**English For Reading and Communication Skill**

**“Reading Strategies for Information Systems”**



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# PREFACE

Assalamu'alaikum Warahmatullahi Wabarakaatuh.

Alhamdulillahirabbil'alamin,

Praise Our gratitude to the Lord of the universe, namely Allah SWT for all the blessings that have been given to us so that we can complete the paper titled Reading Strategies for Information Systems. Shalawat and Salam we send to the Prophet Muhammad SAW who has brought us to a time full of knowledge. We would like to thank Mrs. Renggi Vrika, M.Pd for her clear directions and instructions that helped us in completing our paper. This paper follows conventional academic structure and employs clear, objective language with precise word choice. We would like to express our gratitude to our parents and friends for their support during the completion of this paper.

The paper examines reading strategies in the context of information systems, covering the definitions of information systems, data, and information, as well as the challenges of reading in the field of information systems.

We acknowledge that there may be some limitations in this paper, and we welcome constructive criticism and suggestions from readers to help us improve it.

Padang, 4th March 2024

Author

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# CHAPTER I INTRODUCTION

## Background

In today's landscape of technology-driven advancements, information systems have become integral components of various professional fields(Mukherji, 2002). Navigating the vast array of information within these systems requires a heightened level of comprehension and strategic reading skills. This research is dedicated to exploring and elucidating tailored reading strategies that are essential for information systems professionals.

The exploration begins by establishing a basic understanding of information systems, delving into their core components and functionalities. Recognizing the importance of a nuanced understanding of information systems is imperative for individuals involved in decision making and operational efficiency(Abu Salim et al., 2020).

An emphasis is placed on exploring the role of information literacy within the broader context of information systems. Investigating how information literacy contributes to the effective use of these systems serves as a critical aspect of this research.

Distinguishing between data and information, understanding the structural organization of information, and unraveling the processes involved in information handling are crucial dimensions of this study. Goals such as identifying user needs, locating specific information, and improving decision-making efficiency underscore the practical applications of effective reading strategies within information systems.

To provide practical insights, the research presents reading strategies tailored for information systems professionals. Techniques such as skimming, scanning, and deep reading are presented to enable individuals to effectively navigate the complexities of information(Aritonang et al., 2019).

In addition, the study emphasizes the importance of understanding technical terminology and fundamental concepts within the information systems field. Overcoming the challenges associated with technical language and utilizing additional resources such as glossaries and FAQs are explored as strategies to enhance information comprehension(Xie et al., 2019).

## Problem Statements

* Professionals in Information Systems lack tailored reading strategies, hindering effective information comprehension and utilization.
* Existing literature emphasizes information literacy but lacks practical approaches for efficient information processing in Information Systems.

## Objective

* Provide a structured framework with tailored reading strategies for Information Systems professionals.
* Enhance information literacy and decision-making efficiency within Information Systems.

# CHAPTER II DISCUSSION

## Information System

### Definition of Information Systems

Information Systems (IS) is a complex field that involves managing and processing information efficiently. It includes hardware components such as computers, networks, and servers, as well as software applications, databases, and specialized procedures tailored to meet organizational needs. The elements collaborate to form a complex ecosystem with the goal of capturing, storing, processing, and distributing information effectively. This approach ensures that information systems not only support but also significantly enhance various organizational operations. It fosters a dynamic and technologically-driven environment where information becomes a strategic asset for informed decision-making and operational excellence.(Abu Salim et al., 2020).

### The Importance of Understanding Information Systems

* + Operational Efficiency:

Information Systems are integral to streamlining day-to-day operations, automating routine tasks, and ensuring that processes are executed with precision and speed. This enhances operational efficiency, reduces errors, and optimizes resource utilization.

* + Adaptability in the Digital Era:

Proficiency in Information Systems is paramount for organizations to adapt to the dynamic and rapidly evolving digital landscape. It involves leveraging technology trends, understanding emerging tools, and incorporating innovative solutions to stay competitive.

* + Informed Decision-Making:

A deep understanding of Information Systems equips individuals with the ability to extract meaningful insights from data, facilitating informed decision-making. This is vital for strategic planning, resource allocation, and achieving organizational goals.

* + Resource Utilization Optimization:

Information Systems contribute to optimal resource utilization by providing real-time data, enabling organizations to allocate resources efficiently, reduce wastage, and enhance overall productivity.

### The Role of Information Literacy in Information Systems

* + Navigating the Information Landscape:

Information literacy involves adeptly navigating the vast information landscape within Information Systems. This includes understanding the architecture of databases, repositories, and information flow within the organization.

* + Critical Evaluation of Information Sources:

Information literacy requires individuals to critically evaluate information sources. This involves assessing the credibility, reliability, and relevance of data, ensuring that informed decisions are based on high-quality information.

* + Ethical Application of Knowledge

Beyond technical proficiency, information literacy emphasizes ethical considerations. This involves understanding and adhering to ethical guidelines when accessing, using, and disseminating information within an organizational context.

* + Holistic Skill Development

Information literacy extends beyond technical skills, encompassing critical thinking, problem-solving, and effective communication. These holistic skills are essential for interpreting and applying information effectively in various organizational scenarios.

## Types of Information in Information Systems

### Data vs. Information

In Information Systems, the fundamental distinction between data and information lies in their state of processing and usability. Data constitutes the raw, unprocessed elements that lack intrinsic meaning on their own. For instance, consider a dataset of numerical values or a string of characters devoid of context. These are data points awaiting interpretation and organization(Zemmouchi-Ghomari, 2022).

On the contrary, information is the outcome of processing data, transforming it into a structured and meaningful form. Take, for instance, the transformation of raw numerical data through calculations, resulting in insights such as averages or trends. In this way, information emerges as data imbued with context, relevance, and purpose, providing actionable knowledge within the operational context of Information Systems.

### Information Structure in Systems

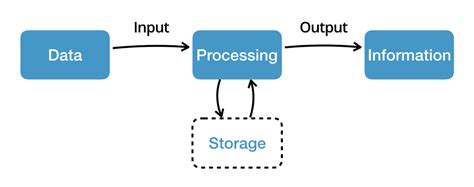
The structure of information within Information Systems plays a pivotal role in ensuring efficient organization, retrieval, and management of information. Organization and Storage involve systematically arranging data in databases or other storage systems. For instance, a Customer Relationship Management (CRM) system may organize customer information by categories such as name, contact details, and purchase history. This structured approach facilitates streamlined access and management of data.

Hierarchical Arrangement further enhances organization by categorizing information in a hierarchical order. An organizational chart, for example, hierarchically arranges employee information based on roles and reporting relationships. This not only simplifies navigation but also provides a logical categorization of organizational data.

Establishing Relational Links between different pieces of information within systems is another crucial aspect. In a relational database, tables may be linked through common identifiers, allowing for the retrieval of related information. This relational structure enhances the interconnectedness and accessibility of information, contributing to a more coherent and comprehensive system.

### . Information Processing

The processing of information within Information Systems involves a series of stages that transform raw data into meaningful insights and information, here are the explanation of those stages:



* Collection and Input

Information Systems collect raw data from various sources. For example, a point-of-sale system collects data about sales transactions, including items purchased, prices, and timestamps. This raw data serves as the initial input.

* Processing and Transformation

Once collected, data undergoes processing to transform it into usable forms. Using algorithms, the sales transaction data can be processed to calculate total revenue, analyze sales patterns, and identify popular products. This transformation stage turns raw data into meaningful insights.

* Storage and Retrieval

Processed information is systematically stored. In a database, the sales transaction information may be stored with attributes like date, product, and quantity. This organized storage allows for efficient retrieval when querying for specific information.

* Output and Presentation

The final stage involves presenting the processed information in a comprehensible format. For instance, a sales report or a graphical representation of sales trends can be generated. These outputs facilitate decision-making by providing stakeholders with clear and actionable insights.

## Objectives of Reading System Information

In the complex landscape of Information Systems, the objectives of reading system information extend beyond routine data extraction, embodying a strategic approach to knowledge utilization for organizational success(Abu Salim et al., 2020). Here are some objective of reading in information systems:

### Identifying User Needs

Understanding and addressing user needs stand as primary objectives in reading system information. This involves a meticulous process of recognizing and comprehending the specific information requirements of diverse stakeholders within the Information System.

For instance, in a Customer Relationship Management (CRM) system, the objective is to discern the needs of sales representatives concerning customer interactions and preferences. Subsequently, the focus shifts to tailoring the delivery of information within the system, ensuring that dashboards, reports, or alerts are configured to match the identified needs. This customization ensures that relevant and timely information is readily accessible, contributing to a more user-centric Information System.

### Finding Solutions or Specific Information

The objective of finding solutions or specific information revolves around utilizing the Information System as a problem-solving tool. This entails leveraging the system's capabilities to address challenges, answer queries, or locate critical details. Effective achievement of this objective requires robust querying and search capabilities within the Information System. Users should be empowered to input specific criteria or questions, and the system should adeptly retrieve pertinent information. In a logistics Information System, for instance, the objective might involve finding optimal transportation routes to enhance efficiency and reduce costs. This underscores the system's role as a dynamic resource for problem resolution and information retrieval.

### Enhancing the Efficiency and Effectiveness of Decision Making

The goal of reading system information is to elevate the efficiency and effectiveness of decision-making processes within the organization. This is realized by ensuring that decision-makers have access to accurate, timely, and relevant information. For example, in a financial Information System, executives benefit from real-time financial reports and forecasts, contributing to more informed decision-making regarding investments or budget allocations.

To achieve this objective, Information Systems often integrate with decision support tools. These tools, encompassing analytics, data visualization, and predictive modeling capabilities, empower decision-makers to analyze complex information and make strategic choices. In a marketing Information System, integration with analytics tools facilitates optimizing campaigns based on performance data. This integration exemplifies the symbiotic relationship between Information Systems and decision support mechanisms, enhancing the overall efficacy of organizational decision-making.

## Reading Strategies for Information Systems

Effective utilization of Information Systems necessitates the employment of purposeful reading strategies. These strategies, encompassing skimming, scanning, and in-depth reading, are pivotal for extracting valuable insights and making informed decisions within the vast landscape of information.

### Skimming

Skimming stands as a fundamental reading strategy, serving the purpose of swiftly filtering through a large volume of information. In the context of Information Systems, skimming involves a rapid overview of content to grasp the main ideas and identify key elements.

This strategy is particularly valuable when faced with extensive reports, documents, or datasets. Skimming allows users to get a sense of the overall structure, identify headings, and discern the relevance of information. For instance, when encountering a lengthy technical document within an Information System, skimming aids in quickly gauging the topics covered, enabling users to determine if further exploration is warranted.

### Scanning

Scanning is a targeted reading strategy employed when searching for specific information within a document or dataset. In the realm of Information Systems, scanning involves systematically moving through the content to locate particular keywords, phrases, or data points. This strategy is particularly useful when users have specific queries or when seeking precise details within a comprehensive dataset.

For example, in a database management system, scanning may involve searching for specific entries in a large dataset or quickly reviewing tables to identify relevant information. Scanning ensures a focused and efficient approach to information retrieval, saving time and facilitating the extraction of pertinent data.

### In-depth Reading

In-depth reading is a comprehensive strategy aimed at gaining a profound understanding of specific information. This approach involves a meticulous examination of content, often requiring a more substantial time investment. Within Information Systems, in-depth reading is employed when a thorough understanding of complex concepts, detailed reports, or critical information is paramount.

For instance, when delving into the documentation of a new software system, in-depth reading ensures a comprehensive grasp of functionalities, specifications, and potential implications. This strategy is essential for acquiring nuanced insights, understanding the intricacies of information, and making well-informed decisions within the context of Information Systems.

## Understanding Key Terms and Concepts

In the landscape of Information Systems, a foundational element for effective engagement is the profound understanding of key terms and fundamental concepts. This knowledge is integral for users to navigate, interpret, and leverage information within the complex realm of Information Systems.

### The Importance of Understanding Technical Terms

The comprehension of technical terms holds significant importance within Information Systems. Technical terminology constitutes the language of this domain, and a solid understanding ensures clear communication and interpretation of information. In the context of Information Systems, technical terms may include jargon specific to software, hardware, networking, and data management.

For instance, grasping terms such as "API," "firewall," or "data encryption" is crucial for users to interpret system functionalities, troubleshoot issues, and effectively collaborate with IT professionals. The importance of understanding technical terms extends beyond mere communication—it underpins the ability to make informed decisions, troubleshoot technical challenges, and contribute meaningfully to discussions within the Information Systems landscape.

### Familiarity with Basic Concepts in Information Systems

Familiarity with basic concepts in Information Systems forms the groundwork for a holistic understanding of the field. This involves grasping overarching principles, structures, and processes that define Information Systems' functionality. Basic concepts may include understanding the components of a database, recognizing the principles of network architecture, or comprehending the lifecycle of software development.

This familiarity ensures that users have a conceptual framework to navigate the Information Systems environment. For example, understanding the concept of "database normalization" is essential for those dealing with data management, as it influences the organization and efficiency of data storage. Familiarity with basic concepts provides a solid foundation for users to engage meaningfully with Information Systems, make informed decisions, and adapt to evolving technological landscapes.

## Overcoming Challenges in Reading Technical Information

Effectively navigating technical information poses challenges that require strategic approaches. Overcoming these challenges involves not only deciphering complex technical language but also utilizing additional resources and establishing effective communication with Information Technology (IT) professionals.

### Handling Technical Language

One of the primary challenges in reading technical information is grappling with specialized and often intricate technical language. Technical documents, manuals, or system documentation can be filled with terminology that may be unfamiliar to non-specialists. Handling technical language requires a systematic approach, including the use of context clues, breaking down complex terms into understandable components, and seeking additional explanations when necessary. For instance, encountering acronyms like "SQL" or terms such as "algorithm" may be challenging for those less familiar with technical jargon. In this context, readers must employ strategies like referring to glossaries, contextualizing terms within the document, or seeking external explanations to ensure a comprehensive understanding of technical language.

### Utilizing Additional Resources (Glossary, FAQ, etc.)

To overcome challenges in understanding technical information, users can leverage supplementary resources that accompany documentation. Glossaries, Frequently Asked Questions (FAQs), and other support materials often accompany technical documents and provide clarifications on terms and concepts. For example, a glossary may provide concise definitions of technical terms, while FAQs can address common queries and challenges faced by users. Effectively utilizing these additional resources not only aids in clarifying technical language but also streamlines the learning process, offering users quick references to enhance their comprehension and address specific challenges they may encounter.

### Communicating with Information Technology Professionals

Establishing effective communication with Information Technology (IT) professionals is a key strategy for overcoming challenges in reading technical information. In situations where the complexity of technical content surpasses individual comprehension, seeking guidance from IT experts becomes invaluable. This communication may involve reaching out to IT support teams, system administrators, or other specialists who can provide insights, explanations, and guidance. Collaborating with IT professionals not only facilitates a deeper understanding of technical information but also fosters a collaborative environment where users can gain tailored assistance and insights based on their specific needs and challenges.

# CHAPTER III CONCLUSION

Proficiency in reading, understanding, and navigating technical challenges is essential in the dynamic landscape of Information Systems. It starts with grasping foundational concepts and terminologies and recognizing the pivotal role of Information Systems in organizational processes. Efficient utilization and decision-making require discerning the distinction between raw data and processed insights. Therefore, it is crucial to understand the types of information. User-centric objectives prioritize tailoring information delivery, effective querying, and integration with decision support systems to meet specific needs.

Strategic reading, which includes skimming, scanning, and in-depth approaches, empowers users to optimize information consumption. Proficiency in technical language and familiarity with key concepts form the foundation for effective communication and decision-making within the technological realm of Information Systems. Navigating technical information requires handling complex language, utilizing resources, and communicating effectively with IT professionals. Strategies such as breaking down technical language, leveraging glossaries, and seeking expert guidance empower users to overcome obstacles.

In conclusion, a comprehensive approach to Information Systems integrates knowledge, strategic reading, and adept navigation of technical challenges. Proficiency in clear and objective language is a strategic asset in the contemporary digital era, where information systems play a pivotal role in achieving organizational excellence

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