networks

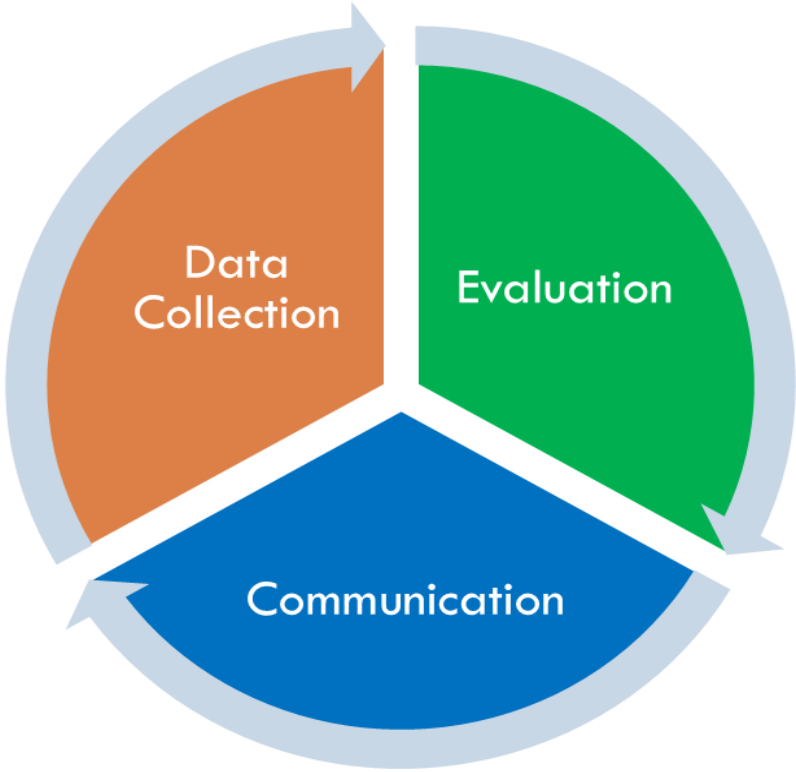
- A social networking site (SNS) is a "networked communication platform in which participants:
  - Have uniquely identifiable profiles that consist of user-supplied content, content provided by other users, and/or system-provided data;
  - Can publicly articulate connections that can be viewed and traversed (go across) by others; and
  - Can consume, produce, and/or interact with streams of user-generated content provided by their connections on the site."

Social Networks

- An enterprise social networking site (ESNS) is basically a social networking site that is used within an organization, that is formally sanctioned (approved, allowed) by management, and that can restrict membership and interactions to the organization's employees.
- For example, the ESNS Yammer limits an individual's network to other users who share the same corporate email domain.
- Though ESNSs are platforms that are technically similar to SNSs, their focus is on forming and maintaining connections and knowledge sharing internal to the organization.

Information Systems and Management Control Systems

- IS play three important roles in management control processes:
- IS collect, evaluate, and communicate information, leaving managers with more time to make decisions.



Information Systems and Management Control Systems

IS and Management Control Systems	
Data Collection	• IS enable the collection of information that helps managers determine if they are satisfactorily progressing toward realizing the organization's mission as reflected in its stated goals.
Evaluation	• IS facilitate the comparison of actual performance with the desired performance that is established as a result of planning.
Communication	• IS speed the flow of information from where it is generated to where it is needed. • This allows an analysis of the situation and a determination about what can be done to correct for problematic situations.

Planning and Information Systems

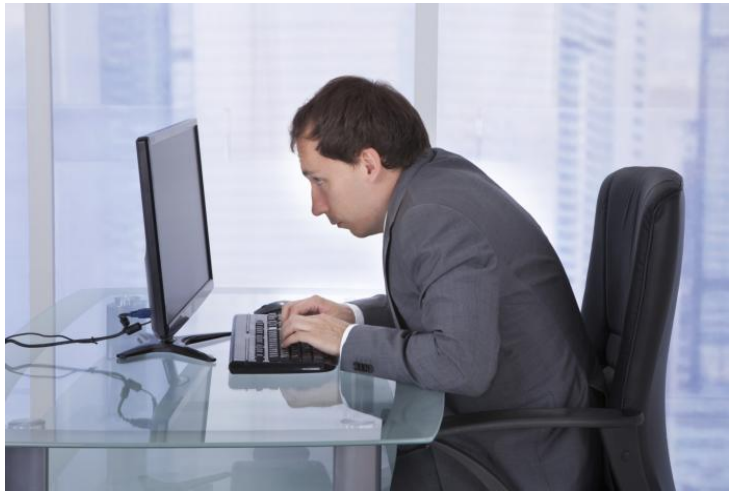
- Information systems can play a role in planning in four ways:
  - IS can provide the necessary data to develop the strategic plan.
    - ✓ IS can be especially useful in collecting data from organizational units and integrating the data to transform those data into information for the strategic decision makers.
  - IS can provide scenario and sensitivity analysis through simulation and data analysis.
  - IS can be a major component of the planning process.
  - In some instances, IS are a major component of a strategic plan.
    - ✓ IS can be used to gain strategic advantage.

Data and Information Systems

- 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.

Data and Information Systems

- Software collecting monitoring data directly from work tasks, or embedding the creation and storage of performance information into software used to perform work is more reliable.
- Monitor "cyberslacking"(*the use of an employer's Internet and e-mail for personal activities during work hours*) and "cyberslouching."



Data and Information Systems

- Monitoring is ethical and in the best interest of business.
- Employees must be informed about monitoring software.
- Reward increase in productivity derived from monitoring information.
- Balance employees' right to privacy against the needs of the business to have surveillance mechanisms in place.

Performance Measurement, Evaluation and Information Systems

- IS make it possible to evaluate actual performance data against reams (large amounts) of standard or historical data.
- Use models and simulations.
- Managers can easily understand work progress and performance.
- Analysis paralysis - analyzing too much or too long
- How the information is used has significant organizational consequences.
- Information collected for evaluation may be used to provide feedback.
  - Worker can improve personal performance.
  - Determine rewards and compensation.

Performance Measurement, Evaluation and Information Systems

- 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.
- IS enables soliciting(asking for) feedback from anyone who has access to the system and report it anonymously.
- Quick feedback enables faster improvements.

Incentives and Rewards and Information Systems

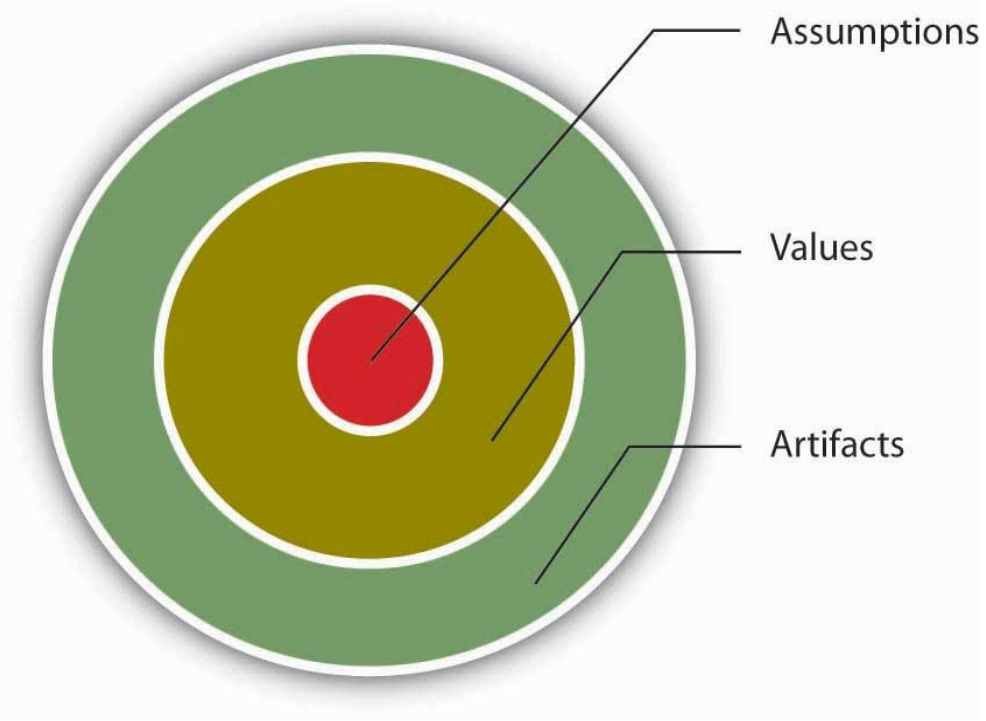
- Enables organizations to encourage good performance.
- Done properly, can make employees feel good without paying them more money.
- Organizations use their Web sites to recognize high performers.
  - Using electronic badges that are displayed on the social network to identify the award recipients.
  - Reward with allocation of 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 Systems and Culture

- Culture is the third managerial lever.
- It 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 a "collective programming of the mind" that distinguishes not only societies (or nations) but also industries professions, and organizations.
  - Beliefs are the perceptions that people hold about how things are done in their community.
  - Values reflect the community's aspirations about the way things should be done.

Information Systems and Culture

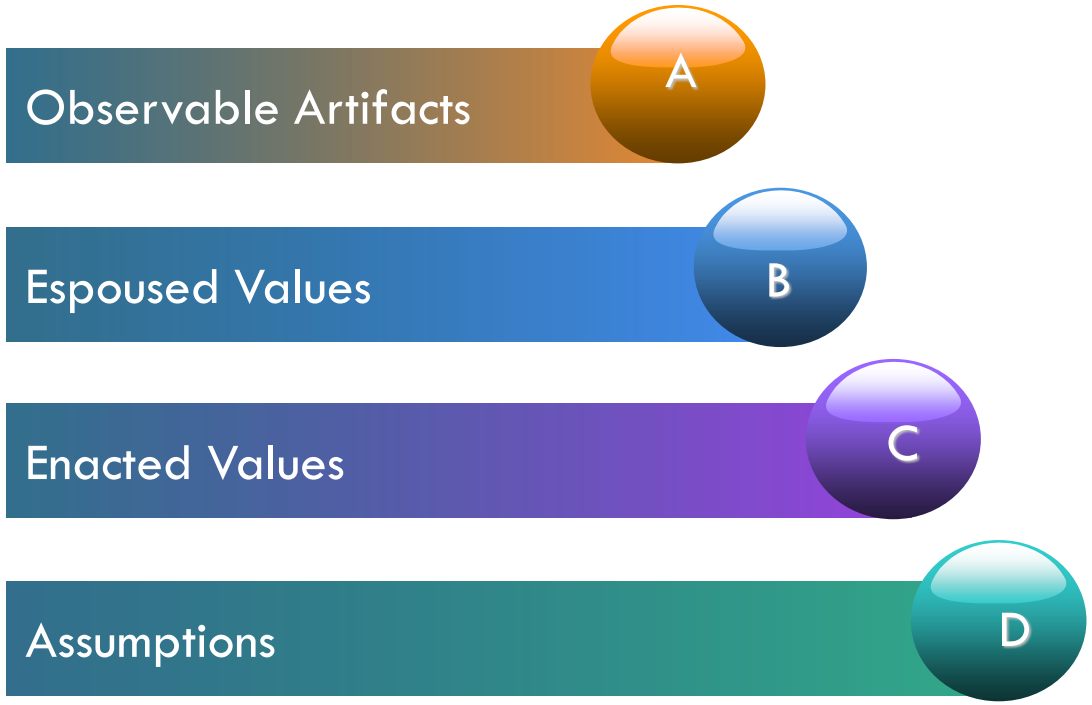
- Assumptions are taken for granted, and they reflect beliefs about human nature and reality.
- Values are shared principles, standards, and goals.
- Artifacts are visible and tangible aspects of organizational culture.

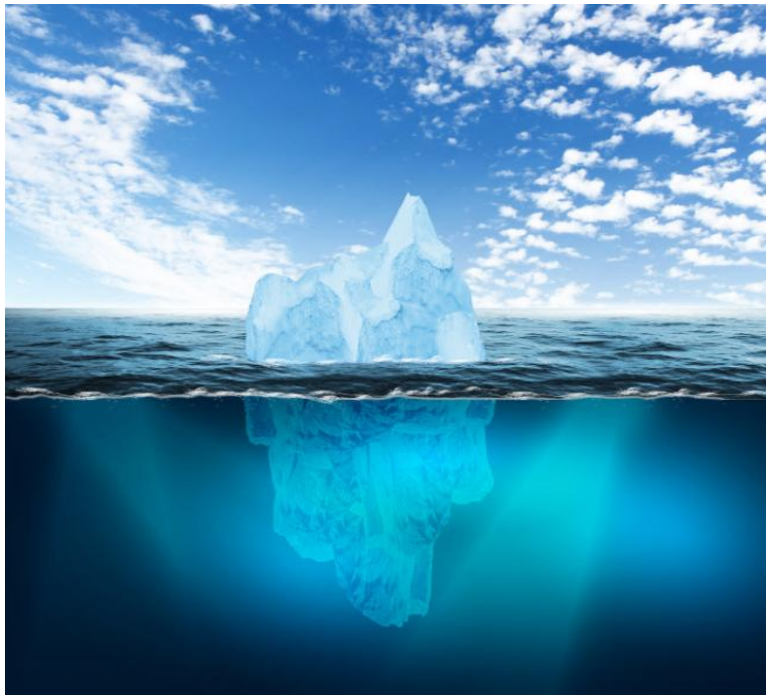


Organizational culture consists of three levels.

Information Systems and Culture

- Culture may change over time depending on the environment and internal operations.
- Culture has layers:





Information Systems and Culture

Culture Layers	Description
Observable artifacts (things)	• The most visible level
Espoused (supported) values	• The explicitly stated preferred organizational values
Enacted (performed) values	• The values and norms that are actually exhibited or displayed in employee behavior
Assumptions	• Unobservable, since they reflect organizational values that have become so taken for granted that they guide organizational behavior without any of the group members thinking about them

Levels of Culture and IT

- Culture can be found in countries, organizations, or even within organizations.
- IS development and use can be impacted by culture at all levels within the organization.
- Both national and organizational cultures can affect the IT issues and vice versa.
- Differences in national culture may affect IT in a variety of ways:
  - Impacting IS development, technology adoption and diffusion, system use and outcomes, and management and strategy.

Levels of Culture and IT

- Figure 3.5 describes the model for the impact of culture on IT issues.
  - At the broadest (highest) level are national values.
  - At the next level are organizational values that are held by the entire organization.
  - Within the organization are subgroup values such as those held by the IT department.

Levels of Culture and IT

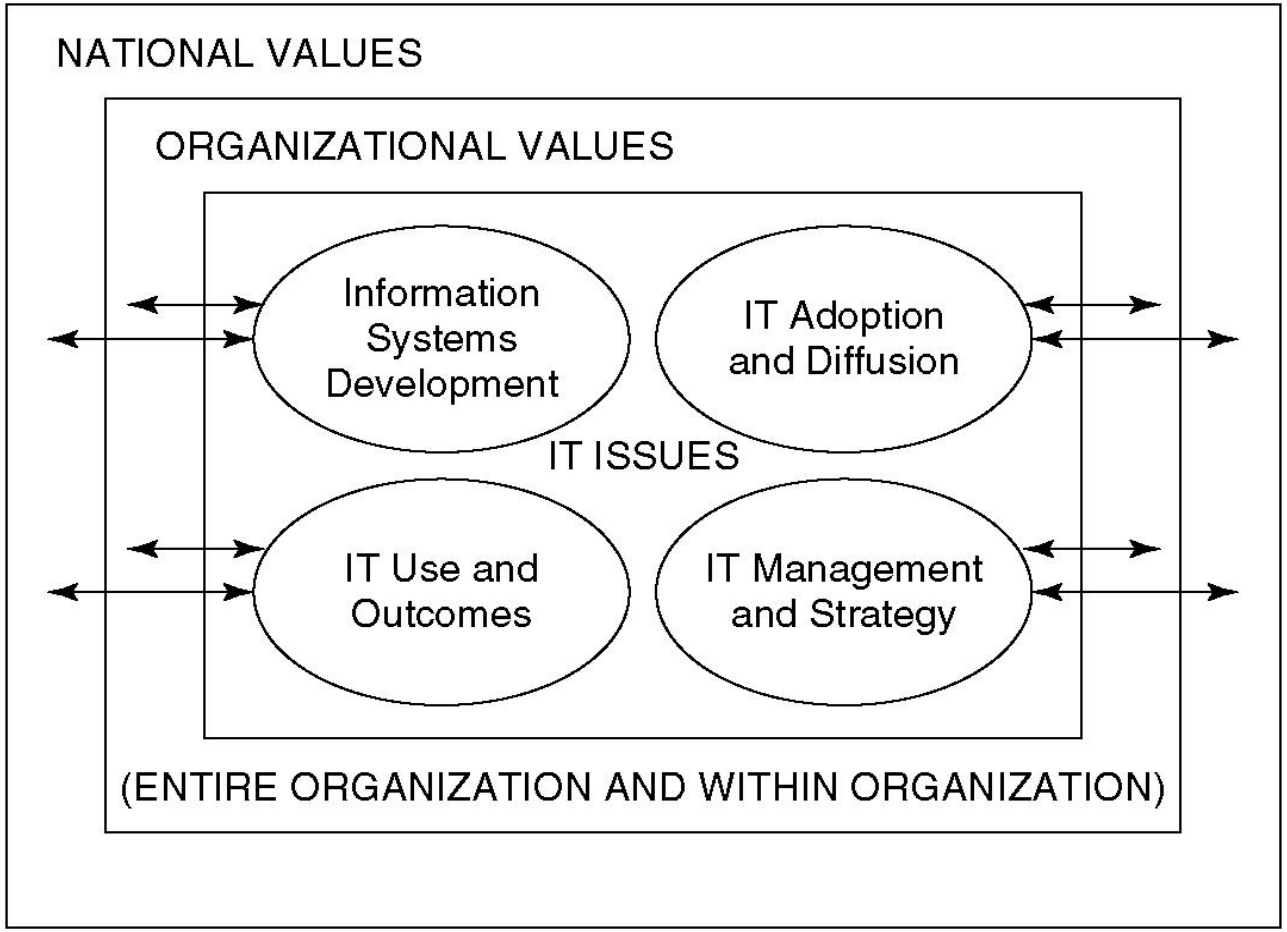


Figure 3.5 Levels of Culture.

Levels of Culture and IT

- Culture and IS Development
  - Variation across national cultures may lead to differing perceptions and approaches to IS development.
  - Systems designers may have different perceptions of the end users and how the systems would be used.
- Culture and IT Adoption and Diffusion
  - National cultures that are more willing to accept risk appear to be more likely to adopt new technologies.
  - People are more likely to adopt a new technology if they think that the technology's embedded values match those of their national culture.

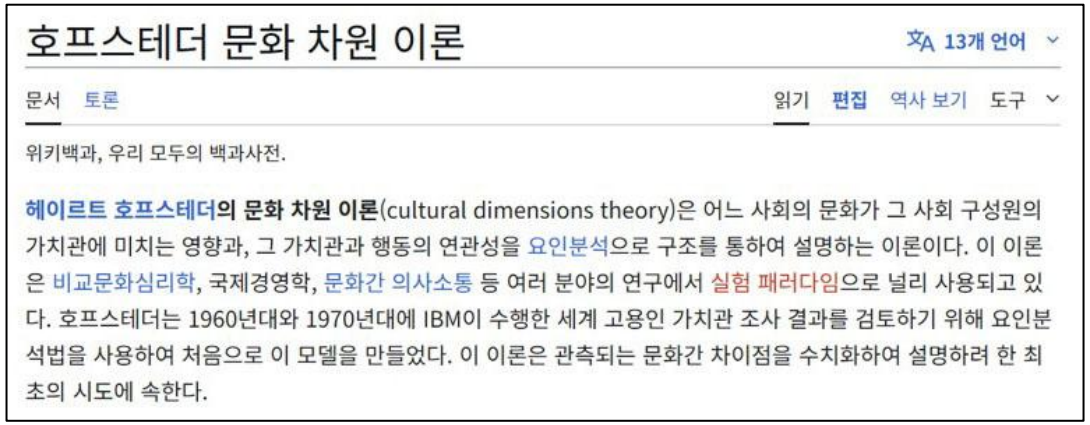
Levels of Culture and IT

- Culture and IT Use and Outcomes
  - Differences in culture result in differences in the use and outcomes of IT.
  - At the organizational level, cultural values are often related to satisfied users, successful IS implementations, or knowledge management success.
- Culture and IT Management and Strategy
  - Culture affects planning, governance, and perceptions of service quality at the national and organizational levels.
  - Having planning cultures at the top levels of an organization typically signal that strategic systems investment is important.

National Cultural Dimensions and Their Application

- Hofstede originally identified four major dimensions of national culture:
  - Power Distance
  - Uncertainty Avoidance
  - Individualism-Collectivism
  - Masculinity-Femininity
  - Confusian Work Dynamism or Long-Term vs. Short-Term Orientation
  - Indulgence/Restraint

→ New Dimensions



호프스테더 문화 차원 이론

13개 언어

문서 토론 읽기 편집 역사 보기 도구

위키백과, 우리 모두의 백과사전.

헤이르트 호프스테더의 문화 차원 이론(cultural dimensions theory)은 어느 사회의 문화가 그 사회 구성원의 가치관에 미치는 영향과, 그 가치관과 행동의 연관성을 요인분석으로 구조를 통하여 설명하는 이론이다. 이 이론은 비교문화심리학, 국제경영학, 문화간 의사소통 등 여러 분야의 연구에서 실험 패러다임으로 널리 사용되고 있다. 호프스테더는 1960년대와 1970년대에 IBM이 수행한 세계 고용인 가치관 조사 결과를 검토하기 위해 요인분석법을 사용하여 처음으로 이 모델을 만들었다. 이 이론은 관측되는 문화간 차이점을 수치화하여 설명하려 한 최초의 시도에 속한다.

National Cultural Dimensions and Their Application

- The GLOBE (Global Leadership and Organizational Behavior Effectiveness) research program uncovered nine cultural dimensions, six of which have their origins in Hofstede's pioneering work (Figure 3.6).
- Some leadership traits are seen as universally acceptable across cultures:
  - Being trustworthy, just (fair), and honest.
  - Having foresight and planning ahead.
  - Being positive, dynamic encouraging, and motivational.
  - Being communicative and informed.

National Cultural Dimensions and Their Application

Hofstede Dimensions (Related GLOBE Dimensions)	Description	
Uncertainty Avoidance (Uncertainty Avoidance)	• 불확실성 회피	• 불확실성과 애매성에 대한 사회적 저항력 • 사회 구성원이 불확실성을 최소화함으로써 불안에 대처하려고 하는 정도를 반영
Power Distance (Power Distance)	• 권력 거리/격차 • 사회 계급의 견고성	• 조직이나 단체(가족과 같은)에서 권력이 작은 구성원이 권력의 불평등한 분배를 수용하고 기대하는 정도
Individualism/Collectivism (Societal and In-Group Collectivism)	• 개인주의_집단주의	• 개인들이 단체에 통합되는 정도

Figure 3.6.1 – National Cultural Dimensions

National Cultural Dimensions and Their Application

Hofstede Dimensions (Related GLOBE Dimensions)	Description	
Masculinity/Femininity (General Egalitarianism and Assertiveness)	• 남성성-여성성 • 과업 지향성-인간 지향성	• 성별 간 감정적 역할의 분화 • 삶의 양-삶의 질
Confucian Work Dynamism (Future Orientation)	• 윤교적 업무 역동성 • 장기 지향성-단기 지향성	• 사회의 시간범위를 설명
Indulgence/Restraint	• 쾌락추구-절제 • 응석-절제	

Figure 3.6.2 – National Cultural Dimensions

National Cultural Dimensions and Their Application

Hofstede Dimensions (Related GLOBE Dimensions)	Description	Examples of Effect on IT
Uncertainty Avoidance (Uncertainty Avoidance)	• Extent to which a society tolerates uncertainty and ambiguity. • 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.	• Countries with high uncertainty avoidance are less likely to adopt new IT and have higher perceptions of project risk than countries with low uncertainty avoidance.

Figure 3.6.3 – National Cultural Dimensions

National Cultural Dimensions and Their Application

Hofstede Dimensions (Related GLOBE Dimensions)	Description	Examples of Effect on IT
Power Distance (Power Distance)	• Degree to which members of an organization or society expect and agree that power should be equally shared.	• Individuals from high power distance countries are found to be less innovative and less trusting of technology than individuals from low power distance countries.

Figure 3.6.4 – National Cultural Dimensions

National Cultural Dimensions and Their Application

Hofstede Dimensions (Related GLOBE Dimensions)	Description	Examples of Effect on IT
Individualism/ Collectivism (Societal and In-Group Collectivism)	• Degree to which individuals are integrated into groups. • Extent to which organizational and societal institutional practices encourage and reward collective distribution of resources and collective action.	• Individualistic cultures are more predisposed than collectivistic cultures to report bad news on troubled IT projects. • Companies in collectivist societies are more likely than individualistic societies to fill IS position from within the company.

Figure 3.6.5 – National Cultural Dimensions

National Cultural Dimensions and Their Application

Hofstede Dimensions (Related GLOBE Dimensions)	Description	Examples of Effect on IT
Masculinity/Femininity (General Egalitarianism and Assertiveness)	• Degree to which emotional roles are distributed between the genders. • Extent to which an organization or society minimizes gender role differences and gender discrimination. • Often focuses on caring and assertive behaviors.	• Australian groups (high masculinity) generated more conflict and relied less on conflict resolution strategies than Singaporean groups (low masculinity).

Figure 3.6.6 – National Cultural Dimensions

National Cultural Dimensions and Their Application

Hofstede Dimensions (Related GLOBE Dimensions)	Description	Examples of Effect on IT
Confucian Work Dynamism (Future Orientation)	• Extent to which society rewards behaviors related to long-or short term orientations. • Degree to which individuals in organizations or societies engage in future-oriented behaviors such as planning, investing in the future, and delaying. gratification(satisfaction).	• When considering future orientation, studies found differences in the use of Executive Information Systems and the evaluation of service quality across countries.

Figure 3.6.7 – National Cultural Dimensions

National Cultural Dimensions and Their Application

Hofstede Dimensions (Related GLOBE Dimensions)	Description	Examples of Effect on IT
Indulgence/Restraint	• Degree to which individuals are encouraged to satisfy their basic and natural drives and have fun vs. to suppress the gratification of their needs by following strict social norms.	• Indulgent societies purchase more on the Internet.

Figure 3.6.8 – National Cultural Dimensions

National Cultural Dimensions and Their Application

- A generally accepted view is that the national culture predisposes (성향을 갖게 하다) citizens of a nation to act in a certain way along a Hofstede or GLOBE dimension. (i.e. individualistic way in England, collectivist way in China).
- The extent of the influence of a national culture may vary among individuals, and culturally based idiosyncrasies (특이한 성격/방식) and individual experiences.
- Effective communication means listening, framing the message in a way that is understandable to the receiver, and responding to feedback.

National Cultural Dimensions and Their Application

- Effective cross-cultural communication involves all of these plus searching for an integrated solution that can be accepted and implemented by members of diverse cultures.
  - For instance, typical American managers, noted for their high performance orientation, prefer direct and explicit language full of facts and figures.
  - However, managers in lower-performance-oriented countries such as Russia or Greece tend to prefer indirect and vague language that encourages the exploration of ideas.

National Cultural Dimensions and Their Application

- Communication in meetings is also subject to cultural differences.
  - In countries with high levels of uncertainty avoidance such as Switzerland and Austria, meetings should be planned in advance with a clear agenda.
  - The managers in Greece or Russia who come from a low uncertainty avoidance culture often shy away from agendas or planned meetings.
- Knowing that a society tends to score high or low on certain dimensions helps a manager anticipate how a person from that society might react.
- Importantly, without awareness of cultural differences, it is unlikely that IS will be developed or used effectively.