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Chapter 1

What is an Organization?

Organizations are social entities that are goal-directed, designed as structured systems of coordinated activities, and linked to the external environment. **(Zara)** They are a means to an end, designed to accomplish specific goals through the coordination of people and resources.

An organization is not just a building or a set of policies; it is made up of people and their relationships. It exists when individuals interact to perform essential functions that help achieve shared goals.

In modern organizations, external interactions with customers, suppliers, competitors, and others are crucial. Some organizations even collaborate with competitors to share information and technology for mutual benefit.

Organizations vary in size and structure, with the key distinction between for-profit businesses and nonprofit organizations. While businesses aim to generate profit, nonprofits focus on creating social impact, often relying on donations or government funding. Managers in for-profit businesses aim to increase revenue, while nonprofit managers work to serve clients efficiently, managing costs to maintain operations and demonstrate resource efficiency.

Dimensions of Organization Design

Structural dimensions provide labels for the internal characteristics of an organization, allowing for comparison and measurement.

Example: Shizugawa → At Shizugawa Elementary School, the creation of detailed rules and procedures during the Minamisanriku tsunami evacuation helped maintain order and provided comfort. Six divisions managed daily tasks like cooking, cleaning, and medical care, ensuring smooth operations. In contrast, the lack of clear authority and structure during the Deepwater Horizon disaster exacerbated the crisis. Confusion over who had the authority to take action led to chaos, with key decisions, like issuing a mayday or triggering an emergency shutdown, delayed due to unclear responsibilities and communication breakdowns.

Contingency factors influence these dimensions and include elements like size, technology, environment, culture, and goals. These factors can be complex as they affect both the organization and its external environment.

Key structural dimensions include:

- **Formalization**: This refers to the extent of written documentation within an organization, such as procedures, job descriptions, regulations, and policies. It measures the amount of formal rules that define behaviors and activities.
- **Specialization**: This dimension describes how tasks are divided within the organization. High specialization means employees perform narrow tasks, while low specialization allows for a broader range of tasks within roles.
- **Hierarchy of Authority**: This defines reporting relationships and spans of control, determining whether the organization has a tall (many layers) or short (few layers) hierarchy.
- **Complexity**: Complexity refers to the number of distinct departments or activities, measured vertically (levels of hierarchy), horizontally (number of departments), and spatially (geographic spread).
- **Centralization**: This dimension indicates where decision-making authority resides. Centralized organizations have decisions made at the top, while decentralized organizations push decision-making to lower levels.

Key contingency factors of organizations include *size, organizational technology, external environment, goals and strategy, organizational culture*

- **Size** is typically measured by the number of employees, though other indicators like total sales or assets can also reflect organizational scale.

- **Organizational Technology** encompasses the tools, techniques, and processes used to convert inputs into outputs, shaping how the organization produces goods and services.
- **Environment** includes all external elements impacting the organization, such as industry, government, customers, suppliers, and the financial sector, with other organizations often being the most influential.
- **Goals and Strategy** define the organization's purpose, competitive approach, and strategic actions.
- **Culture** consists of shared values, beliefs, understandings, and norms among employees, which foster cohesion and may emphasize ethics, employee commitment, efficiency

The five structural dimensions and five contingency factors are interconnected, with specific contingency factors impacting the ideal levels of specialization, formalization, and other structural aspects.

Example: Valve → Valve Software operates with a unique, flat structure, where there are no bosses, and employees have significant flexibility and input in decision-making. While this fosters creativity and innovation, not everyone adapts to the "no-structure" model, leading some to leave for more traditional roles. Teams make hiring decisions, and leadership emerges naturally on projects, with informal team meetings and rare firings. In contrast, Walmart's structure is highly hierarchical, with top-down control and strict procedures, leading to efficiency and consistent performance, but less employee autonomy in decision-making.

For instance, a large organization size, routine technology, and a stable environment often lead to higher levels of formalization, specialization, and centralization.

- **Efficiency** measures how well an organization uses resources (e.g., raw materials, money, and labor) to achieve its goals. It is a reflection of the relationship between input and output, aiming for minimal resource waste while maintaining desired outcomes.
- **Effectiveness** goes beyond efficiency and focuses on the broader goal of achieving the organization's objectives. An organization is considered effective when it successfully meets its defined goals, whether they involve financial success, market position, or customer satisfaction.

The **stakeholder approach** to effectiveness takes a holistic view by evaluating how well an organization satisfies the needs and expectations of various stakeholders, both internal (e.g., employees, managers) and external (e.g., customers, investors). For example:

- **Customers** seek high-quality products and services at competitive prices.
- **Employees** desire fair compensation, good working conditions, and opportunities for growth.
- **Shareholders** prioritize strong financial returns on their investments.

By considering the diverse interests of these groups, the stakeholder approach provides a more comprehensive assessment of organizational effectiveness, highlighting the importance of balancing different priorities to achieve long-term success.

The Evolution of Organization Design

Organization design provides a framework for understanding how people and resources are organized to achieve specific goals, enabling managers to analyze patterns in organizational behavior and design. This deeper analysis helps improve efficiency, effectiveness, and quality. Organization design research also highlights how design and management practices evolve with societal changes.

- **Scientific management**, developed by Frederick Taylor, focuses on efficiency through standardized procedures, structured job roles, and precise planning by managers. This approach significantly influenced modern management practices, emphasizing productivity and stability.
- **The administrative principles approach** extended classical management by focusing on the overall organization, introducing concepts like unity of command. It promoted bureaucratic systems to improve productivity but overlooked human and social factors within organizations.

Effective organization design must account for contingency factors—such as size, technology, environment, goals, and culture—since there is no one-size-fits-all solution. Contingency theory asserts that the best design depends on an organization's unique circumstances, such as using a bureaucratic structure in stable environments or a flexible design in uncertain, high-tech firms.

The Contrast of Organic and Mechanistic Designs

Organizations can be placed on a continuum from mechanistic to organic design.

A **mechanistic design** features rigid rules, formal procedures, and centralized decision-making, focused on efficiency. It is suitable for stable environments that prioritize consistency and control.

An **organic design** is more flexible, decentralized, and adaptive, with less formal structure and rules. It emphasizes employee empowerment and learning, making it ideal for dynamic environments that require innovation.

The choice between these designs depends on factors like structure, tasks, communication, and hierarchy, which affect the organization’s effectiveness.

- **Centralization and Decentralization**: In a mechanistic design, decision-making is centralized at the top, with control held by top executives, and employees follow directives. In an organic design, decision-making is decentralized, with authority and knowledge spread across lower levels, allowing employees to collaborate and make decisions independently.
- **Specialized Tasks and Empowered Roles**: Mechanistic designs assign narrowly defined tasks to individuals, with specific activities for each employee. Organic designs, on the other hand, offer employees empowered roles, giving them discretion and responsibility to use their judgment in achieving goals.
- **Formal and Informal Systems**: Mechanistic designs rely on formal systems, rules, and regulations to manage communication and ensure adherence to standards. Organic designs feature fewer formal systems, allowing for more informal, flexible communication and information sharing.
- **Vertical and Horizontal Communication**: Mechanistic organizations primarily use vertical communication, where information flows up and down the hierarchy. In organic organizations, communication is horizontal, flowing freely across departments and levels, enabling quicker decision-making.
- **Hierarchy of Authority and Collaborative Teamwork**: Mechanistic organizations have a rigid hierarchy with little interdepartmental collaboration. In contrast, organic organizations emphasize collaborative teamwork, horizontal workflows, and interdepartmental cooperation to solve problems, with self-directed teams at the core.

The Emerging Boss-less Design Trend

The rise of knowledge-based work, where expertise and ideas drive value, is pushing organizations toward decentralization. In such organizations, expertise is distributed, and employees at all levels contribute ideas. Rapid responses to environmental and customer changes, along with information-sharing through technology, further necessitate decentralization. As a result, hierarchical layers can slow down decision-making and increase costs. Some organizations have adopted an extremely organic, "boss-less" design, where there are no job titles, seniority, or managers, and employees collaborate equally.

In a boss-less work environment **(Morning Star)**, there are no orders given or taken, and accountability lies with the customer and the team, not with a manager. This structure can lead to increased flexibility and faster decision-making. However, it also presents challenges, such as the need for ongoing employee training and a culture that supports the non-hierarchical system. While overhead costs may be lower, maintaining a boss-less environment requires significant investment in employee development and engagement.

Frameworks

Organizations are complex systems made up of multiple subsystems, analyzed at different levels. At the individual level, employees are the foundational building blocks, much like cells in a biological system. The next level involves groups or departments, where individuals collaborate to achieve shared goals. At the organizational level, these

groups form a cohesive structure, and beyond the organization itself, there exists an inter-organizational set, which includes other organizations with which a company interacts.

Organizational behavior takes a micro-level approach, concentrating on individuals within organizations. It explores factors like motivation, leadership, personality, and cognitive and emotional differences among people, aiming to understand how these individual traits influence organizational dynamics.

In contrast, **organization theory and design** examines the organization as a whole. It looks at its structure, departments, interrelationships, and the ways in which these elements work together. This macro-level approach is particularly important for top and middle management, who are responsible for setting goals, developing strategies, interpreting the external environment, and determining the overall design and structure of the organization. Middle management is also involved in ensuring their departments align with the larger organization and handling challenges like inter-group conflict and information flow. Lower management typically focuses more on day-to-day operations, managing employees, and ensuring tasks are performed efficiently.

Chapter 2

The Role of Strategic Direction in Organization Design

Goals define desired outcomes and guide efforts, while top executives set the overall direction to achieve these goals. Top management defines the organization's goals, strategy, and structure to respond to a dynamic environment, while middle managers adapt these elements to their departments.

Example: Kroger → Kroger is adapting to competition and shifting consumer needs by expanding its organic offerings, launching home delivery, and investing in technology. The company focuses on providing a wide range of products, including private-label brands, and addressing food waste with initiatives like "Pickuliar Picks." Kroger's strategy also includes expanding its direct-to-consumer platform and a merger with Home Chef to enhance convenience and fresh food options.

The direction-setting process starts with an analysis of external opportunities and threats, focusing on change, uncertainty, and resources. Managers also assess internal strengths and weaknesses to identify unique competencies compared to competitors. This SWOT analysis (Strengths, Weaknesses, Opportunities, and Threats) helps leaders understand factors impacting performance.

Scenario planning is used to guide direction by analyzing trends and potential disruptions. Managers envision multiple future scenarios to prepare for uncertainties like extreme weather or system failures. Two to five scenarios are created for each factor, ranging from optimistic to pessimistic outcomes, enabling better responses to future conditions.

Once the direction is set, the next step is to define the organization's **strategic intent**, which includes its mission and official goals. This phase ensures alignment between external opportunities and internal strengths, and sets the foundation for developing operational goals and strategies to fulfill the mission. Following this, the **organization design** phase takes place, where strategies and goals are implemented through decisions on structure, control systems, technology, human resources, culture, and linkages with other organizations. Managers must decide whether to focus on innovation and learning (organic structure) or prioritize efficiency (mechanistic structure).

Organizational design is closely tied to strategic intent. Existing structures influence strategy formulation, but new strategies or goals may require structural changes to adapt to evolving environmental needs.

The final step involves assessing **effectiveness outcomes** by evaluating goal achievement, resource efficiency, and alignment with strategic objectives. Performance metrics provide feedback to help managers refine strategies and set future goals, ensuring continual improvement and adaptability.

Organizational Purpose

Organizations have various types of goals, each with a specific purpose. For long-term success, these goals must align under **strategic intent**, which serves to focus the organization's resources and efforts toward a clear, unified objective. Strategic intent provides direction, ensuring all activities are aligned with the organization's core purpose.

Three essential components related to strategic intent are the **mission**, **core competence**, and **competitive advantage**.

- The **mission** of an organization outlines its core purpose, values, and overarching goals. It defines the reason for the organization's existence and the outcomes it aims to achieve, often focusing on values, markets, and customer needs. The mission statement is also a critical **communication tool**, helping to convey the organization's goals to stakeholders
- **Strategic intent** focuses on helping an organization achieve a **sustainable competitive advantage**, which distinguishes it from competitors and enables it to meet customer needs in a way that others cannot. Successful managers monitor both external trends and internal capabilities to identify new opportunities and develop strategies that can strengthen the organization's position in a changing environment.
- A company's **core competence** is a unique strength that sets it apart from competitors. This could include areas like advanced technological expertise, exceptional customer service, or efficient operational processes. Core competencies represent the capabilities that the organization performs exceptionally well and form the foundation of its strategy.

Operating Goals

The organization's mission and overall goals form the foundation for developing **operating goals**, which define the specific objectives an organization seeks through its daily operations. These goals are focused on measurable, short-term outcomes, guiding day-to-day activities and decisions within departments. Typical operating goals include performance, resource, market, employee development, productivity, and innovation goals.

- **Overall Performance**: For-profit organizations measure performance through profitability, often using metrics like net income, earnings per share, or return on investment. In addition to profitability, other performance goals include **growth**, which refers to increases in sales or profits over time, and **volume**, which pertains to total sales or the number of products or services delivered. These indicators help assess the overall success and health of an organization. Nonprofit organizations, which do not prioritize profitability, focus on service delivery goals, ensuring that they provide value within specified expense levels. Growth and volume are still relevant for nonprofits, particularly in terms of expanding services, reaching more clients, or increasing their impact within the community.
- **Resources**: Resource goals relate to acquiring necessary material and financial resources, such as securing financing, sourcing cheaper raw materials, or recruiting talent. For nonprofits, resource goals may involve recruiting volunteers or expanding funding sources.
- **Market**: Market goals focus on the desired market share or position, often handled by marketing and sales teams. These goals aim to expand an organization's reach or influence. For nonprofits, they target expanding their impact or service delivery in a specific sector.
- **Employee Development**: Employee development includes training, promotion, safety, and growth of employees. Strong goals in this area promote positive workplace cultures and improve department performance, as employees gain necessary skills. Organizations are increasingly prioritizing work-life balance alongside skill development.
- **Productivity**: Productivity goals focus on maximizing output from available resources, measured by metrics like cost per unit or units produced per employee. They help organizations assess and improve operational efficiency.
- **Innovation and Change**: Innovation goals focus on adapting to changes by developing new services, products, or processes. These goals ensure that an organization can stay competitive and respond to market shifts.

Goal Conflict

Different priorities can lead to disagreements among managers, such as balancing employee development with productivity goals, or innovation with profitability. These conflicts arise from the tension between pursuing financial objectives and upholding values like privacy or social responsibility. When goals and values clash, managers must

navigate these tensions through negotiation and compromise to determine the best course of action for the organization.

The Importance of Goals

Official goals and operating goals serve distinct purposes within an organization. **Official goals** define the organization's values and overall purpose. **Operating goals** are more specific, focusing on daily tasks and providing clear direction for employees. However, poorly managed goals can lead to negative outcomes, such as unethical behavior or undue pressure.

Example: Wells Fargo → Wells Fargo's scandals were fueled by aggressive sales goals set by management, which pressured employees to break rules, such as opening fake accounts and pushing unnecessary products. Despite ethical warnings, the high targets led to widespread misconduct, with over 5,000 employees involved. The company initially blamed individual actions, but employees argued the goals themselves were unrealistic without unethical behavior.

Goals also act as guidelines for employee behavior and decision-making, ensuring alignment with the organization's values and societal expectations. Additionally, goals provide a standard for evaluating performance, offering measurable benchmarks in areas such as profits, productivity, employee satisfaction, innovation, or customer complaints.

Porter’s Competitive Strategies

Porter identified two primary strategies to enhance an organization's profitability and reduce vulnerability to competition: differentiation and low-cost leadership. They help organizations decide how to position themselves in the industry to achieve profitability and sustainability.

Example: Allegiant Air → Allegiant Air focuses on a low-cost leadership strategy by serving small, underserved cities with flights to tourist destinations. The airline targets niche opportunities, such as filling gaps left by larger carriers in shrinking markets. With a no-frills approach, low base fares, and charges for extras, Allegiant maintains profitability while keeping costs down. The company has expanded to international markets like Mexico, continuing its focus on cost efficiency and regional markets.

- A **differentiation strategy** involves offering unique products or services through exceptional features, superior service, or innovative technology. This approach targets customers who value quality over price, potentially leading to high profitability. A successful differentiation strategy reduces competition and the threat of substitutes by fostering customer loyalty. However, it requires significant investment in product development, advertising, and talent.
- The **low-cost leadership strategy** aims to increase market share by minimizing costs compared to competitors. This strategy focuses on operational efficiency, cost reduction, and strict control to produce goods or services more efficiently. Although low-cost leaders may offer lower prices, the emphasis is on operational efficiency rather than innovation or risk-taking. By maintaining lower costs, companies can offer competitive prices while still being profitable. This strategy helps protect market share from competitors and substitutes.

Miles and Snow’s Strategy Typology

The goal is to align internal characteristics, strategy, and the external context. According to this typology, there are four strategy types: prospector, defender, analyzer, and reactor. Each strategy represents a different approach to how an organization responds to its environment and manages operations.

- The **prospector strategy** emphasizes innovation, risk-taking, and seeking new opportunities to drive growth. It suits dynamic environments where creativity and differentiation are prioritized over efficiency. Organizations adopting this strategy focus on continuous exploration and expansion.
- The **defender strategy** focuses on stability and control. It aims to maintain existing customer bases and internal efficiency, rather than seeking innovation or growth. This strategy is effective in stable or declining industries where the focus is on producing reliable, high-quality products while avoiding risks.

- The **analyzer strategy** balances stability with innovation. Organizations using this strategy maintain efficient operations in stable environments while exploring new opportunities in dynamic markets. They preserve existing product lines while developing new ones for growth.
- The **reactor strategy** lacks a proactive plan, with organizations responding to external threats and opportunities in an ad-hoc manner. This reactive approach may sometimes succeed, but often leads to failure when it doesn't align with market trends or consumer needs.

The Miles and Snow typology has been widely tested across industries like hospitals, colleges, banks, and insurance firms, showing strong support for its practical effectiveness. The ability of managers to develop and sustain a clear competitive strategy is key to an organization's success, though many managers face challenges in this area.

How Strategies Affect Organization Design

The choice of strategy directly influences an organization's design and structure. A company focused on low-cost leadership tends to adopt a mechanistic approach, emphasizing efficiency, centralized authority, tight control, and standardized procedures. Employees perform routine tasks with close supervision and limited decision-making autonomy. In contrast, a differentiation strategy requires a more organic, flexible structure that fosters learning and experimentation. It involves decentralized decision-making, strong horizontal coordination, and a fluid, adaptable organizational design to support continuous innovation.

In organizations following a differentiation or prospector strategy, employees are empowered to work directly with customers and are encouraged to take risks, be creative, and innovate. These organizations prioritize research, creativity, and innovation over efficiency and standardization.

The defender strategy, similar to the low-cost leadership approach, focuses on efficiency, emphasizing stability and control. The analyzer strategy blends characteristics of both approaches, balancing efficiency in stable product lines with flexibility and learning for new products.

A reactor strategy, however, lacks a clear direction and approach to organization design, leaving the company without a defined strategy or structure.

Other Contingency Factors Affecting Organization Design

Organization design is shaped by various contingencies, including strategy, environment, size and life cycle, technology, and culture. The balance between efficiency and control (mechanistic) versus learning and flexibility (organic) depends on these factors. For example, a stable environment supports a mechanistic structure, while a rapidly changing one requires more flexibility and collaboration.

An Integrated Effectiveness Model

The model addresses these complexities by integrating multiple performance indicators. It was developed to reconcile different views on effectiveness, combining criteria valued by managers and researchers. Through expert analysis, it identifies underlying dimensions of effectiveness that reflect competing management values, providing a framework to balance these priorities.

Indicators. The model incorporates two main dimensions: organizational **focus** and **structure**. Focus refers to whether the organization's priorities are internal (focused on employee well-being and efficiency) or external (focused on the organization's success in its environment). Structure concerns whether the organization values stability (efficiency and control) or flexibility (learning and adaptability). Combining these dimensions results in four approaches to effectiveness, each with distinct managerial emphasis. For example, an external focus combined with flexibility creates an open systems approach, which prioritizes growth and resource acquisition through adaptability and positive external relations.

The competing values model examines organizational effectiveness using two primary dimensions: **focus** and **structure**.

- **Focus** determines whether the organization's primary values are internal (centered on employee well-being and operational efficiency) or external (focused on the organization's success in its environment).

- **Structure** addresses whether the organization emphasizes stability (favoring efficiency and control) or flexibility (prioritizing adaptability and learning).

Combining these dimensions results in different approaches to effectiveness.

- When an organization has an **external focus** and a **flexible structure**, it adopts an **open systems emphasis**. Here, the main goals are growth and resource acquisition, achieved through adaptability and positive external relationships, allowing the organization to thrive in its environment. This approach aligns with the idea of leveraging resources effectively for long-term growth.
- The **rational goal emphasis** combines an external focus with structural control, prioritizing productivity, efficiency, and profit. Its primary goal is achieving output targets through structured planning and goal-setting, reflecting a rational, controlled approach to management.
- The **internal process emphasis** aligns with internal focus and structural control, aiming to create a stable, orderly organizational environment. It emphasizes efficient communication, information management, and decision-making processes to maintain the organization's current position.
- The **human relations emphasis** emphasizes an internal focus paired with a flexible structure, with a primary goal of developing human resources. This approach supports employee autonomy, cohesion, morale, and training, prioritizing internal relationships and development over external concerns.

Fundamentals of Organization Structure

Organization Structure

Organization structure is defined by three key components:

1. It designates formal positions, reporting relationships, and the levels in the hierarchy, including managers' span of control.
2. It involves grouping individuals into departments and departments into the organization.
3. It includes systems for effective communication, coordination, and integration across departments.

These components address both vertical and horizontal aspects of organization, with the first two focusing on the structural hierarchy, and the third on promoting interaction and coordination among employees.

Organization structure is represented by the organization chart, which visually displays the activities and processes within an organization. It shows the different parts of the organization, their interrelationships, and how positions and departments fit into the overall structure.

The concept of the organization chart has been around for centuries, but its use in business became more significant during the Industrial Revolution, when the complexity of work and the need for better management became more apparent. The chart helps define responsibilities and authority within an organization.

Information-Sharing Perspective on Structure

The organization should facilitate both vertical and horizontal information flow to achieve its goals. A mismatch between the structure and information needs can lead to insufficient information or wasted time on irrelevant data, reducing effectiveness. However, there is a conflict between vertical and horizontal mechanisms: vertical linkages focus on control, while horizontal linkages emphasize coordination and collaboration, which typically reduces control.

Centralized vs Decentralized

The level at which decisions are made in an organization affects the flow of information. Centralization places decision-making authority at the top, while decentralization pushes it to lower levels. Organizations can choose between a mechanistic design, which emphasizes efficiency, vertical communication, control, and centralized decision-making, or an organic design, which prioritizes flexibility, horizontal communication, coordination, and

decentralized decision-making. The mechanistic model supports specialized tasks and a strict hierarchy, while the organic model encourages shared tasks, fewer rules, face-to-face communication, and more teams.

Example: Toyota → Toyota moved towards decentralization after facing criticism for its centralized control, especially during safety issues and recalls. The company began delegating more decision-making authority to regional managers, particularly for safety concerns in various regions. While some decisions remained with headquarters, this shift aimed to improve responsiveness and quality control by allowing decisions to be made closer to the action.

Organizations often experiment to determine the best balance of centralization or decentralization. Moving toward decentralization can improve performance by promoting autonomy and responsibility. Some companies are decentralizing to empower employees and foster a sense of ownership.

However, decentralization has its risks, as too much can lead to problems, including ethical and legal issues. There is often tension between centralization and decentralization within organizations. Top executives may favor centralization for control and efficiency, while business managers prefer decentralized decision-making. Managers work to find the optimal balance between vertical control, horizontal collaboration, centralization, and decentralization based on their specific needs.

Vertical Information Sharing

Organization design must enable communication and coordination to achieve goals. Managers create information linkages to facilitate this process. **Vertical linkages**, designed for control, coordinate activities between the top and bottom of the organization. Employees at lower levels must align with top-level goals, while executives need to stay informed of lower-level activities. Structural devices, such as hierarchical referral, rules and plans, and formal information systems, establish vertical linkages.

- **Hierarchical referral** escalates unresolved problems to higher levels in the hierarchy, with solutions communicated back down through organizational lines.
- **Rules and plans** provide coordination by setting predefined responses for repetitive problems, reducing the need for direct communication with managers. Plans like budgets help employees operate within established parameters.
- **Vertical information systems** improve communication with reports, written information, and digital communications, enhancing efficiency in information flow. In response to corporate scandals, managers are strengthening vertical linkages for better control, while horizontal linkages are equally important for collaboration.

Horizontal Information Sharing and Collaboration

Horizontal communication bridges departmental barriers, fostering collaboration to achieve organizational goals. It is vital for complex tasks requiring joint efforts, such as military and intelligence collaborations, which have proven effective in high-stakes operations like the bin Laden raid. Historically, military and intelligence sectors had limited interaction, but the need for coordinated action showed the power of cross-functional collaboration.

Example: AT&T → After AT&T acquired Time Warner, they formed task forces to encourage collaboration between divisions. These groups worked on projects like developing a new subscription video service to compete with Netflix. The initiative aimed to reduce infighting and promote cooperation, shifting towards a more unified organizational approach.

Horizontal linkage refers to communication across departments. In large organizations, mechanisms for information sharing are crucial for effective collaboration and decision-making. Poor coordination can delay responses, so structural devices are necessary to improve horizontal communication.

Information systems enable horizontal linkage by allowing managers and employees to share updates and resolve issues. These systems facilitate relationship-building and coordination, strengthening connections and organizational performance.

Liaison roles are positions within one department that facilitate communication and coordination across departments. They are common between departments like engineering and manufacturing, ensuring product development aligns

with manufacturing capabilities, or between research and sales to align products with customer demands.

Task forces are temporary committees formed to address specific issues involving multiple departments. Each member represents their department, ensuring direct horizontal collaboration. They are disbanded once their objectives are met, helping to reduce the information burden on the vertical hierarchy.

Full-time integrators are dedicated roles, like product, project, or brand managers, responsible for coordinating across departments for complex tasks. Unlike liaisons, integrators are independent of the departments they coordinate, managing tasks like sales and advertising. They have no formal authority but rely on expertise and interpersonal skills to foster cooperation and resolve conflicts.

Cross-functional teams are permanent groups with members from various functional areas working together on long-term projects. These teams are crucial for initiatives requiring ongoing collaboration, bringing together expertise from research, marketing, and finance. **Virtual cross-functional teams** enable global collaboration through digital communication tools, allowing teams to work across time zones and cultures in a 24/7 virtual workspace.

Relational Coordination

Relational coordination is the highest level of horizontal coordination, characterized by frequent, timely, and problem-solving communication based on shared goals, knowledge, and mutual respect. Unlike formal mechanisms, relational coordination is ingrained in an organization's culture and fosters seamless collaboration across departments.

Example: Southwest Airlines → Southwest Airlines uses relational coordination to improve its on-time performance and customer satisfaction. Rather than assigning blame for delays, the company fosters teamwork by focusing on shared goals like on-time departure and safety. Managers emphasize collaboration and provide support, with supervisors coaching employees, ensuring close coordination across various departments. This approach helps the airline maintain the shortest turnaround time in the industry.

Key features include:

- **Free information sharing** and continuous interaction across departmental boundaries.
- Coordination driven by positive relationships rather than formal roles or rules.
- Managers play a critical role by:
  - Training employees in communication and conflict resolution.
  - Building trust through care and credibility.
  - Fostering shared goals over departmental silos.
  - Allowing flexibility in work rules and rewarding team accomplishments.
  - Creating cross-functional roles to support collaboration.
  - Maintaining small spans of control to enable closer supervision and mentoring.

High relational coordination enables teams to share information and solve problems without relying on formal structures or directives.

Required Work Activities

Departments are established to carry out tasks that are strategically significant to an organization. As organizations grow and their operations become more complex, managers create new roles, departments, or divisions to address emerging needs and accomplish additional valuable tasks. This expansion enables the organization to adapt to new challenges and opportunities, ensuring its continued success and alignment with strategic goals.

Reporting Relationships

Once work activities and departments are defined, the next step is determining how they fit within the organizational hierarchy. Reporting relationships, or the chain of command, are shown as vertical lines in an organization chart. This

chain of command establishes an unbroken line of authority, linking all individuals and clarifying who reports to whom. Defining departments and creating reporting relationships outlines how employees are grouped within the organization.

Departmental Grouping Options

Options for departmental grouping include functional, divisional, multifocused, virtual network, and holacracy team grouping. Departmental grouping affects employees by aligning them under a common supervisor, sharing resources, fostering collaboration, and ensuring joint responsibility for performance.

- **Functional grouping** organizes employees based on similar functions, processes, or skills.
- **Divisional grouping** organizes employees based on the products or services the organization produces.
- **Matrix grouping** combines two or more structural grouping methods, such as function and product divisions, to achieve multiple objectives simultaneously.
- **Virtual network grouping** connects separate components or departments electronically, enabling collaboration and task completion across different locations.
- **Holacracy team grouping** uses self-managing teams to accomplish specific tasks or activities.

Functional, Divisional, and Geographic Designs

Functional Structure

A functional structure, or U-form, groups activities based on shared functions, concentrating expertise and skills within distinct departments. It works well when priorities include specialized knowledge, vertical control, and efficiency, with little need for horizontal coordination.

Its advantages include economies of scale, minimized duplication, and enhanced skill development within departments. However, drawbacks include slow adaptability to changes, overburdened top-level decision-making, limited innovation due to poor inter-departmental coordination, and a narrow focus on organizational goals by employees.

Functional Structure with Horizontal Linkages

While functional structures are effective and remain common, they often struggle to adapt to today's fast-paced environment. Small organizations may rely on informal coordination, but larger organizations typically require stronger mechanisms for horizontal linkage to ensure collaboration and coordination.

Managers can improve horizontal coordination through methods such as information systems, liaison roles, full-time integrators or project managers, task forces, teams, and fostering relational coordination. Implementing horizontal linkages helps overcome the limitations of functional structures, such as slow adaptability and poor interdepartmental collaboration.

Divisional Structure

A divisional structure, or M-form, organizes separate divisions responsible for specific products, services, or profit centers. Each division operates as a self-contained unit with its own functional departments, such as R&D, marketing, and accounting, tailored to its outputs. This structure is commonly adopted by growing organizations to manage increasing complexity.

Example: Google & Alphabet → CEO decided to restructure the various Google businesses under a new parent company, called Alphabet, to give managers in the businesses more autonomy and keep the companies innovative and adaptable. The largest division is still Google.
Each division has its own goals and budget, each contains all the functions needed to perform its tasks, and each has its own CEO and management team.

The divisional structure offers several strengths, including enhanced flexibility, adaptation, and coordination within divisions, making it ideal for dynamic environments. It also improves product visibility, allowing divisions to quickly respond to market changes and customer needs. Decentralized decision-making fosters agility and customer focus, particularly in organizations with multiple offerings.

However, there are disadvantages. The structure sacrifices economies of scale due to resource duplication, which can increase costs and hinder in-depth research. Divisions may become siloed, complicating coordination without horizontal mechanisms like task forces, leading to inefficiencies and customer dissatisfaction. The focus on applied research may also reduce attention to broader organizational goals, weakening technical specialization.

These challenges are amplified in international settings due to geographical, cultural, and language differences. To mitigate these, managers must implement systems that promote horizontal collaboration and effective communication across divisions.

Interorganizational Relationshipts

Organizational Ecosystems

Interorganizational relationships refer to enduring resource transactions, flows, and linkages among two or more organizations. Traditionally viewed as necessary but undesirable, these relationships were often seen as a compromise to meet organizational needs in complex and unstable environments.

However, a modern perspective, proposed by James Moore, sees organizations as part of broader business ecosystems. These ecosystems consist of interconnected organizations and their environments, cutting across traditional industry boundaries. Similar to this is the megacommunity approach, where businesses, governments, and nonprofits collaborate across sectors to address large, shared challenges such as energy development, hunger, or cybercrime.

Is Competition Dead?

No organization can thrive independently amid global competition, technological advances, and regulatory changes. Businesses now operate in complex networks, often collaborating in some areas while competing in others. Traditional competition, where companies act as standalone rivals, has shifted toward interdependence, requiring mutual support for success and survival.

Example: Apple and Samsung → rivals in the smartphone wars. Samsung earns from iPhone sales, collaborating with Apple. They worked together for a decade to build custom chips, and Samsung is the only company producing chips and OLED displays at the volume Apple needs.

Modern competition emphasizes co-evolution within ecosystems, where organizations collaborate, share visions, and form alliances to strengthen one another. Like natural ecosystems, business ecosystems depend on continuous adaptation, with relationships evolving to sustain the system's vitality. This is evident in industries like autonomous vehicles, where partnerships are crucial for innovation and progress.

The Changing Role of Management

Managers in business ecosystems must go beyond traditional corporate strategies and hierarchical structures to build networks of partnerships. This involves collaborating with external partners to address challenges, access resources, and drive innovation, showcasing the importance of strategic alliances in achieving success.

In modern business ecosystems, managers must prioritize horizontal processes and collaborative relationships over traditional vertical structures. This broader leadership role involves fostering cooperation with suppliers, customers, and other contributors to strengthen the larger ecosystem. Effective collaboration requires new executive skills, as traditional operational roles with direct authority differ from collaborative roles, which rely on flexibility, communication, and proactive engagement to achieve results without direct control.

Traditional management focused on operations roles, maintaining organizational boundaries and direct control over resources. However, collaborative roles have become essential for success, as trust and strong relationships often

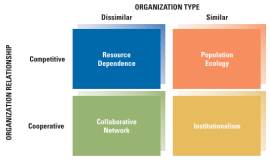
determine the success of partnerships more than strategies or plans. In effective alliances, partners work together seamlessly, sharing responsibilities and expertise to achieve common goals.

Interorganizational Framework

Understanding the broader organizational ecosystem is central to organizational theory, shifting the manager's role from top-down control to horizontal coordination across organizations. Interorganizational relationships can be analyzed through four key perspectives:

1. **Resource-dependence theory**: Focuses on minimizing environmental dependence.
2. **Collaborative networks**: Highlights mutual dependence to boost value and productivity.
3. **Population ecology**: Examines how new organizations fill niches and diversify forms.
4. **Institutionalism**: Explores how organizations gain legitimacy by adopting others' practices.

These frameworks equip managers to assess their environment and develop effective strategies.



Collaborative Networks

The collaborative-network perspective emphasizes cooperation among organizations to enhance competitiveness, share resources, and drive innovation. Companies form alliances to pool knowledge, meet customer demands, and achieve common goals, requiring managers skilled in building strong personal networks across organizational boundaries. This approach highlights the value of collaboration in addressing complex challenges and creating shared benefits.

Why Collaboration

Interest in interorganizational collaboration has increased as companies realize the advantages of mutually dependent relationships. Strategic alliances help organizations share risks, lower costs, drive innovation, adapt, and enhance performance. Collaboration is especially crucial for global market entry, where joint ventures are key. Although North American firms historically valued independence and competition, they have adopted international approaches, like those in Japan and Korea, demonstrating that collaboration and competition can coexist, driving greater success.

Interorganizational linkages foster long-term investment, information sharing, and risk-taking, enabling higher levels of innovation and performance. By shifting from adversarial to partnership mindsets, organizations can achieve greater success. Collaboration across industries, even among competitors, is becoming more common, with partnerships enhancing efficiency, innovation, and shared goals, such as creating better products or advancing research. This trend highlights the growing importance of cooperation in achieving mutual benefits and tackling complex challenges.

Designs for Manufactoring and Service Technologies

This chapter explores the role of technology in both service and manufacturing contexts. Technology includes the processes, techniques, machinery, and actions that convert inputs (materials, information, ideas) into outputs (products and services). It encompasses work procedures and equipment and is central to an organization's production process. A key theme is how core technology shapes organizational design, offering insights into structuring organizations for efficient performance. Core technology refers to the key processes aligned with the organization's mission, playing a crucial role in transforming inputs into outputs.

Manufacturing Firms

Joan Woodward, a British industrial sociologist, conducted a groundbreaking study of manufacturing technology in the 1950s, challenging the prevailing "one best way" management principles. She analyzed 100 manufacturing firms, collecting data on organizational structures, management styles, manufacturing processes, and success. Woodward developed a scale to classify firms based on the technical complexity of their manufacturing processes, which reflects the level of mechanization. High complexity indicates heavy reliance on machines, while low complexity involves more worker involvement. Her scale was later simplified into three technology groups:

Group I: Small-batch and unit production involves producing customized, small orders for specific customer needs. This method is low in mechanization and relies heavily on human operators.

Group II: Large-batch and mass production features long production runs of standardized parts, often stored for customer orders. This method is more mechanized than small-batch production.

Group III: Continuous process production is fully mechanized and standardized, operating without interruptions. Automated systems control the process, producing highly predictable outcomes with minimal human involvement.

Woodward's research revealed that organizational structure depends on technological complexity. Higher complexity requires more management and support staff, with mass production being highly standardized and mechanistic, while unit production and continuous processes are more flexible and organic. Different technologies impose unique demands, requiring structural adaptations.

Strategy, Technology, and Performance

Woodward also evaluated the success of firms based on factors like profitability, market share, stock price, and reputation. Although measuring effectiveness is complex, she categorized firms as above-average, average, or below-average in achieving strategic goals.

The Digital Information Explosion

Traditional information media, like the telephone, television, radio, and early computers, required human involvement. However, digital media now allows machines to independently create, modify, and distribute information.

The evolution of IT began with mainframe systems designed to improve operational efficiency. These systems, known as transaction processing systems (TPSs), automated routine business tasks like sales and inventory management, storing data in databases for real-time decision-making and customer service.

Mainframe computers eventually gave rise to data warehousing and business intelligence tools, enabling organizations to store and analyze large datasets for more informed strategic decisions. Data mining, a core component of business intelligence, analyzes data from multiple sources to identify trends, with retailers using it to quickly respond to market changes.

The advent of mini-computers and desktop computers decentralized computing, empowering individuals with personal workstations, communication tools, and database access.

The wired internet revolutionized IT by providing global access to information, and the mobile internet further accelerated this, enabling big data analytics. This allowed companies to manage and analyze large datasets for improved decision-making.

New sensing technologies help businesses collect, search, and analyze complex data, revealing patterns that traditional systems cannot handle. Companies like Walmart and Facebook leverage this technology to improve decision-making and target advertisements.

The Internet of Things (IoT) represents a major advancement, where everyday objects generate and share data. These devices can communicate with one another, gather information, and automate responses. When combined with artificial intelligence, IoT offers valuable insights and control, such as detecting falls or sending medication reminders.

Pipes versus Platforms:

Traditional organizations, often referred to as "pipe" organizations, follow a linear process where resources are acquired, products are made, and then sold to customers. This model has been dominant in industries like manufacturing, media, and education.

The rise of platform-based organizations, driven by the internet and mobile technology, marks a significant shift. Unlike pipe organizations, platforms don't produce goods but instead facilitate connections between users who create and consume value. Examples like YouTube and Airbnb link independent producers (such as videographers and homeowners) with consumers (like viewers and vacationers), creating a digital ecosystem.

Platforms are business models that enable exchanges between consumers and producers, and sometimes additional groups like app developers. They build large networks of users and resources, offering on-demand access. Successful platforms lower exchange costs and do not rely on supply chains for inventory control, as traditional businesses do. The key difference is that in platform-based organizations, the value lies in the connections they foster, not in the ownership of products or resources.

Two Types

Platform-based organizations typically fall into two categories: **exchange platforms** and **maker platforms**.

- **Exchange platforms** facilitate 1:1 interactions between consumers and producers, where a single consumer engages in a transaction with a single producer.
- **Maker platforms** enable 1:1000s interactions, where producers create content or products that can be consumed by many consumers simultaneously.

Both types rely on digital connections and transactions, rather than physical products or services. Platforms like Amazon started as a maker platform but evolved into an exchange platform as they allowed other businesses to sell through their platform, facilitating digital connections between producers and consumers.

Foundational Assumptions

Traditional organizations tend to be slower and more cumbersome compared to platform organizations, which require fewer assets,
facilitate faster communication, and enable quicker and more objective decision-making. However, even platform organizations still need
a hierarchical structure for certain aspects of the business, particularly to manage culture, which digital platforms cannot shape. The
leadership and hierarchy are essential to maintaining the right culture within the platform organization, as without direction, it may falter.

Example: Uber → Uber's rapid growth prioritized expansion over culture, resulting in a toxic work environment, regulatory backlash, and public scandals. Reports of harassment, HR inaction, and leadership misconduct damaged its reputation. Reliance on algorithms for operations alienated drivers and prevented strong cultural norms. Leadership changes refocused efforts on improving the company's culture, values, and reputation, emphasizing the importance of actively managing organizational culture.

Platform Design Recommendations

Platform-based organizations are still evolving, with limited research on their impact on organizational design. Although there are no strict guidelines, several recommendations have emerged for designing these organizations effectively. Leaders should focus on shaping a positive corporate culture, investing in employee talent, and developing soft skills.

Envision a Constructive Culture: CEOs and top leaders must communicate their vision for both cultural and digital aspects. In platform businesses, technical considerations should not overshadow corporate culture. Successful digital transformations often align with cultures that value agility, risk-taking, collaboration, and data-driven decision-making. Leaders should proactively establish cultural norms and values, guiding the development of technology rather than allowing it to drive culture.

Invest in Digital Talent: Acquiring and retaining digital talent is essential, particularly during labor shortages. Organizations should cultivate a culture that encourages experimentation and supports employees in developing digital skills. Many workers prefer internal training, making companies that invest in skill development more attractive. Digitally mature organizations are likely to offer more resources for talent development, helping retain engaged employees and enhance their digital competencies.

Promote Soft Skills and Team Building: Alongside technical expertise, companies should prioritize developing soft skills like communication, adaptability, and a change-oriented mindset. These are key to success in the digital workplace. Promoting collaboration and offering opportunities for diverse teams to work together accelerates results and fosters innovation. Strong teamwork and flexibility help organizations adapt to digital transformations more effectively.

Cross-functional collaboration is crucial for success in digital environments, as it promotes teamwork and organizational efficiency. Many companies now prioritize soft skills and teamwork abilities when hiring, ensuring employees can work well in cross-functional teams. Supporting continuous learning and participation in external digital platforms helps employees gain new skills and stay engaged. Organizations that prioritize ongoing talent development are more likely to retain employees and remain competitive.

Big Data Analytics

Big data refers to massive data sets that exceed the processing capabilities of traditional IT systems, requiring new approaches to data management and analysis. Big data analytics involves examining these large data sets to uncover patterns, correlations, and insights to support better decision-making. Due to the size and complexity of big data, traditional tools are often insufficient, leading to the development of new technologies for big data processing.

Example: Siemens → Siemens Gamesa uses Big Data Analytics from over 10,000 wind turbines to predict and prevent breakdowns. By analyzing 200 GB of daily sensor data per turbine, it schedules maintenance proactively, reducing downtime, extending turbine life, and boosting profitability.

In the digital era, businesses and customers increasingly see value in big data, making it a strong business opportunity. Sensors are being attached to measure things previously untracked, generating large amounts of useful data. This data can be collected, analyzed, and synced to dashboards for insights, improving decision-making and enabling better monitoring of habits or systems.

Big Data Requirements

VOLUME: Big data is vast, with enormous amounts of information generated daily. Most of today's data has been created recently, and its growth is exponential. Data is constantly collected, often without individuals' knowledge, as actions, locations, and interactions are tracked. This "datafication of everything" makes extracting meaningful insights a challenge. While storing data is inexpensive, the real difficulty lies in effectively analyzing and using it.

USE ALL DATA: Big data enables companies to analyze and store all their data, revealing previously undetectable correlations. Managers with a big data mindset value these correlations, as they often lead to important insights. Big data can predict customer behaviors, allowing businesses to make better decisions and reduce losses.

USE MESSY DATA: With data sets growing, inaccuracies increase, but in big data, perfection is not essential. Big data is often messy, of varying quality, and comes from diverse sources. However, using all available data reduces errors compared to sampling. Managers accept imperfections because they lead to valuable correlations, helping companies spot trends and make recommendations. This results in more effective decision-making.

ADOPT A NEW MINDSET: The big data approach requires a new mindset that prioritizes data over intuition and traditional experience. Decisions are based on statistical analysis and insights rather than past information or instincts. This shift has caused friction between data-driven managers and those relying on intuition. Many big data advocates, frustrated by resistance, have founded companies that use data analytics for decision-making.

Big Data and Organization Structure

Outsourcing analytics is a common solution for companies lacking in-house expertise, offering cost savings by turning fixed costs into variable ones. It allows businesses to execute projects quickly, gain insights, and train employees. Another option is data intermediaries, which aggregate data from multiple organizations to provide insights like maintenance predictions or consumer trends.

A **centralized** model consolidates data experts into one department, ensuring access to expertise and data but may lead to oversight of broader applications if tied to a specific function. A **CDO** reporting directly to the CEO can help align efforts with organizational goals. Partnerships and transformation leaders, like at Intel and IBM, also manage analytics initiatives.

A **hybrid** model combines centralized and decentralized approaches, with a small "center of excellence" led by a CDO and other data scientists in functional departments. This fosters collaboration and expertise development while ensuring alignment with company strategy.

A **decentralized** model embeds data scientists within departments, offering tailored solutions but limiting cross-unit collaboration and broader innovation. Companies like Siemens prefer decentralization, though it can face challenges with resource and expertise limitations. Some organizations have shifted from decentralization to centralization for greater efficiency and cross-organizational innovation.

Artificial Intelligence

Artificial intelligence (AI) is being rapidly adopted in both core manufacturing technologies and organizational management. AI enhances decision-making, often matching or surpassing human capabilities, and automates routine tasks such as accounting, billing, payments, and customer service. It can scan documents, verify records, enter data, process payments, and detect fraud in expense accounts. These AI applications mainly focus on automating repetitive tasks, allowing workers to engage in more meaningful activities, and they will continue to improve as AI systems learn over time.

Unilever uses AI algorithms to streamline its hiring process. Candidates complete online applications, participate in skill-assessing games, and submit video responses, with AI handling the initial selection. Ads on platforms like Facebook attract applicants, and AI evaluates factors such as concentration, memory, facial expressions, and response times, narrowing down the candidate pool. The final hiring decision involves a human interview, resulting in faster, more accurate recruitment with high acceptance rates.

Is Nudge Management Going to Be Your Coach?

AI coaching programs use **nudge management**, which applies behavioral science insights to encourage desired behaviors through gentle prompts or reminders. The approach aims to improve decision-making related to health, wealth, happiness, and goal achievement. Based on Richard Thaler’s research, nudge management recognizes that people often choose what is easier over what is in their best interest. Well-timed nudges can help individuals make better decisions, such as reducing distractions or improving workplace interactions. Software can identify patterns and adjust settings to support more productive behaviors, while reminders encourage managers to take actions that align with their goals and values.

Algorithmic Control May Be Your New Boss

When work is measurable and routine, **algorithmic control** uses software algorithms to set targets, measure performance, provide feedback, and decide rewards for employees. This level of control tracks even minor details of workers' actions, often leaving little room for privacy. AI systems monitor metrics such as performance rates, movement, and interactions, with real-time data often being relayed to supervisors. Employee behavior, including productivity and communication, can be tracked via devices, badges, or software that monitors emails, internet usage, and keystrokes. In extreme cases, AI can evaluate and even fire employees without human involvement, raising concerns about the dehumanizing effects of such systems. While companies claim to provide support and career development, some employees report feeling overly monitored and treated like robots under these automated systems.

AI Implications for Organization Design

Creating a **Chief Artificial Intelligence Officer (CAIO)** role can help organizations implement AI more effectively. The CAIO works across departments to identify AI opportunities, define strategies, coordinate projects, and recruit AI experts. This role is vital for managing the disruptive changes AI brings, ensuring its integration with the organization's long-term vision.

As AI takes over routine tasks, nonroutine work will likely be handled by decentralized, flexible teams with the necessary skills. These teams will require less managerial oversight, as employees often understand the work better than their managers. Non-routine work is more effectively managed with greater autonomy, and employees may be organized in a team holacracy instead of a traditional hierarchical structure.

Social Network Analysis

Social Network Analysis (SNA) is a technique that helps managers understand informal relationships and network structures within an organization. It reveals important insights about influence, knowledge flow, innovation, and leadership capabilities, often highlighting differences between formal hierarchies and actual communication patterns.

In social networks, individuals play roles such as hubs, brokers, or peripheral players. Hubs are central figures with extensive knowledge and influence, making them crucial assets to the organization. Brokers connect different groups, helping share knowledge and encourage collaboration across boundaries. Recognizing these roles and understanding informal networks can give organizations a competitive advantage by identifying key contributors to performance, collaboration, and innovation.

SNA uses data and statistics to uncover hidden relationships within the workplace, helping identify inefficiencies and improve teamwork. It can highlight communication gaps, suggest changes in networking patterns, and promote knowledge sharing.

Knowledge Management

Social network analysis (SNA) can improve an organization's knowledge management by helping systematically organize, share, and utilize intellectual capital. Knowledge management promotes continuous learning and collaboration, supported by tools like intranets that enhance communication, enable information sharing, and foster collaborative work across the organization.

Organizations need to facilitate the transfer of both codified and tacit knowledge. Codified knowledge is formal, easily documented, and accessible, while tacit knowledge, based on personal experience and intuition, is harder to articulate but highly valuable. Since much of an organization's knowledge is tacit, addressing its transfer is crucial, especially as experienced employees retire.

To prevent the loss of tacit knowledge and encourage ongoing knowledge sharing, organizations focus on two approaches: using IT systems to collect and share codified knowledge and leveraging tacit knowledge by fostering personal networks and social media interaction. IT systems also help locate and connect experts to facilitate knowledge exchange.

Digital Impact on Organization Design

Managers and organization theorists have long studied the impact of technology on organizational design and functioning. Recent advances in digital IT have led to smaller, decentralized organizations with improved coordination and new network structures. These developments are expected to significantly shape organizational design in the coming years.

1. **Smaller Organizations**: Digital IT allows organizations to operate with fewer people, leading to smaller structures. Internet-based businesses, like platform models, often operate without physical offices. Traditional businesses also benefit as digital systems manage administrative tasks and enable remote transactions. Outsourcing further reduces the need for in-house resources.
2. **Decentralized Structures**: Digital IT enables decentralized organizational structures by facilitating quick and easy information sharing across large distances. Technology fosters openness, collaboration, and less rigid

hierarchies, allowing managers in various divisions to make decisions autonomously without waiting for headquarters' approval. Social business technologies support communication and decision-making within distributed teams.

3. **Enhanced Horizontal Coordination**: Digital IT improves horizontal coordination, communication, and collaboration across organizations. It connects people worldwide, enhancing teamwork and problem-solving, particularly through virtual teams and collaboration tools. These technologies break down traditional barriers like location and hierarchy, enabling more effective knowledge sharing and project collaboration.
4. **Network Structures**: Digital IT enables enhanced network structures, such as virtual organizations and modular frameworks, by facilitating seamless information flow between companies. Outsourcing has become more feasible as organizations can easily connect with global partners, manage information, and track production in real-time. This structure allows organizations to reduce costs while expanding their activities and market presence.

Organizational Culture and Control

Strong cultures can significantly impact a company, either positively or negatively.

Positive cultural norms can boost productivity, enhance employee satisfaction, and attract talent. On the other hand, **negative cultural norms** can harm the company, leading to issues like misconduct, unethical practices, and a damaged reputation. This can result in resignations and internal upheavals, necessitating investigations and efforts to cultivate a more ethical work environment.

Social capital refers to the quality of interactions within an organization, focusing on trust, mutual understanding, and shared values. High social capital promotes cooperation and smooth functioning, while low social capital, marked by competition and self-interest, can harm organizational effectiveness. Social capital can be viewed as goodwill, where positive relationships lead to mutual benefits and efficient operations.

What is Culture?

Culture encompasses the shared values, norms, beliefs, and understandings within an organization, shaping how members think, feel, and act. It represents the informal, often unspoken aspect of an organization, in contrast to formal elements like structure, strategy, and technology. Culture typically operates unnoticed but becomes evident when changes challenge its established norms and values.

Organizational culture exists on two levels: visible artifacts, such as behaviors, office layouts, and symbols, and deeper, underlying values, beliefs, and assumptions that operate unconsciously. These visible elements reflect the organization's core values, which shape patterns of social interactions and define its culture.

Emergence and Purpose of Culture

Culture plays a vital role in providing **organizational identity** and fostering commitment to shared beliefs and values. Often originating from a founder or early leader, culture is influenced by their vision, philosophy, or strategy. When these ideas lead to success, they become institutionalized, shaping the organization's identity. For instance, **Amazon's culture** reflects the values of founder **Jeff Bezos**, who encourages leaders to challenge decisions or opinions they disagree with, promoting a culture of open disagreement, courage, and conviction. **(Google)**

Organizational culture serves two primary functions:

1. **Internal Integration**: This involves creating a collective identity within the organization, guiding collaboration, communication, acceptable behaviors, and power dynamics. It ensures that employees are aligned with the organization’s goals and work well together.
2. **External Adaptation**: Culture helps the organization respond to external challenges and adapt to its environment, such as addressing customer needs or staying competitive in the market. It influences employees' daily decisions and actions.

An organization’s culture influences employee decision-making when formal rules or policies are absent. It also contributes to building social capital by shaping positive or negative relationships both internally and externally.

Interpreting/Shaping Culture

Understanding organizational culture requires interpreting **observable artifacts**—elements that represent and shape the deeper values and beliefs within an organization. These artifacts, such as **rites**, **ceremonies**, **stories**, **symbols**, **structures**, **power dynamics**, and **control systems**, provide visible clues to an organization’s underlying culture and can be used to shape or analyze it effectively. However, accurately deciphering these artifacts often requires insider knowledge and experience, as the full meaning behind them may be deeply embedded in the organization’s everyday practices.

1. **Rites and Ceremonies**

   Planned events that highlight and reinforce an organization's values, creating unity and shared understanding.

2. **Stories and Sayings**

   - **Stories**: They provide context to cultural beliefs and help reinforce shared norms.
   - **Sayings**: They serve as simple reminders of what is important to the organization.

3. **Symbols**

   Symbols, both physical and abstract, represent deeper organizational values. These could include elements like furniture, office layout, logos, or even rituals that draw attention to particular values.

4. **Organization Structures**

   The design of the organization, including its hierarchy, indicates the cultural values at play.

   - **Rigid Structures** may signal a culture that values control and centralization.
   - **Flexible, Flat Structures** tend to reflect a culture that values autonomy and collaboration.

5. **Power Relationships**

   Power dynamics reflect how influence is exercised in the organization, whether through formal authority or informal sources such as expertise or personal relationships.

6. **Control Systems**

   These refer to how operations and employees are managed and regulated, from information management to reward structures.

Culture at Two Levels:

- **Underlying Values**: The deeper, often subconscious beliefs and assumptions that guide behavior.
- **Visible Artifacts**: Observable elements such as those listed above, which can be used to interpret and influence the culture of the organization.

These **artifacts** both reflect and shape organizational culture. By analyzing these elements, managers can better understand existing cultural dynamics and use them as tools for promoting or modifying culture within the organization.

Culture and Organization Design

Organizational cultures focus on two specific dimensions: (1) the extent to which the competitive environment requires flexibility or stability and (2) the extent to which the organization’s strategic focus is internal or external.

The Adaptability Culture

The adaptability culture emphasizes a strategic focus on the external environment, prioritizing flexibility. It fosters values that enable the organization to detect and respond to environmental signals with new behaviors, actively

driving change rather than just reacting. Innovation, creativity, and risk-taking are valued and rewarded. This culture is common among Internet-based companies like Google, where rapid responses to customer needs are crucial.

The Achievement Culture

The achievement culture focuses on serving specific customers in a stable environment without the need for rapid change. It emphasizes the achievement of goals, growth or profitability, to fulfill its vision. Employees are held accountable for performance, with rewards tied to meeting specific targets. Managers shape behavior by setting goals, evaluating performance based on these goals. Achievement cultures also prioritize competitiveness.
Example: Huawei → employees encouraged to work grueling hours, persever under dangerous conditions to gain new business. New employee are thouroughly trained. But after some illecit activities in the company, CEO has started enforcing more internal rules.

The Clan Culture

The clan culture emphasizes teamwork, focusing on meeting the needs of employees to achieve high performance. It values employee satisfaction and productivity. The culture prioritizes taking care of employees, ensuring they have the resources and support they need. This approach aims to create a positive and supportive environment for employees, which in turn drives the organization's success.
Example: Southwest Airlines → "happy employees make for happy customers, which make for happy shareholders"

The Bureaucratic Culture

The bureaucratic culture focuses on internal stability and consistency, supporting a methodical approach to business. It emphasizes cooperation, tradition, and adherence to established policies and practices to achieve goals. While personal involvement is lower, there is a high level of consistency, conformity, and collaboration among members. This culture succeeds through integration and efficiency.

Culture Strength and Organizational Subcultures

Culture strength refers to the degree of agreement among organizational members on the importance of specific values. A strong culture is cohesive, with clear expectations, widespread consensus on values, and low tolerance for deviation. It is often reinforced by ceremonies, symbols, and stories. Managers align structures and processes to support these values, fostering employee commitment to organizational goals. Strong cultures tend to resist change, as members value stability and prefer maintaining the status quo.

Culture within an organization is not always uniform, especially in large companies, where subcultures can develop within teams, departments, or units to address specific problems, goals, or experiences. These subcultures may arise in separate units or areas with different needs, reflecting values that differ from the dominant culture. For example, while the overall culture may emphasize achievement, certain departments may adopt values of adaptability, clan, or bureaucracy, depending on their functions. Subcultures are shaped by the unique demands of each unit, such as flexibility in research and development versus order in manufacturing.

Subcultures generally share the dominant culture's basic values but also develop unique values. These differences can cause conflicts between departments, particularly in organizations with weak corporate cultures. When subcultures' values surpass the corporate culture, it can negatively impact performance. A common reason for the failure of many mergers is the difficulty in integrating different corporate cultures.

Culture and Performance

Managers play a crucial role in shaping organizational culture to align with strategic goals, as culture significantly influences performance. Research shows that companies that intentionally manage their cultural values tend to outperform those that do not. A strong culture that promotes responsiveness and change can boost performance by motivating employees, uniting them around shared goals, and aligning behaviors with strategic priorities.

The right culture is essential for driving high performance. Successful companies are those where managers are evaluated and rewarded for focusing on both cultural values and business performance.

The company's traditional approach had achieved strong financial results, but it relied on control, intimidation, and a small, exclusive group of staff to motivate people. Quadrant B organizations, on the other hand, represent a high-performance culture that is driven by a clear organizational mission, shared adaptive values that guide decisions and practices, and encourages individual employee ownership of both business results and the company's cultural values.

Foundations of Group Behavior

Individuals belong to various groups based on characteristics such as occupation, race, and gender, which influence their perceptions of situations. Group identification can lead to differing perspectives, such as sympathizing with victims or siding with law enforcement, particularly in contentious scenarios. Tensions, like those between African American communities and law enforcement, often stem from historical conflicts and perceptions of bias. While groups can have positive influences, they may also reinforce biases. This chapter and the next aim to explore group and team dynamics, providing tools for understanding and building effective working units.

Defining and Classifying Groups

In organizational behavior, a group is defined as two or more individuals who interact and are interdependent, coming together to achieve specific objectives. Groups can be categorized as formal or informal.

A **formal group** is created by the organization's structure, with specific tasks and roles aimed at achieving organizational goals. The roles and behaviors of members are explicitly defined.

An **informal group** is not formally structured or organizationally determined. These groups form naturally to fulfill social interaction needs and can influence individual behavior and performance, even without formal roles or tasks.

Social Identity

People often feel a strong connection to their groups because shared experiences, especially painful ones, amplify trust and bonding. This attachment explains why individuals emotionally invest in their group's successes and failures. For example, fans of a winning sports team feel elation, while those of a losing team experience dejection, despite having no direct role in the outcome. This phenomenon is explained by social identity theory, which suggests that people integrate group accomplishments into their self-image.

Social identity theory states that people tie their self-esteem to their group's success or failure. Success boosts self-esteem, while failure can lead to feelings of rejection or efforts to restore group status. Threats to a group's identity can provoke strong emotional responses, including pleasure at rival groups' misfortunes. Individuals develop multiple social identities based on factors like profession, ethnicity, or gender, with their importance shifting over time and in different contexts.

Social identities help us understand ourselves and our place in society, contributing to better health and lower depression by reducing negative self-attributions. For these benefits, social identities must be perceived positively.

In the workplace, social identities arise through **relational identification** (connections based on roles) and **collective identification** (connections to group characteristics). Identification can occur with teams, work groups, or organizations, but is often stronger with work groups. Strong identification leads to positive attitudes and behaviors, while low identification can reduce satisfaction, organizational citizenship behaviors, and interest in organizations that do not align with one's collective identity.

Ingroups and Outgroups

Ingroup favoritism occurs when we perceive members of our group as superior to others and view those outside the group as uniform. People with low openness or low agreeableness are more prone to this bias.

The existence of an ingroup inherently creates an outgroup, often leading to animosity between the two. Religion is a significant driver of such ingroup-outgroup dynamics. Groups deeply engaged in religious rituals and discussions tend to show increased discrimination and aggression toward outgroups, especially if the outgroups possess more resources.

Social Identity Threat

Ingroups and outgroups can lead to social identity threat, where individuals fear being negatively judged due to their association with a devalued group. This threat can diminish confidence and performance. Research shows that individuals experiencing social identity threat can regain confidence and perform effectively if they receive encouragement about their abilities beforehand.

Stages of Group Development

Temporary groups with finite deadlines follow the **punctuated-equilibrium model.**

Alternative models describe group development through the stages of **forming** (initial setup), **storming** (conflict resolution), **norming** (role agreement), and **performing** (collaborative work). These stages often align with the first and second phases of the punctuated-equilibrium model, with additional adjustments to group norms in between.

The **punctuated-equilibrium model** outlines the stages of temporary groups with deadlines:

1. **First meeting**: The group establishes its general purpose and direction, and behavioral patterns and assumptions are set. This direction remains fixed for the first half of the group's life, leading to inertia, where progress is slow and patterns are difficult to change.
2. **Midpoint transition**: This occurs exactly halfway between the first meeting and the deadline, acting as a wake-up call that increases urgency. This transition triggers a burst of change, the abandonment of old patterns, and the adoption of new perspectives, setting a revised direction for the second phase.
3. **Second phase of inertia**: Following the transition, the group moves into a new equilibrium where it focuses on executing the plans created during the transition.
4. **Final meeting**: The group experiences a final burst of activity to complete the project.

In essence, the model suggests that groups experience long periods of inertia, followed by short bursts of significant change, often driven by the awareness of time and deadlines. Though not universally applicable, the model is especially relevant for temporary groups working under time constraints.

Group Property 1: Roles

Work groups influence individual behavior and overall group performance. Key group properties include roles, norms, status, size, cohesiveness, and diversity.

Roles refer to the expected behavior patterns tied to specific positions within a group. Individuals often play multiple roles, both in their professional and personal lives, which can sometimes conflict. Understanding behavior requires recognizing the role a person is currently playing. People draw on their **role perceptions** to understand the behaviors expected of them and how to meet group expectations.

Role Perception

Role perception is how we understand the expected behavior in a given situation. We develop these perceptions from various sources, such as friends, media, or real-life experiences. For example, apprenticeships allow beginners to observe experts to learn the appropriate way to act in a particular role.

Role Expectations

Role expectations refer to how others believe you should behave in a specific context. In the workplace, these expectations are framed by the **psychological contract**, an unwritten agreement between employees and employers outlining mutual expectations. Employers are expected to provide fair treatment, good working conditions, clear expectations, and feedback, while employees are expected to show a positive attitude, follow directions, and be loyal to the organization. When this contract is violated, negative effects such as lower performance, higher turnover intentions, and decreased satisfaction can occur, leading to lower productivity and more workplace issues.

Role Conflict

Role conflict occurs when fulfilling one role requirement makes it difficult to fulfill another, sometimes leading to contradictory expectations. This can also happen between different groups, resulting in **interrole conflict**, such as the tension between work and family roles. Work–family conflict is a significant source of stress for many employees.

Within organizations, employees often face conflicting expectations from different roles, such as occupation, work group, or demographic group. This can be particularly challenging during mergers or when working in multinational companies, where employees may struggle between identifying with their original organization and the new parent company or global division.

Role Play and Assimilation

The degree to which we comply with role expectations, even when we don't initially agree with them, can be surprising. In an experiment by Philip Zimbardo, participants assigned the roles of "guard" or "prisoner" quickly adapted to their roles, with guards developing abusive behaviors and prisoners becoming passive and submissive. This illustrates how social identity and role perceptions can strongly influence behavior. Participants' stereotypical views of their roles, shaped by past experiences, allowed them to execute extreme behaviors consistent with their roles. However, in a follow-up experiment with less intensity and greater awareness of being observed, participants exhibited more restraint, suggesting that less extreme settings can limit role abuse.

Group Property 2: Norms

Groups establish **norms**, which are shared standards of acceptable behavior that guide what members should or should not do in specific situations. These norms, once agreed upon by the group, influence behavior with minimal external control. While leaders may offer their views, the influence may be short-lived unless the group as a whole adopts and reinforces the norms. Norms vary across different groups, communities, and societies, and they can even affect emotions.

Norms and Conformity

Individuals desire group acceptance, making them susceptible to conforming to group norms. Studies, such as Solomon Asch's experiments, demonstrate how group pressure can influence individuals to align their judgments and behaviors with the group, even when they know the group is wrong. In Asch's experiments, 75% of participants conformed at least once, though 63% gave independent responses overall, highlighting that conformity is not inevitable. While individuals feel pressure to conform, they often prefer independence and resist conformity when possible.

Individuals do not conform to the pressures of all groups they belong to, as group norms often vary and may conflict.

Norms and Behavior

Norms influence group behavior significantly, as shown in the workplace and studied extensively during the Hawthorne Studies (1924–1932). These studies revealed that productivity was shaped more by group dynamics and perceived attention than by physical conditions. Workers in small, observed groups performed better due to their sense of being "special," while wage incentive plans showed that group norms often determined output levels. Employees adhered to these norms to avoid negative consequences like changes in incentives or peer backlash, even when it meant operating below their potential.

Positive Norms and Group Outcomes

Organizations aim to align employee behavior with their positive norms to amplify their impact. Research suggests that strong positive norms, like those around political correctness, can enhance group creativity by reducing uncertainty and fostering idea expression. However, the effectiveness of positive norms depends on other factors, such as group traits (e.g., extraversion), individual personality, social identity, and group satisfaction, which influence adherence to these norms.

Negative Norms and Group Outcomes

Deviant workplace behavior, or counterproductive work behavior (CWB), refers to voluntary actions that violate significant organizational norms and harm the organization or its members. This includes behaviors like spreading rumors, verbal aggression, and harassment, which undermine a healthy work environment.

Such behaviors often emerge in environments with negative traits, such as high levels of psychopathy and aggression within work groups. Increasing workplace incivility, marked by rudeness and disregard, leads to higher turnover, psychological stress, physical illness, and retaliatory deviance. Factors like perceived injustice and lack of sleep, often due to heightened work demands, contribute to these behaviors, indicating that organizational pressures can unintentionally foster deviance.

Deviant behavior is influenced by group norms and thrives in environments where such behavior is supported. This results in reduced cooperation, commitment, and motivation. In dysfunctional groups, deviant behaviors can trigger a chain reaction, leading to negative moods, poor coordination, and decreased performance.

Norms and Culture

Norms differ between collectivist and individualist cultures, but individual orientations can shift through specific situational priming. Research shows that when individuals are exposed to scenarios emphasizing either collectivist or individualist norms, their motivation increases when tasks align with the primed orientation—personal choice for individualist norms or ingroup assignment for collectivist norms.

Group Property 3: Status & Group Property: Size and Dynamics

Group Property 3: Status

Status, a socially defined rank or position within a group, exists in all societies and even in small groups over time. It strongly influences behavior, particularly when individuals perceive a gap between their self-assessed status and how others view it.

According to status characteristics theory, status is determined by three key factors:

1. **Power**: Individuals who control group outcomes or resources are perceived as having higher status.
2. **Contributions**: Those whose abilities are crucial to achieving group goals tend to hold higher status.
3. **Personal Characteristics**: Attributes like intelligence, attractiveness, wealth, or a friendly personality, when valued by the group, elevate an individual's status.

Status and Norms

High-status individuals can influence group norms and conformity pressures. They are more likely to deviate from norms if they have low identification with the group and are less influenced by lower-ranking members. As they are valued but not dependent on social rewards, they can resist conformity pressures. While high-status members can enhance group performance, they may also introduce counterproductive norms.

Status and Group Interaction

Individuals aiming for higher status often become more assertive, speaking up more, criticizing, giving commands, and interrupting others. Lower-status members may participate less, and if their expertise is underused, group performance can suffer. However, a balance of mid- and high-status members is more beneficial; too many high-status individuals can hinder performance.

Status Inequity

Status inequity arises when members perceive the status hierarchy as unfair, leading to dissatisfaction, poorer performance, health issues, and higher turnover intentions among lower-status members. Groups agree on status criteria, forming informal hierarchies based on resources or influence. Conflicts can emerge when individuals move between groups with different criteria or cultural backgrounds, complicating group dynamics.

Status and Stigmatization

Status is influenced by an individual's attributes and associations. "Stigma by association" occurs when negative perceptions of a stigmatized person extend to those affiliated with them, even in brief interactions. This can lead to unjust devaluation, as biases against those linked to stigmatized groups persist regardless of merit.

Group Status

From an early age, people develop an "us versus them" mentality, where ingroups often hold higher status and may discriminate against outgroups. Low-status groups may use ingroup favoritism to compete for higher status, leading to high-status groups feeling discriminated against and intensifying bias, thus increasing polarization between groups.

Group Property 4: Size and Dynamics

Group size influences behavior, with larger groups excelling in generating diverse input and ideas, while smaller groups are more effective for productive tasks. A key issue in larger groups is social loafing, where individuals exert less effort when working collectively. This occurs due to perceptions of inequity, where members feel others aren't contributing fairly, or due to a diffusion of responsibility, where individual contributions are harder to distinguish in the group's overall output. Social loafing challenges the assumption that group productivity equals the sum of individual efforts.

Social loafing has significant implications for organizational behavior. To mitigate its effects, managers can set group goals, foster intergroup competition, implement peer evaluations, select motivated, group-oriented members, and tie rewards to individual contributions. Publicly posting individual performance ratings also helps counteract social loafing.

Group Property 5: Cohesiveness & Group Property 6: Diversity

Group Property 5: Cohesiveness

Groups vary in cohesiveness, which is the extent to which members are attracted to each other and motivated to remain in the group. Cohesiveness impacts group productivity, with the effect depending on the group's performance-related norms. High cohesiveness paired with strong performance norms leads to higher productivity, while high cohesiveness with low norms results in low productivity. When cohesiveness is low, productivity depends on the strength of the norms but is generally less effective than in highly cohesive groups with strong norms.

To encourage group cohesiveness, you can:

1. Reduce the group size.
2. Promote agreement on group goals.
3. Increase the time members spend together.
4. Foster competition with other groups.
5. Provide rewards to the group as a whole rather than individuals.

Group Property 6: Diversity

Group diversity refers to the degree of differences among members, offering both benefits and drawbacks. It can increase conflict, particularly in the early stages, lowering morale and increasing dropout rates. While diverse and homogeneous groups may perform similarly, diverse groups tend to have lower satisfaction, cohesion, and higher conflict. The impact of diversity depends on group management and HR practices, with effective leadership helping to reduce conflict. Gender diversity can be challenging, but promoting inclusivity can alleviate issues. The type of diversity matters—surface-level diversity often signals deeper differences and encourages open-mindedness, while deep-level diversity can either enhance performance or reduce unproductive competition.

Diversity can create conflict but also offers unique problem-solving opportunities. Diverse groups may face initial challenges but can become more open-minded, creative, and perform better over time. The overall impact of diversity is mixed, and its positive effects are not always strong. The business case for diversity, particularly in financial terms, is difficult to prove. In diverse teams, especially with surface-level diversity, faultlines—perceived divisions based on individual differences—can emerge, splitting the group into subgroups.

Research on faultlines indicates that splits within groups typically harm performance, leading to competition, slower learning, riskier decisions, reduced creativity, and higher conflict. While subgroups may feel satisfied, overall group satisfaction tends to be lower. However, faultlines based on skill, knowledge, and expertise can benefit results-oriented organizations. If subgroups are given a common goal and encouraged to collaborate, the negative effects of faultlines can be mitigated. In some cases, faultlines related to task-relevant characteristics can improve performance by promoting division of labor. Thus, faultlines can be detrimental but strategically used to enhance performance.

Group Decision Making

Group versus the Individual

Group decision-making is commonly used in organizations, but whether it is preferable to individual decision-making depends on several factors. To evaluate its effectiveness, it's important to consider the strengths and weaknesses of group decision-making.

Strengths of Group Decision Making: Groups bring more complete information and knowledge by combining the resources of multiple individuals, offering a diversity of views and potential alternatives. This diversity increases the chances of considering more approaches. Additionally, group members are more likely to accept and support a decision, fostering broader acceptance within the organization.

Weaknesses of Group Decision Making: Group decisions tend to be time-consuming, as they often take longer to reach a solution. There can be conformity pressures, where members avoid disagreeing to be accepted by the group. Group discussions may also be dominated by a few individuals, which can reduce overall effectiveness. Furthermore, responsibility for the decision is often ambiguous, as accountability is shared, unlike in individual decision-making where accountability is clear.

Effectiveness and Efficiency: Group decision-making is more accurate than the average individual's but less efficient and slower. It excels in creativity and acceptance of solutions. However, it generally requires more time than individual decisions, unless a single person needs extensive input. Managers must balance the effectiveness of group decisions with their inefficiency.

Groups are valuable for decision-making, offering diverse input and critical analysis, which enhances information gathering and solution support. However, the time spent, internal conflicts, and conformity pressures can detract from their effectiveness. Task-related conflicts may improve performance, while relationship conflicts harm it. In some situations, individuals may make better decisions than groups.

Groupthink and Groupshift

Groupthink and groupshift are two negative by-products of group decision-making that can hinder objective evaluation and high-quality solutions.

Groupthink occurs when group pressures for conformity prevent critical appraisal of minority or unpopular views, often limiting creativity and effectiveness. It is more likely in groups with a strong identity, a desire to protect their positive image, and a collective threat to that image. Groups focused on performance over learning are particularly susceptible. Groupthink can be minimized by controlling group size, encouraging impartial leadership, appointing a devil's advocate to challenge the majority, and using exercises that focus on potential risks before discussing benefits. These strategies help foster open discussion and objective decision-making.

Groupshift, or group polarization, happens when group discussions lead members to adopt more extreme versions of their original positions. Conservatives become more cautious, and risk-takers become more aggressive. This shift is driven by factors such as increased comfort in expressing extreme views, diffusion of responsibility, and the desire to

differentiate from outgroups. Understanding group polarization helps managers recognize that group decisions tend to exaggerate individual positions. The direction of the shift depends on members' initial inclinations. Techniques to reduce dysfunctional group decision-making can help mitigate these effects.

Group Decision-Making Techniques

The most common form of group decision-making occurs in interacting groups, where members meet face-to-face and communicate both verbally and nonverbally. However, as seen with groupthink, these groups can sometimes lead to self-censorship and pressure for conformity. Techniques like brainstorming and the Nominal Group Technique (NGT) can help reduce these issues, encouraging more open and diverse input.

Brainstorming encourages creativity by allowing all ideas, even unconventional ones, without criticism. In a typical session, participants suggest as many alternatives as possible, while the leader ensures the problem is clear and records all ideas for later discussion. However, research shows that brainstorming in groups is less efficient than individual idea generation due to "production blocking," where simultaneous discussions interrupt individuals' thought processes, slowing down idea sharing.

The **Nominal Group Technique (NGT)** is a more structured approach to group decision-making that limits discussion and interpersonal communication. It involves the following steps:

1. Each member independently writes down ideas before any discussion.
2. Members present their ideas one at a time, without discussion, until all ideas are shared and recorded.
3. The group discusses the ideas for clarity and evaluates them.
4. Each member silently ranks the ideas, and the idea with the highest aggregate ranking determines the final decision. This method helps reduce production blocking and groupthink.

The main advantage of NGT is that it allows for formal group meetings while maintaining independent thinking. Research shows that nominal groups generally outperform brainstorming groups. Each group decision-making technique has its strengths and weaknesses. The choice of technique depends on the desired criteria and cost-benefit trade-offs. Interacting groups are effective for gaining commitment, brainstorming fosters group cohesion, and NGT efficiently generates a large number of ideas.

EVOLVING THE CISO ROLE

Evolving the CISO Role to make Cybersecurity a Competitive Advantage

The role of the CISO should become more prominent, with a focus on leading with the right technologies, internal partnerships, and awareness of external developments. Some organizations are significantly increasing their cybersecurity investments, but many still lack urgency. While leadership, collaboration, and communication skills are considered crucial for a successful CISO, many organizations do not prioritize developing and applying cybersecurity risk metrics. To build a successful cybersecurity strategy, businesses must invest in talent, elevate the CISO’s role, and involve them more in critical areas like product development.

Not a Mechanical Process
While there are efforts to identify future cybersecurity leaders, most CISOs are recruited externally, often from HR or professional firms. However, some organizations recruit from within, particularly from technology roles, and are becoming more focused on defining the cybersecurity leadership profile. In some cases, organizations also recruit from backgrounds in compliance and consulting, highlighting the importance of understanding both technical and policy aspects of cybersecurity.

Status Uncertain
The CISO role is often still viewed as a technical, rather than strategic, position within many organizations. While cybersecurity is recognized as essential, particularly in regulated sectors, the CISO's position is not always part of the C-suite, and their access to the board and CEO is inconsistent. In some organizations, the CISO role is perceived as subordinate to other IT functions or as a minor business component when there are no immediate threats. Many

CISOs lack broader business experience, and some organizations do not provide the necessary training or work experience to help them contribute strategically outside IT. Formal executive coaching, cross-functional experience, and business knowledge development for cybersecurity leaders are limited, though mentoring within the IT area is more common. Most professional development is pursued independently by cybersecurity leaders, although some organizations offer financial support for specialized training.

A Growing List of Responsibilities

The CISO's role is expanding beyond day-to-day data protection to include more strategic responsibilities as organizations aim to build a resilient cybersecurity culture. While managing threat-resistant systems remains a top responsibility, fewer organizations include formulating cybersecurity strategy, integrating cyber risk with broader risk strategies, or building an organization-wide cybersecurity culture in the CISO's top tasks. Larger organizations tend to involve the CISO more deeply with the C-suite and workforce training. However, many boards and top management still focus less on cybersecurity than needed, with limited attention on developing risk metrics and educating the board. Over the next few years, the strategic aspects of the CISO role, such as building a cybersecurity culture and formulating strategy, are expected to gain importance. However, some core tasks like threat identification may become more routine, and the focus on metrics and board communication is likely to remain low. As cybersecurity programs mature, there will be growing pressure to assess their effectiveness and return on investment, with some companies already implementing detailed metrics to evaluate their cybersecurity efforts.

A Leadership Skill Set

The CISO role is increasingly recognized as requiring the same strategic skills as other top business leaders. Key skills include the ability to educate and collaborate across the business, communicate effectively, provide strategic insight, and make data-driven decisions. While team-building is also important, it's less frequently cited as critical. The CISO must also bridge gaps between security, operations, and IT, ensuring all departments work with a unified security mindset. Communication is essential in both directions: keeping the board informed and conveying business objectives to cybersecurity teams. Additionally, the CISO must foster a collaborative environment, sharing expertise and best practices across the team. As cybersecurity becomes integral to products and services, the CISO's role has expanded to include client-facing responsibilities, helping to translate complex cybersecurity concepts into business-friendly language and contributing to business development.

Too Limited a Role

Cybersecurity is increasingly seen as a competitive advantage, not just a requirement, but many organizations are not fully integrating it into product and application development. The CISO should play a crucial role in this process, especially given the pressure on developers to quickly release products, which can lead to security weaknesses. However, the CISO's involvement in product testing, development, and strategic planning is limited in many companies, and even less so in the early stages of product creation. This is partly due to resource constraints, as the CISO often lacks the staff to influence product planning and development. Additionally, while the CISO is involved in some innovative data tool development, their role is not universally recognized across all initiatives.

Not Getting the Board's Attention

Boards often fail to fully utilize the strategic insights of the CISO, with many not receiving the comprehensive cybersecurity information or educational support they need. While some boards get routine updates on cybersecurity issues, fewer receive detailed reports or strategic evaluations from the CISO. Additionally, boards are not consistently using the CISO to assess the effectiveness of their cybersecurity strategies. Despite the growing importance of cybersecurity, many boards lack detailed metrics on cybersecurity risks, trends, and compliance. Moreover, the CISO's input is generally seen as less valuable by the full board, while committees like executive risk and compliance committees tend to receive more useful information. This highlights that CISOs are more focused on providing information to the C-suite rather than engaging directly with the board.

Getting the Most Out of the CISO Role

To fully leverage the CISO role, organizations must recognize its expanding importance beyond the IT function and throughout the entire organization. As cybersecurity becomes a key differentiator in products and services, it plays a central role in both risk management and value creation. This shift requires developing cybersecurity leaders with strong technical, leadership, and communication skills.

However, many organizations still fail to act on this understanding. To build an effective cybersecurity program, organizations should focus on five key elements:

1. Develop a business case for a comprehensive cybersecurity program and secure internal buy-in.
2. Allow the CISO to prioritize cybersecurity strategy and foster a company-wide security culture.
3. Separate the CISO from the IT function and promote more frequent interaction with executive management and the board.
4. Involve the CISO earlier and more significantly in product and application development.
5. Focus on recruiting and training skilled cybersecurity leaders.

NONAKA

In a constantly changing economy, knowledge is crucial for sustained competitive advantage. Companies that succeed are those that consistently generate new knowledge, share it, and integrate it quickly into products and technologies. However, many managers struggle to manage this process due to a limited understanding of knowledge, shaped by Western management's focus on formal, quantifiable data and efficiency metrics.

A more dynamic approach, seen in successful companies, focuses on creative and holistic knowledge management, prioritizing innovation, adaptability, and responsiveness to market needs. This approach ensures success in a fast-evolving business environment.

The Japanese approach to innovation stresses creating new knowledge by utilizing employees' tacit, subjective insights, rather than just processing objective data. This approach involves personal commitment, organizational identity, and using symbols and metaphors to embed knowledge in products and technologies.

Japanese companies view the organization as a living entity with a shared sense of purpose, promoting innovation through self-renewal and alignment with common values. Knowledge creation is a collective effort, where every employee is a knowledge worker.

The key takeaway for managers is to place knowledge creation at the heart of HR strategies, drawing from Japanese methods to design organizations focused on continuous innovation and adaptability.

The process of creating organizational **knowledge** begins with individuals transforming their personal, tacit knowledge into explicit, shared knowledge. Tacit knowledge, deeply personal and rooted in experience, encompasses both technical skills ("know-how") and cognitive frameworks such as mental models and beliefs. This type of knowledge is difficult to formalize and communicate, yet it shapes how individuals perceive and approach problems.

The example of Ikuko Tanaka at Matsushita highlights how tacit knowledge, such as the baking techniques observed from a master baker, can be transformed into explicit knowledge, like product specifications, through experimentation and collaboration. Explicit knowledge, being formal and systematic, is easier to share across the organization and use as a foundation for innovation.

This movement between tacit and explicit knowledge is at the heart of the knowledge-creation process, enabling companies to convert individual insights into valuable organizational assets.

The distinction between tacit and explicit knowledge underpins four key patterns of knowledge creation within organizations, forming a dynamic "spiral of knowledge":

1. **Tacit to Tacit (Socialization):** Tacit knowledge is shared directly through observation, imitation, and practice, as seen when an apprentice learns from a master. However, this process remains limited because the knowledge stays personal and cannot be easily leveraged by the organization.
2. **Explicit to Explicit (Combination):** Explicit knowledge is synthesized into new forms, such as a financial report that integrates data from different sources. While useful, this process does not significantly expand the organization's knowledge base.

3. **Tacit to Explicit (Articulation):** Tacit knowledge is converted into explicit knowledge, making it shareable across the organization. For instance, a worker articulates their insights to create innovative solutions or product specifications. This interaction is particularly powerful for knowledge creation.
4. **Explicit to Tacit (Internalization):** Shared explicit knowledge is absorbed by employees, reshaping their tacit understanding and expertise. Over time, it becomes an intuitive part of their work practices, enabling further innovation.

These processes interact dynamically. For example, Ikuko Tanaka at Matsushita learned tacit knowledge from a baker (socialization), articulated it into explicit product specifications (articulation), helped the team standardize it in a manual (combination), and internalized the experience to intuitively understand quality standards (internalization).

This continuous spiral allows the organization's knowledge base to grow and evolve, with each iteration elevating understanding and fostering innovation at a higher level.

Articulation (converting tacit knowledge into explicit knowledge) and internalization (using explicit knowledge to enhance tacit understanding) are key to the knowledge-creation process. Both require personal commitment and involve expressing one's vision of the world, leading to the reinvention of individuals, the organization, and its broader impact. Managing this process demands approaches that differ significantly from traditional Western management practices.