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The Role of Information Systems in Business Today

**MIS is short for *m*anagement *i*nformation *s*ystem
or *m*anagement *i*nformation *s*ervices.
Management information system, or MIS, broadly refers to a computer-based system that provides managers with the tools to organize evaluate and efficiently manage departments within an organization.
In order to provide past, present and prediction information, a management information system can include <u>software</u> that helps in decision making, data resources such as <u>databases</u>, the <u>hardware</u> resources of a system, <u>decision support systems</u>, people management and project management <u>applications</u>, and any computerized processes that enable the department to run efficiently.**

Role of Information Systems in Business

Despite the huge number of software applications out there, they mainly serve three key purposes in business:

- **Support of business processes and operations.**
- **Support of decision making by employees and managers.**
- **Support of strategies for competitive advantage.**

Information Systems

The diagram shows how these important functions work together in a normal company. Sometimes, systems that help with everyday business tasks might also share or get information from systems that help in making decisions or staying competitive. This sharing happens the other way around too. Nowadays, companies are always trying to make their systems work together better so that information can move around easily. This makes the company more flexible and supports its activities better than any single system could on its own.

1. Support for Business Processes and Operations

Information systems are fundamental to the seamless execution of daily business operations. They automate and manage a wide array of business processes, including but not limited to inventory management, customer relations, and payroll. By simplifying and streamlining these activities, IS significantly reducing operational costs and enhance both efficiency and productivity across the board. The automation of routine tasks frees up human resources, allowing them to focus on more strategic activities that add value to the business.

2. Support for Business Decision Making

In today's data-driven landscape, the ability to make well-informed decisions swiftly is crucial for business success. Information systems provide a robust framework for the collection, processing, and analysis of data, converting raw data into actionable insights. These insights empower managers and business leaders to make informed decisions, accurately forecast future trends, and devise effective strategies. The analytical capabilities of IS, therefore, are invaluable in navigating the complexities of the market and maintaining a competitive edge.

3. Support for Strategic Competitive Advantages

The competitive advantage of a business often hinges on its agility, responsiveness, and innovation. Information systems are key enablers in this regard, offering tools to identify new market opportunities, enhance customer service, and foster the creation of innovative products or services. Moreover, IS facilitating the optimization of supply chains, ensuring that businesses can respond swiftly to changes in market dynamics. Through

the strategic use of IS, businesses can position themselves ahead of competitors, adapting quickly to new challenges and seizing opportunities as they arise.

In essence, information systems are indispensable assets for businesses, integral to optimizing operations, guiding decision-making, and securing a competitive stance in the marketplace. Their role in enhancing operational efficiency, providing data-driven insights, and enabling strategic initiatives underscores the vital contribution of IS to business success in the digital age.

How are information systems transforming business, and why are they so essential for running and managing a business today?

Information systems are essential for running and managing a business today because they help businesses achieve six major objectives,

1. Operational Excellence (OpEx)

Operational Excellence is an approach to business management that emphasizes continuous improvement and employee empowerment. It aims to create a culture where everyone is invested in the business and can identify and solve problems before they disrupt operations.

2. New Products, Services & Business Models

New products, services, and business models are vital for business success, enabling competitiveness and relevance in a dynamic market. Innovation is the key to their development, creating new revenue streams and improving existing offerings. Successful innovation demands creativity, risk-taking, and seizing new opportunities. By identifying areas for improvement and implementing changes, businesses can stay ahead of the competition.

3. Customer and Supplier Intimacy

Customer intimacy is a relationship-building strategy in which brands acquire better knowledge about customers and use that data to meet their needs and expectations in thoughtful, personalized ways. It also creates emotional connections with customers, which can boost customer retention and loyalty. Supplier intimacy is a similar strategy that involves building strong relationships with suppliers, thereby improving the quality of products or services and reducing costs. Both customer and supplier intimacy require businesses to be proactive in building relationships. They involve identifying the needs of customers and suppliers and working to meet those needs in innovative ways.

4. Improved decision making
Information systems play a crucial role in providing decision makers with essential data and tools to make informed decisions. These systems enable businesses to identify trends and patterns in real-time data, analyze information more efficiently and accurately compared to manual methods. By leveraging information systems, decision makers can respond swiftly to changes in the business environment. Furthermore, they can automate specific processes, saving time and reducing errors.
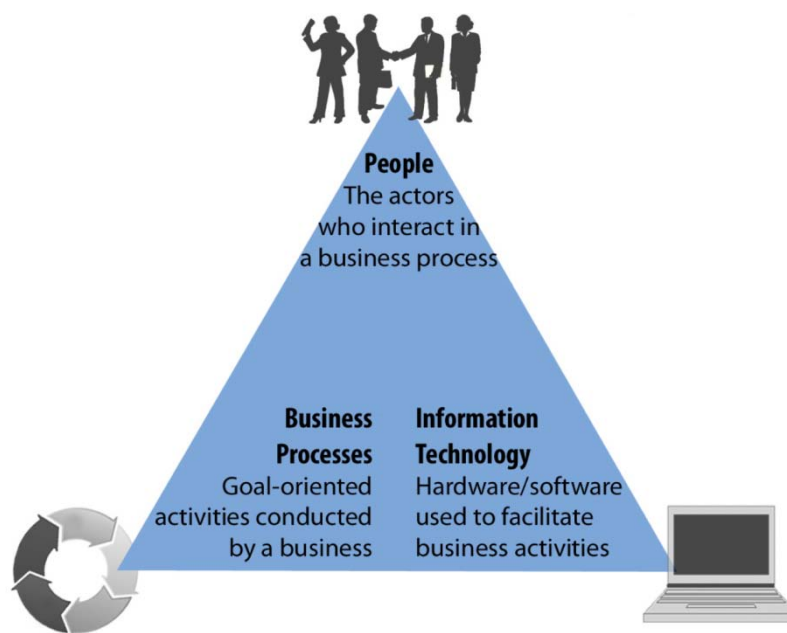
5. Competitive advantage
Competitive advantage refers to the factors that enable a company to produce goods or services better or more affordably than its competitors. These factors contribute to increased sales, superior margins, and overall value for the company and its shareholders.
In the context of Information Systems (IS), competitive advantage involves the strategic use of information technology (IT) to gain an edge over rivals. IT can assist companies in developing new products and services, enhancing existing offerings, and streamlining operations. Additionally, it improves customer service, reduces costs, and enhances overall efficiency.

6. Survival
Survival in IS refers to the ability of a business to continue operating despite changes in the business environment. This is achieved by investing in information systems that help businesses adapt to changes in the environment and remain competitive.

People
The actors who interact in a business process

Business Processes
Goal-oriented activities conducted by a business

Information Technology
Hardware/software used to facilitate business activities

Globalization Challenges and Opportunities:

Globalization is an established part of the modern world, so most of us do not realize the benefits it brings to our everyday lives—such as easy access to a variety of different cuisines or new technologies developed by countries half a world away.

Even though globalization makes our lives better, it brings some challenges as companies start to grow and expand across borders.

Cultural differences around the world are undeniable. These differences create hurdles for businesses entering foreign markets and necessitate changes to their daily business operations, whether it's employing workers in a new region or communicating the value of their product to a new audience.

Keep reading to learn more about the benefits and challenges of globalization and how businesses navigate these difficulties to reach their global expansion goals.

Before discussing the benefits and challenges of globalization, it's essential to have a strong understanding of what the term means.

The official definition of globalization is the process by which businesses or other organizations develop international influence or start operating on an international scale.

More simply, globalization refers to an open flow of information, technology, and goods among countries and consumers. This openness occurs through various relationships, from business, geopolitics, and technology to travel, culture, and media.

Because the world is already so connected, most people don't notice globalization at work every single day. But the world is getting smaller, and companies need to understand what this means for the future of doing business. Companies that don't embrace globalization risk losing a competitive advantage, which allows other businesses to take over new opportunities in the global marketplace.

What are the benefits of globalization?

Globalization impacts businesses in many different ways. But those who decide to take on international expansion find several benefits, including:
1. Access to new cultures

Globalization makes it easier than ever to access foreign cultures, including food, movies, music, and art. This free flow of people, goods, art, and information is the reason you can have Thai food delivered to your apartment as you listen to your favorite U.K.-based artist or stream a Bollywood movie.

Read more: The Role of Culture in International Business

2. The spread of technology and innovation
Many countries around the world remain constantly connected, so knowledge and technological advances travel quickly. Because knowledge also transfers so fast, this means that scientific advances made in Asia can be at work in the United States in a matter of days.

3. Lower costs for products
Globalization allows companies to find lower-cost ways to produce their products. It also increases global competition, which drives prices down and creates a larger variety of choices for consumers. Lowered costs help people in both developing and already-developed countries live better on less money.

4. Higher standards of living across the globe
Developing nations experience an improved standard of living—thanks to globalization. <u>According to the World Bank</u>, extreme poverty decreased by 35% since 1990.

The target of the first Millennium Development Goal was to cut the 1990 poverty rate in half by 2015. This was achieved five years ahead of schedule in 2010. Across the globe, nearly 1.1 billion people have moved out of extreme poverty since that time.

5. Access to new markets
Businesses gain a great deal from globalization, including new customers and <u>diverse revenue streams</u>. Companies interested in these benefits look for flexible and innovative ways to grow their business overseas.

A <u>global employer of record (EOR)</u> makes it easier than ever to employ workers in other countries quickly and compliantly. This means that, for many companies, there is no longer the need to establish a foreign entity to expand overseas.

Read more: <u>Your Guide to the Global Marketplace</u>

6. Access to new talent
In addition to new markets, globalization allows companies to find new, specialized talent that is not available in their current market. For example, globalization gives companies the opportunity to explore tech talent in booming markets such as Berlin or Stockholm rather than Silicon Valley.

A global EOR allows companies to compliantly <u>employ talent overseas without establishing an entity</u>, making global hiring easier than ever.

Globalization Challenges:

1. International recruiting
A common challenge global leaders face when going global is <u>international recruiting</u>. Recruiting across borders creates unknowns for HR teams.

First, companies create a plan for how they will interview and thoroughly vet candidates to make sure they are qualified when thousands of miles separate them from headquarters. Next, companies need to know the market's demands for salaries and benefits to make competitive offers. To ensure successful hires, HR teams must factor in challenges like time zones, cultural differences, and language barriers to find a good fit for the company.

2. Managing employee immigration

Despite the benefits of <u>global mobility</u>, immigration is a top challenge companies face when expanding overseas. Immigration laws change often, and in some countries, it is extremely difficult to secure visas for employees who are foreign nationals. The U.S., for example, is getting stricter with <u>granting H-1B visas</u>, and <u>Brexit makes immigration to the U.K. difficult</u>.

3. Incurring tariffs and export fees

Another challenge leaders face when going global is incurring tariffs and export fees. For companies looking to sell products abroad, getting those items overseas can be expensive, depending on the market.

4. Payroll and compliance challenges

Another common global expansion obstacle is <u>managing global payroll</u> and maintaining compliance with changing employment and tax laws. This management task gets even more difficult if you're trying to manage operations in multiple markets.

5. Loss of cultural identity

While globalization has made foreign countries easier to access, it has also begun to meld unique societies together. The success of certain cultures throughout the world caused other countries to emulate them. But when cultures begin to lose their distinctive features, we lose our global diversity.

6. Foreign worker exploitation

Lower costs do benefit many consumers, but it also creates tough competition that leads some companies to search for cheap labor sources. Some Western companies ship their production overseas to countries like China and Malaysia, where <u>lax regulations</u> make it easier to exploit workers.

7. Global expansion difficulties

For businesses that want to go global and discover the benefits of globalization, setting up a compliant overseas presence is difficult. If companies take the traditional route of setting up an entity, they need substantial upfront capital, sometimes up to $20,000, and costs of $200,000 annually to maintain the business.

Read more: <u>The Hidden Costs of Entity Establishment</u>

Additionally, global businesses must keep up with different and ever-changing labor laws in new countries. When expanding into new countries,

companies must be aware of how to navigate new legal systems and ensure <u>global compliance</u>. Otherwise, missteps lead to impediments and severe financial and legal consequences.

8. Immigration challenges and local job loss

The political climates in the U.S. and Europe show that there are different viewpoints on the results of globalization. Many countries around the globe are tightening their immigration rules, and it is harder for immigrants to find jobs in new countries.

This rise in nationalism is mainly due to anger from the perception that foreigners fill domestic jobs or that companies move their operations abroad to save money on labor costs.

How globalization changes your daily business operations

Both the benefits and challenges of globalization change how a business operates in different ways. When companies decide to go global, they must be ready and willing to change internal processes. This helps to accommodate new markets and make their **global workforce** feel comfortable and accepted at work.

Companies see many aspects of their businesses change once they enter the global marketplace. For example, globalization makes the **workforce more diverse**. This diversity is an overall positive change, but it creates some challenges, such as language barriers and differences in cultural expectations.

Some operational changes companies should expect from globalization include:

1. Global communication challenges

Before starting to branch out from headquarters, firms have to put an established internal communication plan in place since global employees likely work in a different time zone and have a different native language. Software and other digital tools help smooth global communication hurdles and allow teams to connect easily. Zoom, Slack, and Google all provide valuable tools for companies trying to manage employees in multiple offices, countries, and time zones.

2. International employee expectations

Foreign employees have different expectations when it comes to things like salary and benefits, as well as how they manage their daily work schedules. Companies that want to take advantage of globalization and hire foreign workers need to accommodate them as much as possible. HR teams must also ensure their <u>employee benefits</u> offerings are competitive and on par with local expectations during the hiring process.

3. Supporting foreign customers
Similar to communication changes with employees, companies must also plan for how they run customer service and support in new countries. Customers in the new market where you offer your products or services might not speak your native language or be close to your time zone.
4. Increased competition
International companies have to adjust more than internal operations. Going global opens up new revenue streams and increases availability to talent. Because of these attractive benefits and the ease of going global due to solutions like partnering with a global EoR, the global marketplace is competitive.
As globalization becomes the norm, many companies often seek the same foreign markets, which increases competition for businesses.
5. Marketing and communication changes
Just like hiring employees in different countries creates internal communication challenges, marketing your products or services to a completely new audience creates obstacles for companies. Businesses need to adjust their marketing strategies to communicate the benefits of their product in a way that resonates with a foreign audience.
You cannot assume that a marketing campaign targeting an American audience (or wherever your HQ location is) attracts consumers in Europe, Asia, or any other popular market, as the consumers there have very different wants and needs.

Perspectives on Information Systems:
Since the early days of computer technology, different classifications or types of information systems have been used in organisations to identify how information should be used, managed, and analysed.
However, there seems to be a lot of confusion around what is meant by an 'information system', as this is a term that can be loosely referred to many different things depending on what type of information we're looking at and who it is being used by.
To help your understanding, we've put together a quick guide to the main 4 types of information systems used in an organisation according to each level of management. This includes
1. Low level workers – Transaction Processing Systems
2. Middle Managers – Management Information Systems
3. Senior Managers – Decision Support Systems
4. Executives – Executive Information Systems

Types of Information System:

DEFINITION OF INFORMATION SYSTEM – " An information system is a set of interrelated components that works together to collect, process, store and breakdown the information to support decision making. "
Following are the DIMENSIONS of information system:
1.ORGANIZATIONAL DIMENSION : Information system are part of organization. Information system will have the standard operating procedure and culture of an organization embedded within them. This involves: a)Functional specialties b)Business processes c)Culture d)Political interest groups 2.MANAGEMENT DIMENSION : Managers perceive business challenges in the environment. Information systems supply tools and information needed by the managers to allocate,coordinate and monitor their work, make decision,create new products and services and make long range strategic decision. 3.TECHNOLOGY DIMENSION : Management uses technology to carry out their functions. It consists of – computer hardware/software, data management technology, networking/telecom technology.Its one of the many tools managers use to cope with the change.

Information systems play a crucial role in various organizations, providing essential data and functionalities. Understanding the different types of information systems helps in selecting the right one for your organization's needs. Explore this System design course to deepen your knowledge about various information systems and their implementations.
Information Systems
Are classified by organizational levels, mode of data, processing, system objectives and type of support provided. Following are the TYPE of information system:

1. **Transaction Processing System (TPS):**
- **Transaction Processing System are information system that processes data resulting from the occurrences of business transactions**
- **Their objectives are to provide transaction in order to update records and generate reports i.e to perform store keeping function**
- **The transaction is performed in two ways: Batching processing and Online transaction processing.**
- **Example: Bill system, payroll system, Stock control system.**
2. Management Information System (MIS):
- **Management Information System is designed to take relatively raw data available through a Transaction Processing System and convert them into a summarized and aggregated form for the manager, usually in a report format. It reports tending to be used by middle management and operational supervisors.**

- **Many different types of report are produced in MIS. Some of the reports are a summary report, on-demand report, ad-hoc reports and an exception report.**
- **Example: Sales management systems, Human resource management system.**
 **3. Decision Support System (DSS):**
- **Decision Support System is an interactive information system that provides information, models and data manipulation tools to help in making the decision in a semi-structured and unstructured situation.**
- **Decision Support System comprises tools and techniques to help in gathering relevant information and analyze the options and alternatives, the end user is more involved in creating DSS than an MIS.**
- **Example: Financial planning systems, Bank loan management systems.**
  4. Experts System:
- **Experts systems include expertise in order to aid managers in diagnosing problems or in problem-solving. These systems are based on the principles of artificial intelligence research.**
- **Experts Systems is a knowledge-based information system. It uses its knowledge about specify are to act as an expert consultant to users.**
- **Knowledgebase and software modules are the components of an expert system. These modules perform inference on the knowledge and offer answers to a user's question**

What Is an Information System?

Let's use your experience as a user to understand the above definitions. For example, let's say you work for a small business, and your manager asks you to track the business's expenses and send her the list to see where the money has gone. You use a spreadsheet application on your laptop to enter the list of costs you have collected and then email the spreadsheet to her once you are done. You will need a device (i.e., laptop) based on an operating system (i.e., iOS, Windows), a spreadsheet app running, an email app (i.e., Outlook), and an internet connection. All these components must work together perfectly! In essence, you are using the interrelated components in an IS to allow it to collect, process, store, and disseminate information. The role of this IS system is to enable you to create new value (i.e., expense tracker) and for your manager to use the information you disseminate "to support decision making, coordination, control, analysis, and visualization in an organization." (Laudon et al., 2011) You and your manager have obtained your goals through the processes you have created to capture the data, calculate it, check it, and how and when your manager receives the new information to make her decision to manage her company.
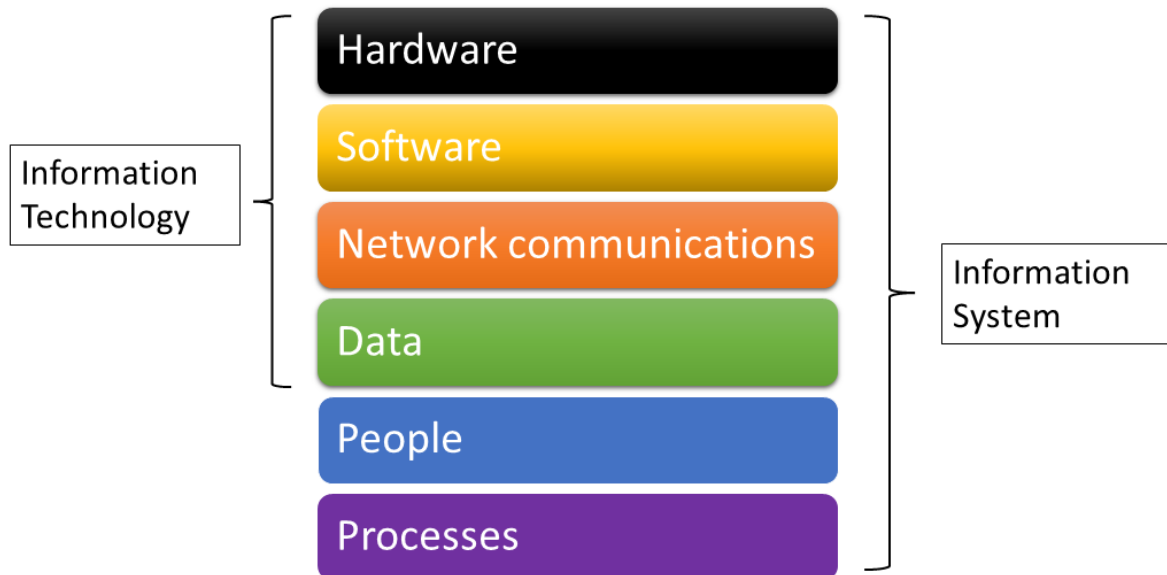
Hardware

Hardware represents the physical components of an information system. Some can be seen or touched easily, while others reside inside a device that can only be seen by opening up the device's case. Keyboards, mice, pens, disk drives, iPads, printers, and flash drives are all visible examples. Computer chips, motherboards, and internal memory chips are the hardware that resides inside a computer case and is not usually visible from the outside. Chapter 2 will go into more detail to discuss how they function and work together. For example, users use a keyboard to enter data or a pen to draw pictures.

Software

Software is a set of instructions that tell the hardware what to do. Software is not tangible – it cannot be touched. Programmers create software programs by following a specific process to enter a list of instructions that

tell the hardware what to do. There are several software categories, the two main types being operating systems and application software.

Data

The third component of an IS is data. You can think of data as a collection of non-disputable raw facts. Your first name, driver's license number, city in which you live, a picture of your pet, a clip of your voice, and phone number are examples of raw data. You can see or hear your data, but by themselves, they don't give you any additional meanings beyond the data itself. For example, if you can read a person's driver's license number, you may recognize it as a driver's license number, but you know nothing else. They are examples of what IS would need to collect from you or other sources. However, once these raw data are aggregated, indexed, and organized together into a logical fashion using software such as a spreadsheet, or a database, the collection of these organized data will present new information and insights that a single raw fact can't convey. The example of collecting all expenses (i.e., raw data) to create an expense tracker by category (new information derived) discussed earlier is also a good example. All of the definitions presented at the beginning of this chapter focused on how information systems manage data.

Networking Communication

The components of hardware, software, and data have long been considered the core technology of information systems. However, networking communication is another component of an IS that some people believe should be in its own category. An information system can exist without the ability to communicate. For instance, the first personal computers were stand-alone machines that did not have access to the Internet. Information Systems, however, have evolved since they were developed. For example, we used to have only desktop operating system software or hardware. However, in today's environment, the operating system software now includes mobile OS, and hardware comprises other hardware devices besides desktops. It is extremely rare for a computer device that does not connect to another device or a network. Chapter 5 will go into this topic in greater detail.

People

People built computers for people to use. It means that there are many different categories in the development and management of information systems to help organizations to create value and improve productivity, such as:

- **Users** are those who use an IS to perform a job function or task. Examples include a student using a spreadsheet or a word-processing software program.
- **Technical Developers** are the people who create the technologies used to build an information system. Examples include a computer chip engineer, a software programmer, and an application programmer.
- **IT Support:** These specialized professionals are trained to keep the information systems running smoothly to support the business and keep it safe from illegal attacks. Examples include network analysts; data center support, and help desk support.
- **Business Professionals:** these are the CEOs, owners, managers, entrepreneurs, and employees who use IS to start or expand their businesses to perform their job functions such as accounting, marketing, sales, human resources, and supporting customers, among others.

Process

The last component of information systems is *Process*. A business process is a series of steps to achieve a desired outcome or goal. Businesses must continually innovate to create more revenues through new products and services that fulfill customers' needs or find cost-saving opportunities in running their companies. Simply automating activities using technology is not enough. Information systems are becoming increasingly integrated with organizational processes to deliver value in revenue-generating and cost-saving activities that can give companies competitive advantages over their competitors. Technical standards or procedures such as "business process reengineering," "business process management," "enterprise resource planning," and "customer relationship management" all have to do with the continued improvement of these business procedures and the integration of technology with them to improve internal efficiencies and to gain a deeper understanding of customers' needs. Businesses hoping to gain an advantage over their competitors are highly focused on this component of information systems.

Information system, an integrated set of components for collecting, storing, and processing data and for providing information, knowledge, and digital products. Business firms and other organizations rely on information systems to carry out and manage their operations, interact with their customers and suppliers, and compete in the marketplace. Information systems are used to run interorganizational supply chains and electronic markets. For instance, corporations use information systems to process financial accounts, to manage their human resources, and to reach their potential customers with online promotions. Many major companies are built entirely around information systems.

Acquiring information systems and services

Information systems are a major corporate asset, with respect both to the benefits they provide and to their high costs. Therefore, organizations have to plan for the long term when acquiring information systems and services that will support business initiatives. At the same time, firms have to be responsive to emerging opportunities. On the basis of long-term corporate plans and the requirements of various individuals from data workers to top management, essential applications are identified and project priorities are set. For example, certain projects may have to be carried out immediately to satisfy a new government reporting regulation or to interact with a new customer's information system. Other projects may be given a higher priority because of their strategic role or greater expected benefits.

Dimensions of Information:

Information has following three dimensions:

Economic Dimension

Business Dimension

Technical Dimension

Economic Dimension:

Refers to the cost of information and its benefits.

- **Generation of information costs money.**
- **To decide about the money to be spent on information generation, a cost benefit analysis should be undertaken.**
- **For this the following aspects of information may be useful**

Economic Dimension:
Cost of information- may include:
- **Cost of acquiring data.**
- **Cost of maintaining data.**
- **Cost of generating information.**
- **Cost of communicating information.**

Value of information:
- In decision theory, the value of information is the value of change in decision behavior because of the information.
- The change in behavior due to new information is measured to determine the benefits from its use.
- To arrive at value of new information, the cost incurred to get this information is deducted from the benefits.

Business Dimension:
• Information can also be understood from its business dimension.
• Different types of information are required by managers at different levels of management hierarchy.
• The information needs of managers at strategic planning level are altogether different from those of operational control managers.

Technical Dimension:
• This dimension refers to the technical aspects of the database.
• Various aspects of the database that are considered include:
• The capacity of the database
• Response time
• Security
• Validity
• Data interrelationship, etc.
• This dimension is covered under design of information systems.

A Business Perspective on Information Systems:

Types of information systems, their applications, best practices, and implementation approach.

1. **Transaction Processing Systems (TPS): Transaction processing systems are designed to process large volumes of data generated from day-to-day business transactions. They are commonly used in businesses that handle a large number of transactions, such as retail stores, banks, and airlines. TPS is responsible for capturing, processing, and storing data related to transactions. The primary purpose of TPS is to ensure that transactions are processed accurately and promptly.**

Best Practices for TPS

- **Ensure that data is validated and accurate before processing.**

- **Implement backup and recovery mechanisms to ensure data is not lost in case of system failure.**

- **Implement security measures to prevent unauthorized access to data.**

Implementation approach

- **Analyze business processes and identify the types of transactions that need to be captured.**

- **Identify the types of data that need to be captured and stored.**

- **Develop a data model and design the TPS to capture and process data.**

1. **Management Information Systems (MIS): Management information systems are designed to provide management with information necessary for decision-making. MIS is used to analyze and summarize data generated by other information systems. The primary purpose of MIS is to provide management with information that helps them make informed decisions.**

Best Practices for MIS

- **Ensure that the information provided is accurate and up-to-date.**

- **Provide easy-to-use interfaces for managers to access information.**

- **Implement security measures to prevent unauthorized access to data.**

Implementation approach

- **Identify the types of information that management requires to make informed decisions.**

- **Develop a data model and design the MIS to provide the necessary information.**

- **Integrate MIS with other information systems to ensure data consistency.**

1. **Decision Support Systems (DSS): Decision support systems are designed to support decision-making processes by providing data analysis and modeling tools. DSS is used to analyze data and help users make informed decisions based on the results of data analysis.**

Best Practices for DSS

- **Ensure that the data used for analysis is accurate and up-to-date.**

- **Provide easy-to-use interfaces for users to access data analysis tools.**

- **Implement security measures to prevent unauthorized access to data.**

Implementation approach

- **Identify the types of decisions that need to be made.**

- **Identify the data required for decision-making.**

- **Develop data analysis and modeling tools that can be used to support decision-making processes.**

Contemporary Approaches to Information Systems (Technical Approach + Behavioral Approach) Approach Socio technical Systems)

CONTEMPORARY APPROACHES TO INFORMATION SYSTEMS

Information systems are socio technical systems. Though they are composed of machines, devices, and "hard" physical technology, they require substantial social, organizational, and intellectual investments to make them work properly. Since problems with information systems -- and their solutions -- are rarely all technical or behavioral, a multidisciplinary approach is needed.

The technical approach emphasizes mathematically based, normative models to study information systems, as well as the physical technology and formal capabilities of these systems. The behavioral approach, a growing part of the information systems field, does not ignore technology, but tends to focus on non-technical solutions concentrating instead on changes in attitudes, management and organizational policy, and behavior.
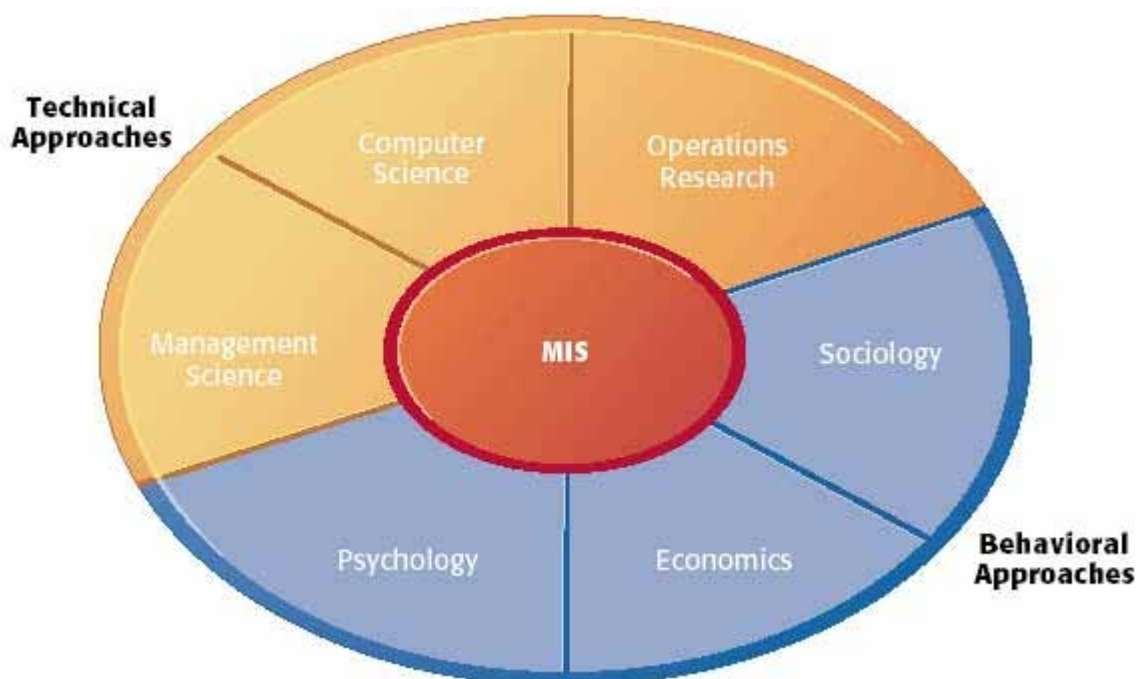
Technology must be changed and designed, sometimes even "de-optimized," to fit organizational and individual needs. Organizations and individuals must also be changed through training, learning, and planned organizational change to allow technology to operate and prosper.
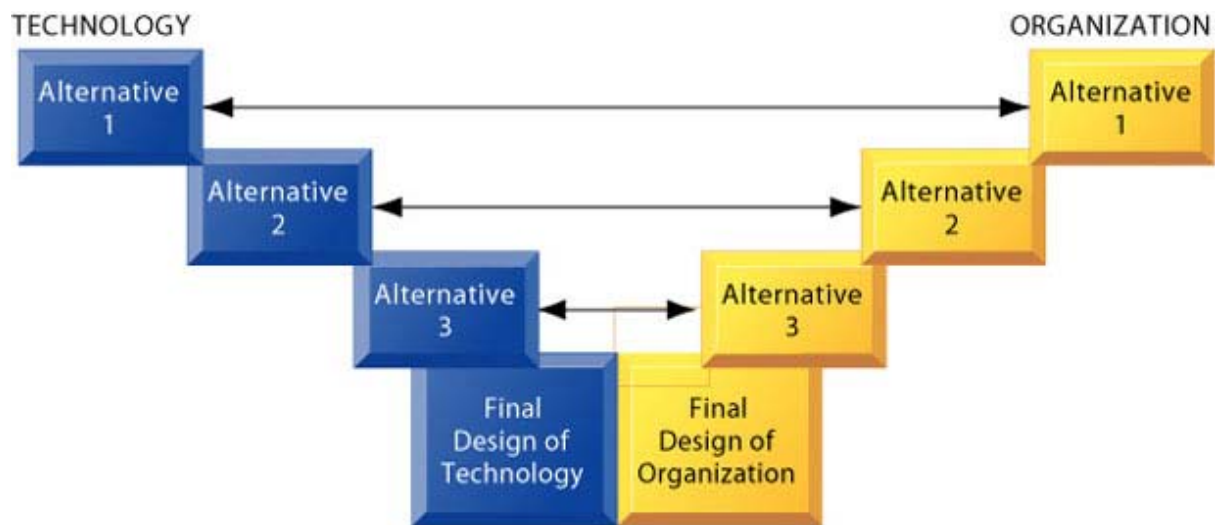
Business Processes and Information Systems
Types of Information Systems

What Is a Business Process?

We have all heard the term process before, but what exactly does it mean? A process is a series of tasks that are completed in order to accomplish a goal. A business process, therefore, is a process that is focused on achieving a goal for a business. If you have worked in a business setting, you have participated in a business process. Anything from a simple process for making a sandwich at Subway to building a space shuttle utilizes one or more business processes.

Processes are something that businesses go through every day in order to accomplish their mission. The better their processes, the more effective the business. Some businesses see their processes as a strategy for achieving competitive advantage. A process that achieves its goal in a unique way can set a company apart. A process that eliminates costs can allow a company to lower its prices (or retain more profit).

Managing Business Process Documentation

As organizations begin to document their processes, it becomes an administrative task to keep track of them. As processes change and improve, it is important to know which processes are the most recent. It is also important to manage the process so that it can be easily updated! The requirement to manage process documentation has been one of the driving forces behind the creation of the *document management system*. A document management system stores and tracks documents and supports the following functions:

- Versions and timestamps. The document management system will keep multiple versions of documents. The most recent version of a document is easy to identify and will be served up by default.
- Approvals and workflows. When a process needs to be changed, the system will manage both access to the documents for editing and the routing of the document for approvals.
- Communication. When a process changes, those who implement the process need to be made aware of the changes. A document management system will notify the appropriate people when a change to a document is approved.

Of course, document management systems are not only used for managing business process documentation. Many other types of documents are managed in these systems, such as legal documents or design documents.

Business Process Management

Organizations that are serious about improving their business processes will also create structures to manage those processes. Business process management (BPM) can be thought of as an intentional effort to plan, document, implement, and distribute an organization's business processes with the support of information technology.

BPM is more than just automating some simple steps. While automation can make a business more efficient, it cannot be used to provide a competitive advantage. BPM, on the other hand, can be an integral part of creating that advantage.

Not all of an organization's processes should be managed this way. An organization should look for processes that are essential to the functioning of the business and those that may be used to bring a competitive advantage. The best processes to look at are those that include employees

from multiple departments, those that require decision-making that cannot be easily automated, and processes that change based on circumstances. To make this clear, let's take a look at an example.

Suppose a large clothing retailer is looking to gain a competitive advantage through superior customer service. As part of this, they create a task force to develop a state-of-the-art returns policy that allows customers to return any article of clothing, no questions asked. The organization also decides that, in order to protect the competitive advantage that this returns policy will bring, they will develop their own customization to their ERP system to implement this returns policy. As they prepare to roll out the system, they invest in training for all of their customer-service employees, showing them how to use the new system and specifically how to process returns. Once the updated returns process is implemented, the organization will be able to measure several key indicators about returns that will allow them to adjust the policy as needed. For example, if they find that many women are returning their high-end dresses after wearing them once, they could implement a change to the process that limits – to, say, fourteen days – the time after the original purchase that an item can be returned. As changes to the returns policy are made, the changes are rolled out via internal communications, and updates to the returns processing on the system are made. In our example, the system would no longer allow a dress to be returned after fourteen days without an approved reason.

Types of Information Systems:

DATA AND INFORMATION
• Data: facts and figures that are not currently being used in a decision process; form of historical records that are recorded and filed without immediate intent to retrieve for decision making
• Information: data that has been retrieved, processed, or otherwise used for informative or inference purposes, argument, or as a basis for forecasting or decision-making

CHARACTERISTICS OF INFORMATION
• Relevance
 • Timeliness
 • Accuracy
• Completeness
 • Summarization
 • Reliability
• Validity
• Consistency

- **Up-to-date**
- **Impartiality**
- **Cost-benefit analysis**
- **Frequency of transmission**

TYPES OF INFORMATION

- **Strategic information:**
- **For long term planning**
- **Top level management**
- **Unstructured**
- **Small volume**
- **Source: external**
- **Difficult to obtain**
- **Tactical information:**
- **For medium term planning to run the business efficiently**
- **Middle level management**
- **Less unstructured**
- **Volume is more than strategic information**
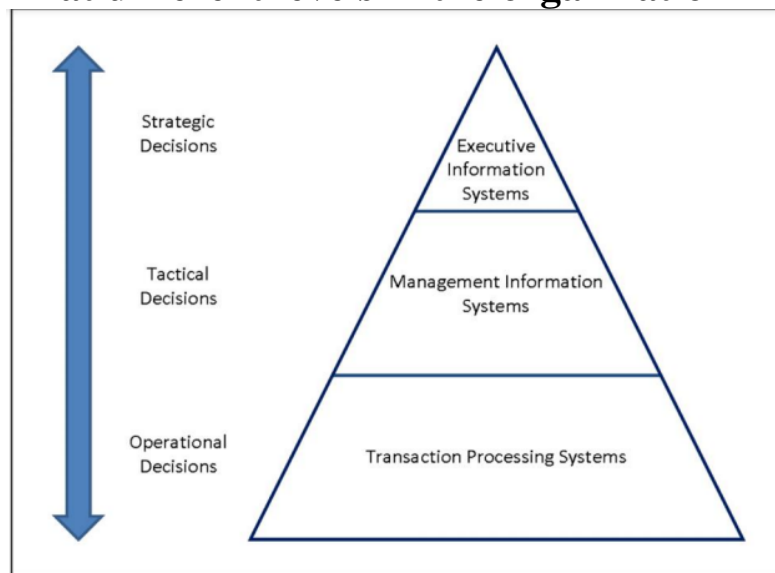- **Source: internal and external**

TYPES OF INFORMATION SYSTEM

1. **Transaction Processing System (TPS)**
2. **Management Information System (MIS)**
3. **Decision Support System (DSS)**
4. **Executive Information System (EIS)**
5. **Expert System (ES)**
6. **Office Automation System**

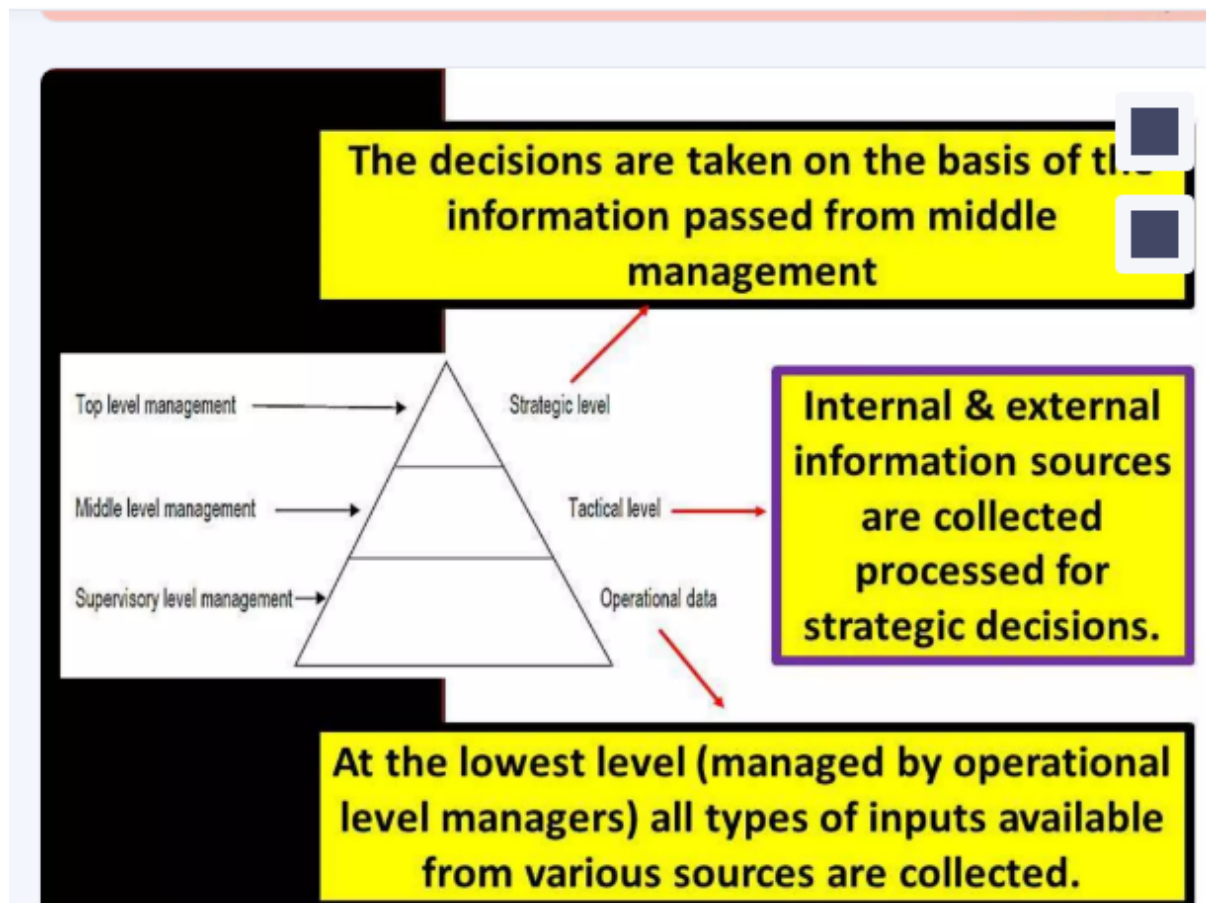# Decision-Making Levels of an Organization

- **Executive level (top)**
- **Long-term decisions**
- **Unstructured decisions**
- **Managerial level (middle)**
- **Decisions covering weeks and months**
- **Semi-structured decisions**
- **Operational level (bottom)**
- **Day-to-day decisions**
- **Structured decisions**

Three level pyramid models based on the type of decisions taken at different levels in the organization

Types of Information System

Operation Support Systems	Management Support Systems	Office Automation System
Transaction Processing Systems (TPS)	Management Information Systems (MIS)	Text Processing Systems (TPS)
Process Control Systems (PCS)	Decision Support Systems (DSS)	Electronic Document Management Systems (EDMS)
Enterprise Collaboration Systems (ECS)	Executive Information Systems (EIS)	Electronic Message Communication Systems (EMCS)
		Teleconferencing & Video-conferencing Systems (TPS)

The decisions are taken on the basis of the information passed from middle management

Internal & external information sources are collected processed for strategic decisions.

At the lowest level (managed by operational level managers) all types of inputs available from various sources are collected.

Top level management → Strategic level
Middle level management → Tactical level
Supervisory level management → Operational data

E-Business, E-Commerce, and E-Government Systems for Collaboration and Social Business

Electronic commerce or e-commerce refers to a wide range of online business activities for products and services.
1- **It also pertains to "any form of business transaction in which the parties interact electronically rather than by physical exchanges or direct physical contact."**
2- **E-commerce is usually associated with buying and selling over the Internet, or conducting any transaction involving the transfer of ownership or rights to use goods or services through a computer-mediated network.**

3- **Though popular, this definition is not comprehensive enough to capture recent developments in this new and revolutionary business phenomenon. A more complete definition is: E-commerce is the use of electronic communications and digital information processing technology in business transactions to create, transform, and redefine relationships for value creation between or among organizations, and between organizations and individuals.**

Three primary processes are enhanced in e-business:

 1. Production processes, which include procurement, ordering and replenishment of stocks; processing of payments; electronic links with suppliers; and production control processes, among others;
 2. Customer-focused processes, which include promotional and marketing efforts, selling over the Internet, processing of customers' purchase orders and payments, and customer support, among others;
3. Internal management processes, which include employee services, training, internal information-sharing, video-conferencing, and recruiting. Electronic applications enhance information flow between production and sales forces to improve sales force productivity.

What are the different types of e-commerce?
The major different types of e-commerce are: business-to-business (B2B); business to-consumer (B2C); business-to-government (B2G); consumer-to-consumer (C2C); and mobile commerce (m-commerce).

What is B2B e-commerce?
B2B e-commerce is simply defined as e-commerce between companies. This is the type of e-commerce that deals with relationships between and among businesses. About 80% of e-commerce is of this type, and most experts predict that B2B ecommerce will continue to grow faster than the B2C segment. The B2B market has two primary components: e-frastructure and e-markets. Efrastructure is the architecture of B2B, primarily consisting of the following:

● logistics - transportation, warehousing and distribution (e.g., Procter and Gamble);

- application service providers - deployment, hosting and management of packaged software from a central facility (e.g., Oracle and Linkshare);
- outsourcing of functions in the process of e-commerce, such as Web-hosting, security and customer care solutions (e.g., outsourcing providers such as eShare, NetSales, iXL Enterprises and Universal Access);
- auction solutions software for the operation and maintenance of real-time auctions in the Internet (e.g., Moai Technologies and OpenSite Technologies);
- content management software for the facilitation of Web site content management and delivery (e.g., Interwoven and ProcureNet);
- Web-based commerce enablers (e.g., Commerce One, a browser-based, XMLenabled purchasing automation software).

What is C2C e-commerce?

Consumer-to-consumer e-commerce or C2C is simply commerce between private individuals or consumers. This type of e-commerce is characterized by the growth of electronic marketplaces and online auctions, particularly in vertical industries where firms/businesses can bid for what they want from among multiple suppliers.

It perhaps has the greatest potential for developing new markets. This type of e-commerce comes in at least three forms:
- auctions facilitated at a portal, such as eBay, which allows online real-time bidding on items being sold in the Web;
- peer-to-peer systems, such as the Napster model (a protocol for sharing files between users used by chat forums similar to IRC) and other file exchange and later money exchange models

What is m-commerce?

M-commerce (mobile commerce) is the buying and selling of goods and services through wireless technology-i.e., handheld devices such as cellular telephones and personal digital assistants (PDAs). Japan is seen as a global leader in m-commerce.

Industries affected by m-commerce include:

- Financial services, including mobile banking (when customers use their handheld devices to access their accounts and pay their bills), as well as

brokerage services (in which stock quotes can be displayed and trading conducted from the same handheld device);

● Telecommunications, in which service changes, bill payment and account reviews can all be conducted from the same handheld device;

● Service/retail, as consumers are given the ability to place and pay for orders on-the-fly;

 ● Information services, which include the delivery of entertainment, financial news, sports figures and traffic updates to a single mobile device.

E-government refers to the use of information systems and technology by government agencies to provide public services and administration at different levels, enhancing efficiency, productivity, and citizen engagement.

E-government refers to services provided by government agencies with the use of information technology, particularly the Internet, so as to simplify the transaction of business and improve the democratic process within the context of government and public administration.[41] It aims at making government digitally interactive with citizens (government-to-citizen, or G2C), with other government agencies (government-to-government, or G2G), with employees (government-to-employees, or G2E), and with business (government-to-business, or G2B). Among its diverse services, data integration and sharing from multiple sources are very relevant to the discussion here about scholarly communication. Data provided by government are widely considered to be authoritative, thus reliable, and on a large scale, consisting of one of the most used sources in scientific studies. One of the purposes of the e-government movement is to make such data accessible to the public.

What is Collaboration? What Is Social Business?

Social business orchestrators (SBO) help social businesses of various sizes to tackle major societal issues by filling gaps in knowledge and resources. However, research has overlooked these types of collaboration. Situated within a bottom of the pyramid (BoP) context in Bangladesh, the current study sheds light on the process of value creation for SBO–social businesses partnerships by comparing different collaboration partners. Multiple case study research through the lens of the relational view was used to ask how SBOs facilitate value creation in social businesses by flexibly adapting

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resource inputs and governance mechanisms to the specific endowment and size of partners; this approach was informed by interviews and field note analyses. The combined deductive–inductive analysis enhances knowledge of idiosyncrasies of SBO–social business collaborations. Our study draws attention to the role of large orchestrators, whose model could be scaled and transferred toothier world regions, including in dustrialised countries.

Business Benefits of Collaboration and Social Business:

Collaboration is a working practice where people or groups work together to attain a shared goal. It is common in businesses, where different departments have different roles, but they cooperate to <u>achieve a goal</u> . For example, collaboration between suppliers, workers, and <u>managers is needed if an organisation</u> offers goods and services. Depending on the nature of the work and mission, the collaboration would be short or long-term, and the relevant people would collaborate in informal or formal groups. Collaboration plays a significant role in <u>improving innovation</u> and communication and increasing efficiency and success. <u>Working as a team</u> gives workers a sense of purpose at work and improves productivity. However, collaboration brainstorming ideas is easier to solve an existing problem or deliver work as required. This leads to increased success, improved communication, increased innovations, and increased work efficiency.

Collaboration and social <u>business systems are essential</u> in business today, where technologies are used to create networking. The <u>nature of work has changed</u> entirely, and jobs need close interaction between the members involved in a group project. These jobs that require interactions are regarded as the most 'professional' jobs, especially in the tertiary sector. Furthermore, in this <u>social business era, Social media</u> platforms such as Twitter, Face book, and other social tools are used because they use high-quality technologies enabling the fulfillment of social business. Collaborative technology uses tools that include <u>instant messaging</u>, shared workspaces and calendars, note-taking on online whiteboards, communities, video conferencing, and live chats.

<u>Business benefits of Collaboration and Social Business</u>
Collaboration and social business are beneficial to any business. For instance, through collaboration and social business, productivity

is **increased through the knowledge** generated when people work together, resulting in higher efficiency. There are fewer chances of errors and a better quality of goods and services is provided, as working together guarantees effective communication and mistakes are corrected on time. Communication reduces time delays and smooth production, resulting in better quality than when the stakeholders do not collaborate.
Also, **creativity and innovation** are attained as crowd wisdom develops. When people collaborate, they **generate ideas**, research, and analyze them, thus learning those fit in their operations. Diversity is also created, increasing the pool of ideas. **Customer service also improves** when collaboration and social business are implemented. Since the stakeholders are united, they identify customers' complaints and concerns and address them fast and efficiently as each party understands his/her role in resolving the issue. Finally, the **businesses perform** better financially as sales increase and production processes are run better, resulting to higher profits.

Tools and Technologies for Collaboration and Social Business

What is social collaboration?

Networking is the standard way business people connect. It's a concept that

has gone on for as long as people have been trading goods and services.

Social collaboration is networking gone digital.

Instead of coming together in the town square or at a networking meeting,

people come together online and work together. You can "meet" people on

LinkedIn, Twitter, or any number of websites and create professional

relationships. People can recommend others for new jobs or contract work

based on these digital-only relationships.

Social collaboration isn't just about networking in the traditional sense of

you- help-me and I'll-help-you in solidifying business deals. It can also be

within an organization where you work together to solve a problem or

create a plan, but do so via electronic media rather than sitting in a conference room.

In 2020 when the pandemic forced many jobs and all external networking to an online realm, social collaboration took off in a new way. Suddenly, it was okay to meet via video conference and do entire project plan discussions via instant messaging.

Whatever your situation, social collaboration is creating networks and solving problems in the digital world.

Benefits of social collaboration

Bloomfire, a company that specializes in social collaboration software, identified five key benefits of social collaboration. They are:

1. Increased understanding of projects throughout the organization. When employees are siloed, they know only what they are working on. Socializing their work helps ensure more employees are aware of the bigger picture.

2. Easier knowledge transfer. When someone leaves an organization, knowledge typically leaves with them. Making their knowledge available to others in a public way minimizes the impact of their departure.

3. Stronger teams. Teams that communicate well do better than those that don't. If you don't believe this, watch a development organization that has institutionalized code review, in which one developer consistently reviews the code of another. Both developers improve through the process, thereby improving the team.

4. A better product. The more that employees socialize their work through collaboration, the better the opportunity for enhancements, and the better

they are able to mitigate potential risks. Personally, I never send out something I've written for work without having a colleague review it. Including this article.

5. **Improved culture.** When people on a team support each other through collaboration, there is less fear of failure because every project is a group project. If you've ever been in a team culture, you know what I'm talking about. It's liberating and empowering at the same time.

Here are some *external* benefits to social collaboration.

1. **Removes geographic limits.** You can quickly contact someone on LinkedIn regardless of their location. You are not limited to people in your town or even in your country. It's easy to connect and collaborate with people who live all over the world. You can develop business relationships with people as well. For instance, these social collaboration tools allow you to find a web designer in Brazil and an administrative assistant in India while you sit in London. The world is the limit.

2. **A better chance for feedback.** If you post your idea on Reddit, you'll get immediate and harsh feedback. While you generally want to keep the polite side of "social" on the collaboration, people who do not know you are often less concerned about your feelings than your immediate coworkers who know and like you–and have important reasons for maintaining a cordial relationship.

Using broader social groups for networking, people will happily tell you what is wrong with your plans–which gives you a chance to fix it, rather than blindly move forward with something unlikely to work.

3. **Expanded water-cooler.** You're no longer limited to your own coworkers for ideas. Scroll through your Twitter feed, and (if you've chosen to follow people in your profession), you'll find ideas on tackling the same problems you face. You'll see solutions and find humor in what you need to accomplish.
In the world of Human Resources, many small companies have HR departments of one or two. Through social collaboration, HR people around the globe can come together in a Facebook group to serve as each other's coworkers. That helps save the company a fortune and relieves headaches for the solo <u>HR generalist</u>.

4. **Discover best practices without formal research.** There will always be a white paper or an article in the Harvard Business Review about best practices in almost all business cases. Still, social collaboration allows you to see things without the help of academics. Read in real-time about what people are doing. Ask questions directly to thought leaders. You no longer have to wait for an academic to interview the VP of HR at IBM; you can send her a message on LinkedIn or ask a question via Quora.

5. **A leveled playing field.** It's not what you know; it's who you know. While this has not gone away, social collaboration has made it possible to "know" more people. You don't have to buy a VIP

backstage ticket to a conference to catch the eye of an industry leader. You don't have to get into Harvard to connect with Harvard grads. Suddenly, there is a lot more access.

Organizations and Information Systems, What Is an organization? Features of Organizations

What is Organization?

An organization is a structured group of individuals who come together with a shared purpose and goals, forming a legal entity such as a company, institution, or association. It serves as a social system that defines formal relationships among people to achieve specific objectives.

Characteristics of Organization

Organizations are systems of people that clearly define each member's roles in the system. The following are the main features that characterize the organizations.

1. **Association of People: An organization brings together individuals who collaborate and work collectively towards a common purpose.**
2. **Common Goals: Members of the organization share specific objectives that they strive to achieve together, guiding their actions and decisions.**
3. **Well-Defined Structure: The organization has a clear and established framework that outlines roles, relationships, and hierarchical levels to facilitate efficient operations.**
4. **Coordinated Activities: Activities within the organization are synchronized and aligned to ensure harmony and effective collaboration among members.**
5. **Communication: Open and effective communication channels are established to enable the exchange of information, ideas, and feedback among members.**
6. **Division of Work: Tasks and responsibilities are assigned and distributed among members based on their skills, expertise, and job roles to optimize efficiency and productivity.**
7. **Environmental Influence: Organizations operate within an external environment that can impact their functioning, requiring them to adapt and respond to changes and influences from the outside world.**
8. **Well-defined Authority and Responsibility Relationships: The organization establishes a clear structure of authority and assigns responsibilities to**

different positions or individuals to ensure accountability and effective decision-making.

9. Continuity: Organizations are designed for longevity and aim for sustainable operations over time, ensuring stability and endurance beyond individual members or specific periods.

10. Rules and Regulations: Organizations implement policies, procedures, and guidelines to provide a framework for behavior, ensure compliance, and maintain ethical standards.

How Do Organizations Work?

An organization works by bringing together a group of people who share common goals and objectives. It operates through a well-defined structure, where tasks and responsibilities are divided among members.

Clear lines of authority and responsibility are established to ensure effective decision-making and accountability. Communication plays a crucial role in facilitating information exchange and coordination among members.

The organization functions within an external environment that can influence its operations and requires adaptation. Rules, regulations, and policies are put in place to guide behavior and maintain ethical standards. Continuity is essential, as organizations aim for long-term sustainability. By aligning the efforts of its members, coordinating activities, and utilizing resources, an organization strives to achieve its objectives and fulfill its mission.

Types of Organization

You can find different types of organizations in the marketplace, but all of them can be categorized into four types. They are formal, informal, profit-oriented, and non-profit-oriented organizations.

These four types of organizations represent different structures, purposes, and approaches to achieving their respective goals, whether they are driven by formal rules and hierarchies, social relationships, profit generation, or the pursuit of social impact.

Formal Organization

A formal organization refers to a structured entity with defined roles, responsibilities, and hierarchical relationships. It operates based on explicit rules, regulations, and procedures.

Formal organizations have clear objectives and employ a systematic approach to achieve them. Examples include corporations, government agencies, and educational institutions.

Informal Organization

An informal organization is a more spontaneous and unofficial network that develops among individuals within a formal organization. It is characterized by social connections, shared interests, and informal communication channels.

Informal organizations can influence decision-making, communication patterns, and work dynamics. They play a crucial role in fostering relationships, collaboration, and a sense of belonging among members.

Profit Organization

A profit organization, also known as a for-profit organization, operates with the primary goal of generating financial profits for its owners or shareholders.

Profit organizations engage in commercial activities and aim to maximize revenue while managing costs. Examples include businesses, corporations, and entrepreneurial ventures.

Non-Profit Organization

A non-profit organization, also called a not-for-profit organization, operates for a specific social, humanitarian, or charitable cause. Unlike profit organizations, the main objective of non-profit organizations is not to generate profits for owners.

Instead, they focus on delivering services, addressing societal needs, and fulfilling their mission. Non-profit organizations rely on donations, grants, and fundraising efforts to support their activities. Examples include charitable foundations, NGOs, and educational or healthcare institutions.

Process of Organization

How organizations are formed? The following 5 are the main steps in the organization's process.

Determination and Classification of Firm's Activities

The first step in the organizing process involves identifying and categorizing the various activities and tasks that need to be performed within the organization. This step helps in understanding the scope of work and the areas that require specific attention.
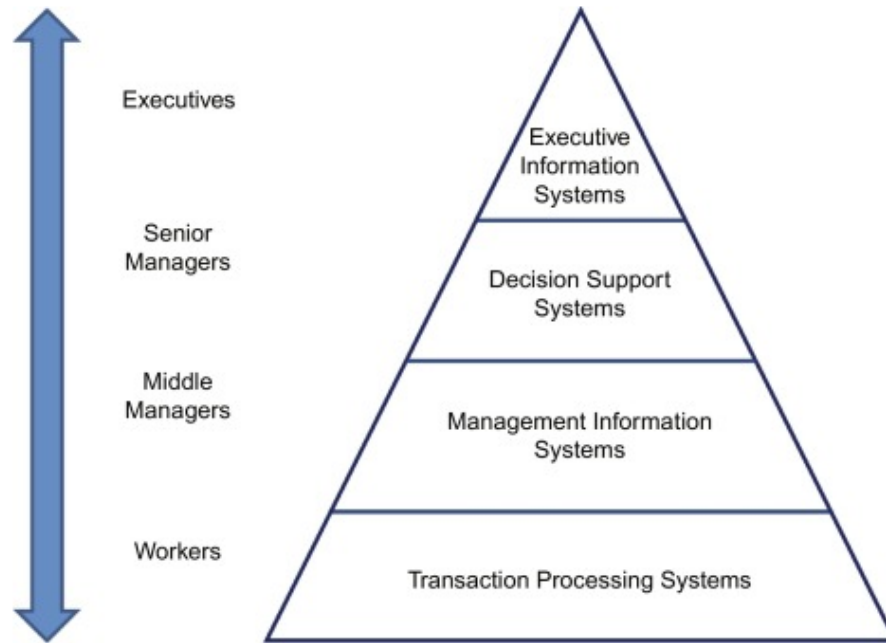
Information systems can be used by organizations to gain a competitive advantage in various ways:

Improved Efficiency: Information systems can automate and streamline many business processes, improving efficiency and reducing costs. This means that organizations can produce goods and services at a lower cost than their competitors, which can be a significant competitive advantage.

Enhanced Customer Service: Information systems enable organizations to collect and analyze data about their customers, allowing them to provide more personalized and responsive customer service. This can lead to increased customer loyalty and retention, which can be a key competitive advantage in many industries.

Product Innovation: Information systems can help organizations to innovate by providing insights into customer preferences, market trends, and emerging technologies. This can help organizations to develop new products and services that meet the changing needs of their customers, giving them a competitive advantage.

Faster Decision-Making: Information systems provide real-time data, analytics, and reporting, enabling organizations to make faster and more informed decisions. This can help organizations to respond quickly to market changes and stay ahead of their competitors.

Supply Chain Optimization: Information systems can optimize the supply chain by improving inventory management, reducing lead times, and

minimizing waste. This can help organizations to reduce costs, increase productivity, and improve customer satisfaction, all of which can provide a competitive advantage.

In conclusion, information systems can be a powerful tool for organizations to gain a competitive advantage in their industries by improving efficiency, enhancing customer service, fostering innovation, enabling faster decision-making, and optimizing the supply chain.

Features of Organizations for a successful information systems

All modern organizations share certain characteristics. They are bureaucracies with clear-cut divisions of labor and specialization. Organizations arrange specialists in a hierarchy of authority in which everyone is accountable to someone and authority is limited to specific actions governed by abstract rules or procedures. These rules create a system of impartial and universal decision making. Organizations try to hire and promote employees on the basis of technical qualifications and professionalism (not personal connections). The organization is devoted to the principle of efficiency: maximizing output using limited inputs. Other features of organizations include their business processes, organizational culture, organizational politics, surrounding environments, structure, goals, constituencies, and leadership styles. All of these features affect the kinds of information systems used by organizations.

Routines and Business Processes

1. All organizations, including business firms, become very efficient over time because individuals in the firm develop routines for producing goods and services. Routines—sometimes called standard operating procedures—are precise rules, procedures, and practices that have been developed to cope with virtually all expected situations. As employees learn these routines, they become highly productive and efficient, and the firm is able to reduce its costs over time as efficiency increases. For instance, when you visit a doctor's office, receptionists have a well-developed set of routines for gathering basic information from you, nurses have a different set of routines for preparing you for an interview with a doctor, and the doctor has a well-developed set of routines for diagnosing you. Business processes are collections of such routines. A business firm, in turn, is a collection of business processes

2. Organizational Politics

People in organizations occupy different positions with different specialties, concerns, and perspectives. As a result, they naturally have divergent viewpoints about how resources, rewards, and punishments should be distributed. These differences matter to both managers and employees, and they result in political struggles for resources, competition, and conflict within every organization. Political resistance is one of the great difficulties of bringing about organizational change—especially the development of new information systems. Virtually all large information systems investments by a firm that bring about significant changes in strategy, business objectives, business processes, and procedures become politically charged events. Managers who know how to work with the politics of an organization will be more successful than less- skilled managers in implementing new information systems. Throughout this book, you will find many examples where internal politics defeated the best- laid plans for an information system.

3. Organizational Culture

All organizations have bedrock, unassailable, unquestioned (by the members) assumptions that define their goals and products. Organizational culture encompasses this set of assumptions about what products the organization should produce, how it should produce them, where, and for whom. Generally, these cultural assumptions are taken totally for granted and are rarely publicly announced or discussed. Business processes—the actual way business firms produce value—are usually ensconced in the organization's culture.

4. Organizational Environments

Organizations reside in environments from which they draw resources and to which they supply goods and services. Organizations and environments have a reciprocal relationship. On the one hand, organizations are open to and dependent on the social and physical environment that surrounds them. Without financial and human resources—people willing to work reliably and consistently for a set wage or revenue from customers—organizations could not exist. Organizations must respond to legislative and other requirements imposed by government as well as the actions of customers and competitors. On the other hand, organizations can influence their environments. For example, business firms form alliances with other businesses to influence the political process; they advertise to influence customer acceptance of their products.

5. Organizational Structure

The kind of information systems you find in a business firm—and the nature of problems with these systems—often reflects the type of organizational structure. For instance, in a professional bureaucracy such as a hospital, it is not unusual to find parallel patient record systems operated by the administration, another by doctors, and another by other professional staff such as nurses and social workers. In small entrepreneurial firms, you will often find poorly designed systems developed in a rush that quickly outgrow their usefulness. In huge multidivisional firms operating in hundreds of locations, you will frequently find there is not a single integrating information system, but instead each locale or each division has its own set of information systems.

6. Other Organizational Features

Organizations have goals and use different means to achieve them. Some organizations have coercive goals; others have utilitarian goals (e.g., businesses). Still others have normative goals (universities, religious groups). Organizations also serve different groups or have different constituencies, some primarily benefiting their members, others benefiting clients, stockholders, or the public. The nature of leadership differs greatly from one organization to another—some organizations may be more democratic or authoritarian than others. Another way organizations differ is by the tasks they perform and the technology they use. Some organizations perform primarily routine tasks that can be reduced to formal rules that require little judgment (such as manufacturing auto parts), whereas others (such as consulting firms) work primarily with no routine tasks.

How Information Systems Impact Organizations and Business Firms Using Information Systems to Achieve Competitive Advantage
Porter's Competitive Forces Model

How Information Gives You Competitive Advantage:
The information revolution is sweeping through our economy. No company can escape its effects. Dramatic reductions in the cost of obtaining, processing, and transmitting information are changing the way we do business.

Most general managers know that the revolution is under way, and few dispute its importance. As more and more of their time and investment capital is absorbed in information technology and its effects, executives have a growing awareness that the technology can no longer be the exclusive territory of EDP or IS departments. As they see their rivals use information for competitive advantage, these executives recognize the need to become directly involved in the management of the new technology. In the face of rapid change, however, they don't know how.

This article aims to help general managers respond to the challenges of the information revolution. How will advances in information technology affect competition and the sources of competitive advantage? What strategies should a company pursue to exploit the technology? What are the implications of actions that competitors may already have taken? Of the many opportunities for investment in information technology, which are the most urgent?

To answer these questions, managers must first understand that information technology is more than just computers. Today, information technology must be conceived of broadly to encompass the information that businesses create and use as well as a wide spectrum of increasingly convergent and linked technologies that process the information. In addition to computers, then, data recognition equipment, communications technologies, factory automation, and other hardware and services are involved.

The information revolution is affecting competition in three vital ways:
It changes industry structure and, in so doing, alters the rules of competition.
It creates competitive advantage by giving companies new ways to outperform their rivals.
It spawns whole new businesses, often from within a company's existing operations.

We discuss the reasons why information technology has acquired strategic significance and how it is affecting all businesses. We then describe how the new technology changes the nature of competition and how astute companies have exploited this. Finally, we outline a procedure managers can use to assess the role of information technology in their business and to help define investment priorities to turn the technology to their competitive advantage.

- # Information technology and organizations influence one another
  - ## Complex relationship influenced by organization's
    - **Structure**
    - **Business processes**
    - **Politics**
    - **Culture**
    - **Environment, and**
    - **Management decisions**

Organizations and Information Systems

THE TWO-WAY RELATIONSHIP BETWEEN ORGANIZATIONS AND INFORMATION TECHNOLOGY

This complex two-way relationship is mediated by many factors, not the least of which are the decisions made—or not made—by managers. Other factors mediating the relationship include the organizational culture, structure, politics, business processes, and environment.
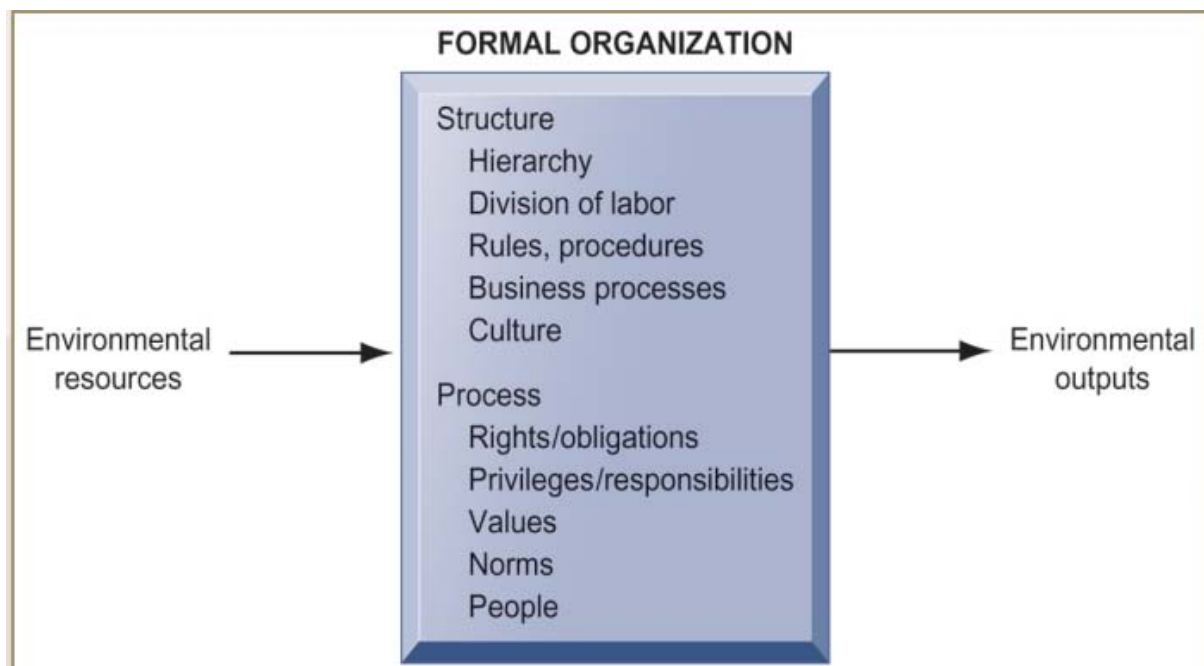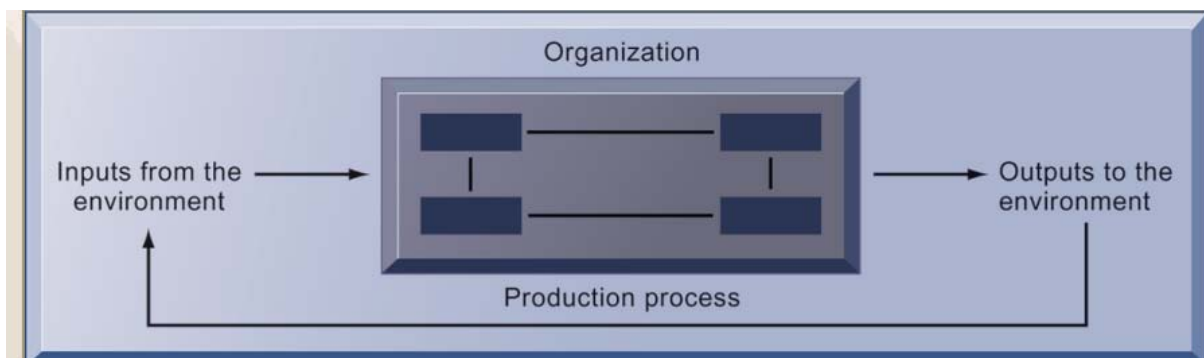
FIGURE 3-1

Mediating Factors
Environment
Culture
Structure
Business Processes
Politics
Management Decisions

Organizations

Information Technology
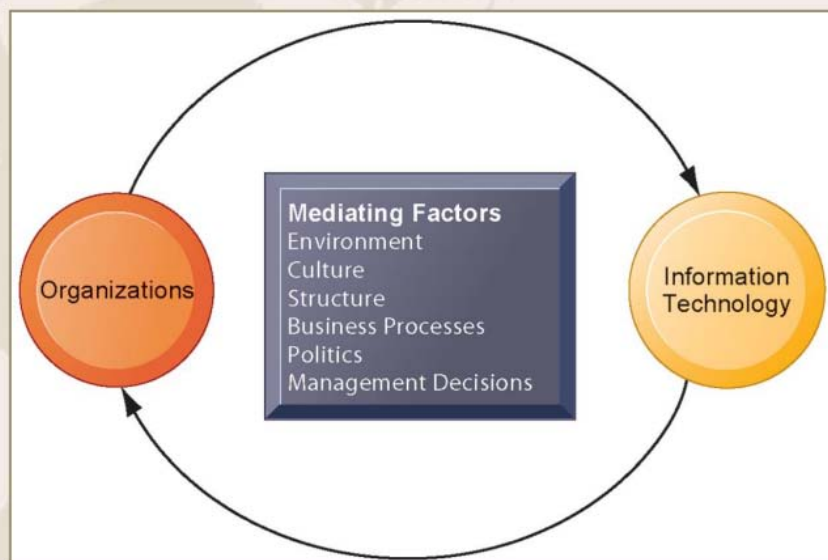
• What is an organization?
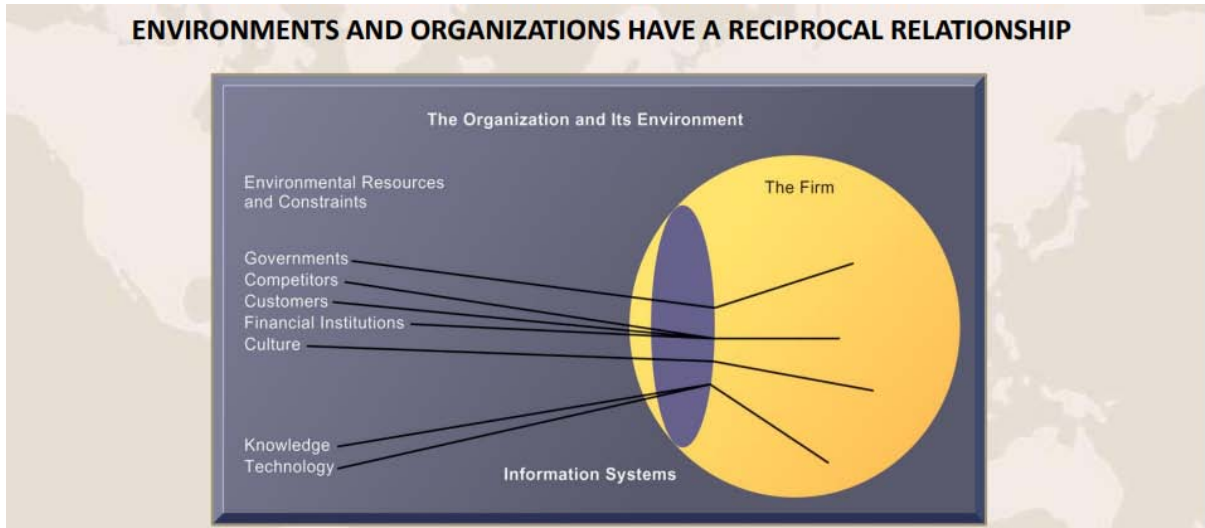
– Technical definition:

- Stable, formal social structure that takes resources from environment and processes them to produce outputs
- A formal legal entity with internal rules and procedures, as well as a social structure

– Behavioral definition:

- A collection of rights, privileges, obligations, and responsibilities that is delicately balanced over a period of time through conflict and conflict resolution
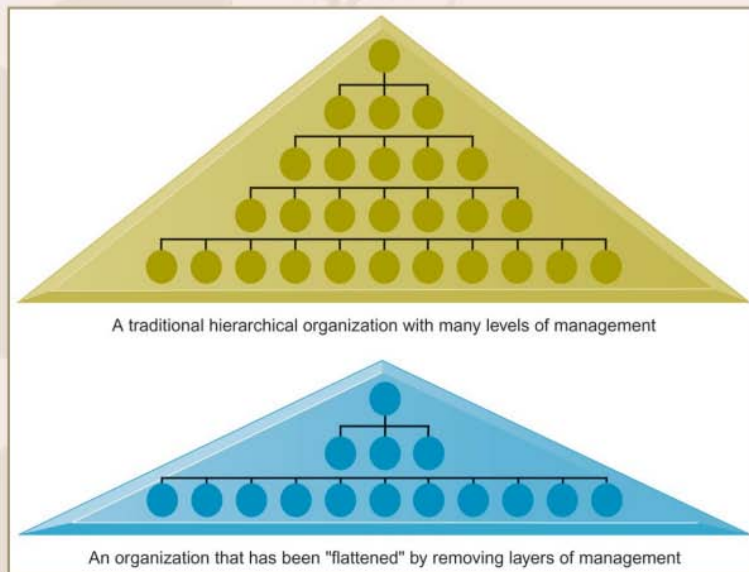
ENVIRONMENTS AND ORGANIZATIONS HAVE A RECIPROCAL RELATIONSHIP

The Organization and Its Environment

Environmental Resources and Constraints

The Firm

Governments
Competitors
Customers
Financial Institutions
Culture

Knowledge
Technology

Information Systems

FLATTENING ORGANIZATIONS

Information systems can reduce the number of levels in an organization by providing managers with information to supervise larger numbers of workers and by giving lower-level employees more decision-making authority.

FIGURE 3-8

A traditional hierarchical organization with many levels of management

An organization that has been "flattened" by removing layers of management

The Internet's Impact on Competitive Advantage
Understanding Ethical and Social Issues Related to Systems
Five Moral Dimensions of

The Information Age:

Understanding Ethical Practices in Business

Imagine walking into a bustling office where employees seem genuinely happy to be there. You might wonder what the secret sauce is for such a vibrant workplace culture. It turns out that understanding ethical practices in business is often the foundation for that kind of environment. Companies that prioritize ethics not only attract top talent but also see increased productivity and employee loyalty. According to a recent study, businesses that invest in ethical training and practices tend to outperform their peers by a staggering 20% in overall profitability. This shift not only nurtures a positive company image but also fosters trust with stakeholders and customers alike.

Social and Ethical Perspective

One effective way to ensure that ethical standards are understood and upheld within an organization is through psychometric testing for potential hires and existing employees. By using a streamlined approach to assess personality traits and ethical decision-making skills, businesses can identify individuals who align with their core values. Tools like Psico smart offer cloud-based solutions for conducting psychometric assessments, paving the way for informed hiring decisions and employee development. When businesses incorporate these ethical practices into their operational model, they are essentially investing in their future—creating not only a more harmonious workplace but also one that thrives in an increasingly competitive market.

What is Business Ethics?

Business ethics refers to the set of principles or standards that govern the moral conduct of business. It is concerned with the relationship between the techniques, practices, and objectives of an organization. Business ethics says that businesses have to be honest with themselves and society.

The Role of Corporate Social Responsibility:

Have you ever thought about how much power a corporation can wield beyond just profits? Imagine a company that not only thrives financially but also invests in the well-being of its community, environment, and employees. This is the essence of Corporate Social Responsibility (CSR). In today's world, where consumers are more informed and concerned about ethical practices than ever, companies that embrace CSR often stand out in the marketplace. They are not just seen as businesses but as champions of social good, which can significantly boost their brand loyalty and reputation.

Additionally, CSR isn't merely a nice-to-have; it's becoming a crucial part of business strategy. According to a study by Harvard Business Review, companies that actively pursue social and environmental initiatives see a boost in profitability. For instance, integrating tools that enhance employee evaluation and development, like psychometric testing solutions, can ensure you have a workforce that is not only competent but aligned with the company's values. By implementing comprehensive assessment systems from providers such as Psico smart, businesses can ensure their teams are equipped to contribute positively to their social goals while also thriving in their roles. The role of responsibility in the corporate realm is evolving, and those who adapt will undoubtedly reap the rewards.

Building Trust through Transparency:

Imagine walking into a workplace where everyone seems to wear a mask, hiding their true thoughts and feelings. The atmosphere is thick with uncertainty, and you can't help but wonder: how can we foster real collaboration and innovation in such an environment? Building trust through transparency is crucial, especially in today's world, where honesty can set a team apart from the rest. When organizations openly share their decision-making processes, goals, and even challenges, they create a culture where employees feel valued and invested. This not only boosts morale but also enhances performance and loyalty. Did you know that companies with high transparency levels can increase employee retention by up to 50%? That's a statistic worth pondering!

Now, consider what role technology plays in this quest for transparency. Tools like cloud-based software can streamline communication and provide access to real-time data, reinforcing a culture of openness. For instance, using systems that apply psychometric and technical assessments can help ensure that everyone is on the same page regarding skills and expectations, making it easier to trust each other's capabilities. Platforms that give employees insights into their progress and how it aligns with team objectives foster a sense of community and shared purpose. In a world

where talent is at a premium, remember that transparency isn't just a strategy—it's the foundation for building lasting trust within your organization.

Advantages and Disadvantages of an Ethical Perspective:

An ethical perspective on business looks to ensure that company operations are conducted in a way that contributes to the greater good of society and the world. This means pursuing goals, such as environmental sustainability and social responsibility that are part of a company's core values and what it stands for. It also requires setting up policies and establishing practices at the company level. The main advantage of this perspective is that it can lead to increased revenue and customer loyalty by promoting organizational values in a genuine way that aligns with customers' expectations.

Benefits of Business Ethics:

- **Draws more investors towards the business: Investors are a big part of any business for growth and raising funds. If the investors of an organization realize that the company they are working with is working ethically and prioritizes high morale in the business, they will feel safe knowing that their money is being used responsibly and for good purposes. Also, they can feel comfortable knowing that they are not entering into anything unethical indirectly. Besides, companies with strong ethics get more attention from investors.**
- **Provide a competitive advantage in terms of customers: Like investors, customers are also a huge part of a business as they are the reason for the sales and revenue of a <u>company</u>. When an organization behaves ethically, it can gain customer loyalty and attract them to their goods and services. It ultimately helps the business in fulfilling its profit-earning motive.**
- **Enhance a company's reputation: A company behaving ethically can create a positive image in the eyes of the public, which can help the business retain its existing customers by ensuring them that they are spending their hard-earned money on an ethical business and bringing in new customers. Besides, today's world is highly social, and dissatisfied customers can easily and quickly give reviews about the negative experience and unethical behaviour of the business, which can be bad for the company and its growth.**
- **Stronger collaboration: Team members or staff of the company working together on business ethics has respect for each other, which leads them to work together effectively. The practice of ethics not only creates a good**

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work environment, but also helps the members collaborate and bring productivity.

- Avoid lawsuits: Behaving ethically may be expensive for an organization, but unethical behavior can be more expensive as an organization involved in unethical practices may face lawsuits and will have to pay huge fines.

Key Technology Trends That Raise Ethical Issues:

Technology is rapidly transforming the way we access, use and convey information. While it offers immense benefits and continues to evolve, it is imperative to consider the ethical implications of the developments. As we continue to embrace new technologies, we need to explore the importance of ethics in technology and potential consequences of not considering ethical issues. From data security issues, to the impact of artificial intelligence on jobs and society, there are a wide range of ethical concerns that require addressing in order to successfully use technology to our advantage. Ethics play an important role in the business world and ethical decision making and practices could be key for business success in today's tech-driven world.

Why is ethics important in technology?

Ethics in technology plays an important in today's worlds as it ensures that technology is used appropriately to benefit the society, without any unintended consequences and bias. It ensures accountability and builds trust between companies, individuals and, governments enabling the effective adoption of technology.

Ethical issues in technology:

While businesses face several ethical challenges owing to the ever-evolving technologies and its fast-paced implementation, it is critical that they ensure personal data is protected and used appropriately. While there could be several ethical issues, here are some of the important ones:

1. Misuse of personal data
With businesses gathering huge amount of our personal data from various internet sites such as shopping sites, social media or any other business platforms, etc., misuse of personal information becomes one of the primary ethical concerns. While companies extract the information to personalize our experiences, to understand what kind of products consumers are looking for, what type of content are we interested in, or just to reach out to a larger customer base. However having access to all our personal

information could also be considered as a breach to our right to privacy and can lead to negative circumstances such as data breaches and cyberattacks. In some cases, our personal data can be misused for targeted advertising, shared with third-party partners.

2. Spread of misinformation

With information/news being available real-time thanks to constant access to the internet, there are high chances of it being misinterpreted or simply spread without fact checking. This kind of inaccurate or distorted information is capable of causing havoc in the society. Information that's being freely spread on the internet does not undergo any validation and therefore carries high chances of turning into misinformation. With deepfake technology coming into picture, even videos cannot be claimed to be real and truthful. This technology allows manipulation of digital images, giving an output that may have never happened. Deepfake technology also carries a lot of ethical concerns such as misuse of identity or privacy invasion.

3. Lack of accountability

When it comes to ways in which businesses operate, often there are third-parties and shared technology involved. There arises confusion about which party is responsible for data governance. For concerns on big data, cybersecurity and other data being used by both parties, there is usually a lack of responsibility or even awareness. While ideally, businesses need to share these responsibilities collectively to ensure data security.

4. Liability for autonomous technology

From robotic surgeons to self-driving cars or unmanned drones for delivery, all come with ethical concerns. While from the business perspective, it holds immense potential, however allowing programmed technology to control itself without human oversight can be concerning. Some level of human intervention is always needed for safety and ethical purposes.

5. Artificial Intelligence (AI) bias & accountability

AI is yet another transformative technology that has a huge potential, however it also comes with its own set of ethical issues. AI technologies such as facial recognition, health tracking etc. result in risking our personal data and has the possibility of being misused. Another ethical issue AI poses is the concern of bias as AI algorithms are based on training data that tend to have a human bias; therefore AI has the issue of inheriting the bias of its creators.

Ways to manage ethical issues in technology
Some basic ways which companies can adopt to handle ethical issues in technology are:

(a) Identify ethical issues
Companies can carry out ethical assessments and identify potential ethical risks while implementing any new technology. This way they can mitigate risks and address ethical concerns proactively.
(b) Develop ethical guidelines
Organizations that develop and use technology can establish certain guidelines to maintain the ethical standards while using that technology. Main areas that need to be covered while creating these guidelines are data security, privacy, and transparency.
(c) Work on creating an ethical culture
Companies can work towards creating an ethical culture by focusing on values that encourage ethical use of technology. They should work on educating and training employees on promoting transparency.

Apart from these basic steps, encouraging discussions involving employees, developers, and users can help promote ethical decision-making. Additionally, it is important to regularly review and evaluate technology, conduct audits, take feedback from users, thereby helping organizations keep track of usage of technology. Therefore, ethical issues in technology can be successfully managed to an extent via a multifaceted approach.

ETHICS IN AN INFORMATION SOCIETY:

Ethics is a concern of humans who have freedom of choice. Ethics is about individual choice: When faced with alternative courses of action, what is the correct moral choice? What are the main features of ethical choice?

Basic Concepts: Responsibility, Accountability, and Liability

Ethical choices are decisions made by individuals who are responsible for the consequences of their actions. Responsibility is a key element of ethical action. Responsibility means that you accept the potential costs, duties, and obligations for the decisions you make. Accountability is a feature of systems and social institutions: It means that mechanisms are in place to determine who took responsible action, who is responsible. Systems and institutions in which it is impossible to find out who took what action are inherently incapable of ethical analysis or ethical action. Liability extends

the concept of responsibility further to the area of laws. Liability is a feature of political systems in which a body of laws is in place that permits individuals to recover the damages done to them by other actors, systems, or organizations. Due process is a related feature of law-governed societies and is a process in which laws are known and understood and there is an ability to appeal to higher authorities to ensure that the laws are applied correctly.

These basic concepts form the underpinning of an ethical analysis of information systems and those who manage them. Information technologies are filtered through social institutions, organizations, and individuals. Systems do not have impacts by themselves. Whatever information system impacts exist are products of institutional, organizational, and individual actions and behaviors. Second, responsibility for the consequences of technology falls clearly on the institutions, organizations, and individual managers who choose to use the technology. Using information technology in a socially responsible manner means that you can and will be held accountable for the consequences of your actions. Third, in an ethical, political society, individuals and others can recover damages done to them through a set of laws characterized by due process.

Ethical Analysis

when confronted with a situation that seems to present ethical issues, how should you analyze it? The following five-step process should help.

1. **Identify and describe clearly the facts.** Find out who did what to whom, and where, when, and how. In many instances, you will be surprised at the errors in the initially reported facts, and often you will find that simply getting the facts straight helps define the solution. It also helps to get the opposing parties involved in an ethical dilemma to agree on the facts.

2. **Define the conflict or dilemma and identify the higher-order values involved.** Ethical, social, and political issues always reference higher values. The parties to a dispute all claim to be pursuing higher values (e.g., freedom, privacy, protection of property, and the free enterprise system). Typically, an ethical issue involves a dilemma: two diametrically opposed courses of

action that support worthwhile values. For example, the chapter-ending case study illustrates two competing values: the need to protect citizens from terrorist acts and the need to protect individual privacy.

3. **Identify the stakeholders. Every ethical, social, and political issue has stakeholders: players in the game who have an interest in the outcome, who have invested in the situation, and usually who have vocal opinions (Smith, 2003). Find out the identity of these groups and what they want. This will be useful later when designing a solution.**

4. **Identify the options that you can reasonably take. You may find that none of the options satisfy all the interests involved, but that some options do a better job than others. Sometimes arriving at a good or ethical solution may not always be a balancing of consequences to stakeholders.**

5. **Identify and describe clearly the facts. Find out who did what to whom, and where, when, and how. In many instances, you will be surprised at the errors in the initially reported facts, and often you will find that simply getting the facts straight helps define the solution. It also helps to get the opposing parties involved in an ethical dilemma to agree on the facts.**

Five Moral Dimensions of the Information Age

The major ethical, social, and political issues raised by information systems include the following moral dimensions:

- **Information rights and obligations. What information rights do individuals and organizations possess with respect to information about themselves? What can they protect? What obligations do individuals and organizations have concerning this information?**

- **Property rights and obligations. How will traditional intellectual property rights be protected in a digital society in which tracing and**

accounting for ownership are difficult and ignoring such **property rights is so easy?**

- **Accountability and control. Who can and will be held accountable and liable for the harm done to individual and collective information and property rights?**

- **System quality. What standards of data and system quality should we demand to protect individual rights and the safety of society?**

- **Quality of life. What values should be preserved in an information- and knowledge-based society? Which institutions should we protect from violation? Which cultural values and practices are supported by the new information technology?**

The right to information and privacy : balancing rights and managing conflicts

right to privacy and the right to information are both essential human rights in the modern information society. For the most part, these two rights complement each other in holding governments accountable to individuals. But there is a potential conflict between these rights when there is a demand for access to personal information held by government bodies. Where the two rights overlap, states need to develop mechanisms for identifying core issues to limit conflicts and for balancing the rights. This paper examines legislative and structural means to better define and balance the rights to privacy and information.

Importance of data privacy:

Privacy is one of the most important consumer protection issues as technology continues to expand, more information is digitalised, and more measures exist to collect data. Businesses and apps often store data, such as this information:

- **Name**
- **Birth date**
- **Address**
- **Email**
- **Phone number**
- **Credit card or bank details**
- **Information on health and activities**

Security defined

Security involves measures taken to be protected from danger, threat, or harm. It often refers to safety. In the digital world, cybersecurity is typically the protection of data and sensitive information against potential breaches or leaks, often at the hands of cybercriminals or hackers. Security is the act of keeping your private information and data secure, and ensuring it is not accessed by any un authorized sources. Cyber security can involve a number of tools and methods, including these:

- **Firewalls**
- **Network limitations**
- **Security software**
- **User authentication**
- **Internal security measures**

Property Rights Intellectual Property:
What is Intellectual Property?

Intellectual property (IP) refers to creations of the mind, such as inventions; literary and artistic works; designs; and symbols, names and images used in commerce.

IP is protected in law by, for example, <u>patents</u>, <u>copyright</u> and <u>trademarks</u>, which enable people to earn recognition or financial benefit from what they invent or create. By striking the right balance between the interests of innovators and the wider public interest, the IP system aims to foster an environment in which creativity and innovation can flourish.

What are intellectual property rights?

Intellectual property rights are the rights given to persons over the creations of their minds. They usually give the creator an exclusive right over the use of his/her creation for a certain period of time.

Intellectual property rights are customarily divided into two main areas:
a)

The rights of authors of literary and artistic works (such as books and other writings, musical compositions, paintings, sculpture, computer programs and films) are protected by copyright, for a minimum period of 50 years after the death of the author.
Also protected through copyright and related (sometimes referred to as "neighbouring") rights are the rights of performers (e.g. actors, singers and musicians), producers of phonograms (sound recordings) and broadcasting organizations. The main social purpose of protection of copyright and related rights is to encourage and reward creative work.
b)

Industrial property can usefully be divided into two main areas:

- One area can be characterized as the protection of distinctive signs, in particular trademarks (which distinguish the goods or services of one undertaking from those of other undertakings) and geographical indications (which identify a good as originating in a place where a given characteristic of the good is essentially attributable to its geographical origin).

  The protection of such distinctive signs aims to stimulate and ensure fair competition and to protect consumers, by enabling them to make informed choices between various goods and services. The protection may last indefinitely, provided the sign in question continues to be distinctive.

- Other types of industrial property are protected primarily to stimulate innovation, design and the creation of technology. In this category fall inventions (protected by patents), industrial designs and trade secrets.

  The social purpose is to provide protection for the results of investment in the development of new technology, thus giving the incentive and means to finance research and development activities.

A functioning intellectual property regime should also facilitate the transfer of technology in the form of foreign direct investment, joint ventures and licensing.

The protection is usually given for a finite term (typically 20 years in the case of patents).

While the basic social objectives of intellectual property protection are as outlined above, it should also be noted that the exclusive rights given are generally subject to a number of limitations and exceptions, aimed at fine-tuning the balance that has to be found between the legitimate interests of right holders and of users.

E-commerce: Digital Markets, Digital Goods E-commerce and the Internet

Despite the fact that digital marketing is an essential component of e-commerce, the two are, by definition, distinct. Although they are so intertwined, it is difficult to determine where one ends and the other begins. But first, let's get an overview of the most important factors that distinguish e-commerce from digital marketing.

E-Commerce vs. Digital Marketing Overview

E-Commerce

- A digital store for purchasing products or services.
- There are different types of e-commerce available.
- All the transactions take place online between the consumer and the supplier.

Digital Marketing

- Utilizes technology to interact with and reach consumers.
- Used to market products and services to customers.
- Helps increase sales by directing more traffic to where it is needed.

E-commerce refers to an online store where products and services can be purchased, whereas digital marketing is the method used to drive the necessary traffic to these stores in order to increase sales. Now that you have a general understanding of the two terms, let's examine the most crucial details you should know about each.

What Are the Three Types of E-Commerce?

There are many <u>different types of e-commerce</u>, but the three main types are:

- **Business-to-Business (B2B) The exchange of one business's products or services for another business's products or services.**
- **Business-to-Consumer (B2C) The sale of a business's products or services to a consumer.**
- **Consumer-to-Consumer (C2C) The exchange of one consumer's products or services for another consumer's products or services.**

Benefits of E-Commerce

There are a number of distinct <u>advantages of e-commerce</u> for both the seller and the buyer. These include:

Buyer

- **Accessibility: The product is accessible 24 hours a day, seven days a week.**
- **Flexibility: Products are available for purchase from anywhere in the world.**
- **Choice: Have access to an extensive selection of products.**
- **Assurance: Able to conduct product research at their leisure.**
- **Quicker buying process: Save time and effort searching for what they need while shopping online.**

Seller

- **Low cost: Establish an internet-based business that can be operated from any location.**
- **Little to no overheads: No need to pay for inventory, as it will be shipped as orders are received.**
- **No overstocks: Pay only for the products that are sold.**

- **Faster response to the market:** Easily keep up with trends and modify products and services.
- **Cost-efficient promotion:** Social media allows free audience targeting. Cheaper advertising.

What Is Digital Marketing?

Digital marketing is the promotion and advertising of a brand with the objective of connecting a business with prospective customers. This is made possible through the use of the Internet, cutting-edge technology, and other digital communication methods.

What Is a Digital Marketing Strategy?

Digital marketing is a plan that analyzes how the budget, manpower, and time can be integrated to create the most effective marketing campaign for a business and is achieved through the following steps.

Digital Marketing Strategy Steps

1. Define a set of goals.
2. Establish a budget to develop a schedule.
3. Research the target audience.
4. Develop a strategy for each channel.
5. Implement and monitor its success.
6. Modify if needed.

Benefits of Digital Marketing

There are numerous benefits to digital marketing. These consist of:

- **Timeliness:** It allows brands to reach their target audience with the right message at the right time.
- **Specific targeting:** Increased brand awareness and greater customer engagement through targeted advertising.
- **Develop brand loyalty:** By publishing relevant content to your audience more frequently, your brand will be able to expand more quickly.
- **Wide-reach:** It offers a wonderful opportunity to advertise your business and services to a potentially infinite audience.

- **Improve customer loyalty: It enables you to share the latest trends and news with your audience via social media and email.**

5 Advantages of E-Commerce in 2024

1. **Enhanced Customer Experience**

The advantages of e-commerce to consumers mainly deal with user experience and convenience. Not only can customers shop whenever and wherever, but they also have more options to compare products and prices. From reviews to detailed product descriptions, customers can access a range of information.

Whether it be the convenience of shopping from home, the 24/7 availability, or access to a wider range of products that simply aren't available downtown, more and more people are preferring to shop online over traditional brick-and-mortar stores.

2. E-commerce Benefits Businesses

Businesses can use conversion and tracking technologies to monitor how their customers use their websites. This can provide insight into their customers' shopping behaviors, which can then be used to <u>personalize the shopping experience</u> for each customer with more relevant product suggestions and personalized offers. This can boost sales and revenue by building customer loyalty and increasing customer satisfaction.

Social media and multi-channel strategies, such as <u>email marketing</u>, offer extended reach and loyalty for businesses to approach potential customers and talk to current ones. These strategies can assist e-commerce enterprises in increasing sales by raising brand awareness.

» Leveraging social media? Find out <u>if Facebook or TikTok ads for e-commerce are best</u>

3. Businesses Can Target a Global Audience

Rather than being subject to the limitations of a finite localized customer base, e-commerce grants budding and established online stores the ability to reach an international customer base - meaning anybody with an internet connection is now a potential customer.

4. E-commerce Benefits the Government Sector

It's not only customers and businesses that can reap rewards. Since the operation of e-commerce can minimize paperwork and make it easier to organize paper-based information, it also benefits the government sector. Increased resources and efficiency mean that delivering public services, like education and healthcare, is a more achievable outcome.

5. Fewer Overheads and More Savings

No rent, no building or contents insurance, and fewer staff wages all mean that <u>e-commerce expenses</u> are comparatively less and the stores are cheaper to establish and maintain. These savings are great for business owners and also a tremendous bonus for customers as the savings are reflected in product and service costs.

Disadvantages of E-Commerce in 2024

1. **No Brick-and-Mortar Store to Browse Through**

One of the major disadvantages of digital business and online shopping is that customers can not see the product in real life. For example, if you're selling clothing and accessories, customers won't be able to try on an item first to make sure it fits. If they're unhappy with the product, it could lead to refunds, returns, and bad reviews.

2. Shipping Times

Unlike in-person shopping, customers don't get the product immediately. In fact, shipping times are one of the worst technical disadvantages of e-commerce to consumers. While same-day shipping is offered as an option by some online businesses, customers typically receive their orders locally within 2-7 days, while international shoppers have to wait between 2-4 weeks. Additionally, shipping costs can be a costly drawback. It's up to you to balance customer satisfaction with business expenses and decide what percentage, if any, of the shipping costs will be covered by you.

» Learn <u>how to improve your e-commerce order fulfillment process</u>

3. No Sales During a Site Crash

Sure, you'll have the advantage of being open round the clock, but one of the more technical disadvantages of e-commerce includes site crashes. If your site

unexpectedly goes down, you won't be able to process any sales. Worse yet, potential customers won't even be able to browse your product range and wish list items for later purchase.

4. Inflation concerns

With <u>26%</u> of small business owners stating inflation is their biggest concern in operating their businesses, it's unsurprising that post-pandemic inflation has led to consumers becoming more careful with their spending.

E-commerce businesses can adjust to account for inflation by adjusting their product offerings. For example, they may choose to focus on selling lower-priced items or offering more sales and discounts to attract price-sensitive consumers. However, these adjustments can negatively impact e-commerce businesses, as they may lead to decreased profit margins and increased competition with other businesses.

E-commerce and the Internet:

E-commerce, short for electronic commerce, has witnessed a transformative journey over the past few decades. What began as a novel experiment has now become an integral part of our daily lives. E-commerce has not only revolutionized the way we shop but has also transformed the business landscape. This article explores the evolution of e-commerce, its impact on society, and the trends shaping its future. In the rapidly evolving landscape of commerce, the internet has emerged as a transformative force, reshaping traditional business models and giving rise to the era of ecommerce. This article explores the dynamic relationship between ecommerce and the internet, delving into key aspects that have defined this digital revolution.

THE ECOSYSTEM OF E-COMMERCE

E-commerce is a complex ecosystem with various players, including online marketplaces, payment processors, logistics companies, and digital marketing agencies. These players work in tandem to create a seamless shopping experience for consumers. Innovations in areas like payment processing and last-mile delivery have been critical to the growth of e-commerce.

CHALLENGES AND CONCERN

Despite its many benefits, e-commerce faces challenges. Cybersecurity and data privacy issues have become increasingly important as online transactions have grown. Counterfeiting, fraud, and online scams are also areas of concern. Additionally, some worry about the environmental impact of e-commerce, particularly the packaging and delivery processes.

FUTURE TRENDS

E-commerce is continually evolving, and several trends are shaping its future:
1. Personalization: Businesses are using data and AI to offer highly personalized shopping experiences.
2. Sustainability: Consumers are becoming more environmentally conscious, leading to a rise in eco-friendly e-commerce practices.
3. Augmented Reality (AR) and Virtual Reality (VR): These technologies are being used to enhance the online shopping experience, allowing customers to virtually try on products.
4. Voice Commerce: The integration of voice-activated devices like Amazon's Alexa is making it easier for consumers to shop with just their voice commands.
5. Global Expansion: E-commerce is crossing borders, allowing businesses to access international markets more easily.

DIGITAL REVOLUTION

The shift from mechanical and analogue electronic technology to digital electronics as a means of storing, transferring and utilising information is credited as the starting point of what we refer to as the digital revolution.
It began in the second half of the 20th century with the adoption and proliferation of digital computers and digital storage of information, which in turn led to the development of more advanced computer systems able to digitally replicate and automate previously manually performed mathematical calculations.

INTERNET

The internet is rightly called the highway that has managed to erase the borders between countries and societies and taken the human society to a different level altogether. Today millions of users access and use the internet for various purposes throughout the day. They use the internet for searching, browsing, writing & communication, listening, watching news, videos, publishing copying, printing, discussions, trading and selling.

Concepts in E-commerce Types of E-Commerce E-Commerce Business Models:

- **Business to Consumer (B2C)**
- **Business to Business (B2B)**
- **Business to Government (B2G)**
- **Business to Business to Consumer (B2B2C)**
- **Consumer to Consumer (C2C)**
- **Consumer to Business (C2B)**

eCommerce business models
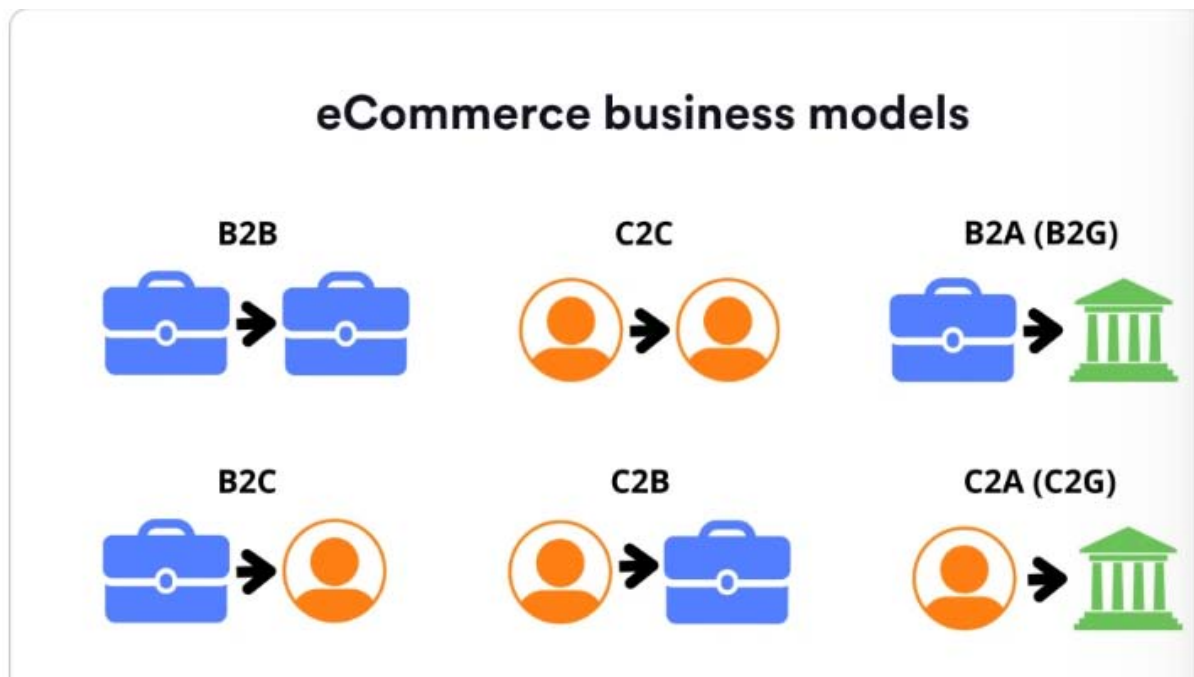
What Is an Ecommerce Business Model in 2024?

An ecommerce business model refers to how a business operates to sell goods and services online. There are quite a few types of ecommerce business models.

For example, we have:

Business-to-Government (B2G)

Business-to-Business (B2B)

Business-to-Consumer (B2C)

Consumer-to-Consumer (C2C)

Consumer-to-Business (C2B)
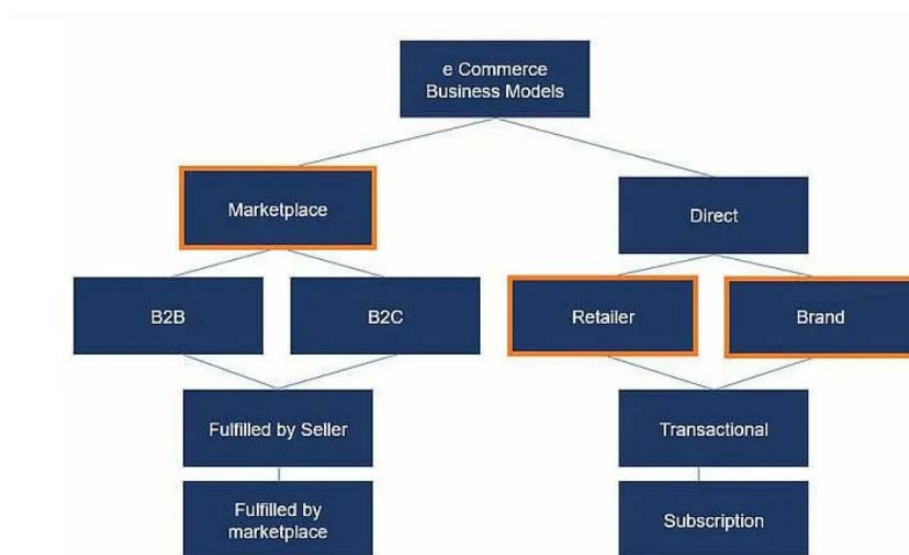**Business-to-Business-to-Consumer (B2B2C)**
Direct-to-Consumer (D2C)
Hybrid

In order to find the right ecommerce model for your business, you need to define two things.

Firstly, you will have to define who you will sell to and then define how you will position what you have to sell. Then, figure out your ecommerce business plan. This will define how you will attract customers and how they will engage with your product.

Secondly, figure out your delivery framework by assessing what will work best for your ecommerce business.

4 Types of **E-Commerce Business Models**

1. Business to Consumer (B2C)

2. Business to Business (B2B)

3. Consumer to Consumer (C2C)

4. Consumer to Business (C2B)

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