



## Implementation of an Integrated Management Information System to Create Business Efficiency

Awan Setiawan

Universitas Langlangbuana, Bandung, Indonesia

Email: [awans2425@gmail.com](mailto:awans2425@gmail.com)

### ABSTRACT

This research aims to investigate and analyze the application of Integrated Management Information Systems (IMIS) in the context of business organizations with the aim of increasing operational efficiency and resource management. This research uses a qualitative approach with descriptive methods. The research results show that the implementation of an Integrated Management Information System (IMIS) makes a positive contribution to business efficiency. With good integration between information systems, companies can optimize operational processes, reduce redundancy, and improve information flow. In addition, IMIS also supports faster and more accurate decision making, enabling companies to respond to market changes more efficiently. The research results also highlight the benefits of IMIS in strengthening relationships with customers through holistic access to customer information. This integration also helps in managing company resources efficiently and improves information security. In conclusion, IMIS implementation is a relevant and effective strategy in increasing the company's competitiveness and operational efficiency.

*Keywords: Integrated Management Information System, Efficiency, Business*

### INTRODUCTION

Efficient and effective information management has become a central challenge in the turbulent contemporary business era. Companies, both large and small, must cope with the ever-increasing flood of data, process it quickly, and use it for better decision making (Anggraeni & Maulani, 2023). In an effort to achieve this goal, management information systems (MIS) become a critical foundation. MIS plays a vital role in the collection, storage, processing and distribution of information relevant to an organization. However, with technological developments and increasing business complexity, expanding this concept towards Integrated Management Information Systems (IMIS) is becoming increasingly important (Harahap & Nasution, 2023).

IMIS development is one approach that has emerged as a solution to increase business efficiency and support better decision making (Arisuniarti, 2016). IMIS integration includes combining various information systems in various departments or functions into one integrated platform. This provides benefits in the form of faster and easier access to comprehensive information, minimizing data redundancy, and improving interdepartmental coordination (Hariyanto, 2016).

A deep understanding of how IMIS can be implemented effectively will help organizations overcome the challenges of managing information in this digital era. IMIS will provide new views and innovative solutions to increase business efficiency, promote better decision making, and respond to the changing dynamics in the global business environment (Ismail, 2004).

Management Information Systems (MIS) is an entity that involves a combination of information technology, procedures, and human roles that interact with each other to collect, store, manage, and provide access to relevant information to organizational leaders (Suryadharma et al., 2019). The main goal is to provide critical support in better decision making. In an increasingly complex and dynamic business context, the importance of an effective and integrated MIS becomes increasingly apparent (Wijoyo, 2021).

The development of Integrated Management Information Systems (IMIS) has become the main focus in efforts to achieve higher operational efficiency, better responsibility to customers, and better ability to adapt to market changes (Salwa & Nasution, 2023). IMIS not only allows organizations to optimize their internal processes, but also facilitates the integration of information from different departments or functions. In this way, IMIS creates an environment where information can flow smoothly, supporting faster and more precise decision making (Laratmase, 2023).

In facing growing business challenges, IMIS development is also key in increasing organizational competitiveness in the global market. The ability to integrate and analyze data from multiple sources provides a competitive advantage, enabling organizations to respond to market changes more proactively.





Therefore, IMIS development is not only an investment in operational efficiency, but also an important strategy to achieve long-term sustainability and success amidst ever-growing business complexity.

## METHOD

This research is a type of qualitative research which aims to explore problems that arise in a social context, referring to the theoretical framework explained by Moleong (2014). The methodological approach used in this research is focused on an in-depth understanding of the experiences of research subjects, which includes behavior, perception, motivation for action, and other aspects. This method focuses on holistic descriptions using language and words as a medium for analysis. This research is descriptive in nature, with the aim of providing a clear picture of a particular situation, event, population or area. This descriptive approach is supported by the concept of Anggito & Setiawan (2018), which explains that descriptive research aims to systematically, factually and accurately describe the facts and relationships of the phenomena being investigated. In the process, all collected data is analyzed and organized to compile research findings which are then presented in the form of scientific writing. Thus, this research adopts a descriptive approach to provide a comprehensive picture of the topic being researched.

### Management information System

Management Information Systems (MIS) are resources from an organization that provide information to groups of managers with similar needs (Gilman, 1977). Information can span the past, present and future. Information is also available in all kinds of computer output forms and can be used by anyone, managers or non-managers, in solving problems. Mc. Leod (2004) states that SIM is one of the five main subsystems of CBIS whose aim is to meet the general needs of all managers in a company or organizational subunit of a company. Subunits can be based on functional areas or management levels. All functional information systems can be viewed as a system of various input subsystems, databases and output subsystems.

SIM is a reflection of the attitude of executives who want changes in the availability of computer facilities for solving company problems. And when this SIM is in the desired place and function, the SIM will help managers and other users in the company identify and understand problems. All the information above can provide a definition of SIM, namely a computer-based system that can provide, serve and provide information for several users with similar needs (Sharp et al., 2001).

Today the MIS concept is so well accepted that managers in functional areas are starting to incorporate software and data into systems to meet their own needs. Marketing blazed the trail, followed by manufacturing and finance. Most attention is currently focused on the executive level and human resource functions (Laudon & Laudon, 2013). Effective methods are needed to provide senior executives with information. Stacks of paper transaction information or ineffective access to the transaction information system. Techniques are available to estimate executive function, determine the function and extent of EIS and implement it. To be successful, senior managers must focus on the problem and use the right tools and people and approach the right side (Sharma & Thakur, 2015).

Breaking away from the traditional approach requires Executive Information Systems and executive support systems to display user-friendly interfaces and emphasize database retrieval. Executives can drill down to a more detailed level. Information is needed by management to avoid the entropy process. The entropy process is the process of ending the existence of a management system which is preceded by a patternless and uncertain condition. Information is the result of data processing that can be used as a basis for decision making. Data as raw material for information is a description of events in the form of certain characters, numbers or symbols that have meaning.

### Company Efficiency

Efficiency is one way for companies to manage financial resources, materials, processes, equipment, labor and costs effectively. Efficiency can be interpreted as a situation where the greatest benefit can be achieved from a certain sacrifice, where to obtain a certain benefit requires as little sacrifice as possible (Palupi, 2017). Efficiency is an effort to achieve maximum performance by using available possibilities (materials, machines and people) in the shortest possible time, under real conditions (as long as those conditions can change) without disturbing the balance between objective factors, tools, energy and time (Aminah & Andriyani, 2020). Efficiency is the best comparison between a result and its effort. This comparison can be seen from the following two aspects:





- a. Results An activity can be called efficient, if an effort provides maximum results. Maximum in terms of quality or number of units of output.
- b. Effort An activity can be said to be efficient if a certain result is achieved with minimum effort, including five elements: mind, physical energy, time, space and objects (including money).

According to Ghiselli & Brown, quoted by Ibnu Syamsi, the term efficiency has a definite meaning, namely indicating a comparison between output and input. Companies with efficient operations do not waste resources. An operation is inefficient if the company expends resources in excess of the required amount.

## RESULTS AND DISCUSSION

It is important to understand why integration in Management Information Systems (MIS) is so crucial in the modern business context. In this digital era, companies face the challenge of managing data originating from various sources, such as sales, production, finance, marketing and human resources. Without efficient integration, this data tends to become fragmented within different departmental "silos," leading to access difficulties, and even potential contradictions. This condition creates serious obstacles in decision making, because company leaders find it difficult to have a comprehensive picture of organizational performance. With an integrated Management Information System, data from various sources can be consolidated and analyzed together.

This provides a deeper understanding of overall business operations, allowing company leaders to make more informed and informed decisions. Through efficient integration, integrated MIS facilitates cross-departmental collaboration, breaks down data isolation, and enables management teams to see the big picture of all aspects of the business. This creates better operational sustainability, increases efficiency in resource use, and helps companies to be more responsive to market changes. Therefore, integration in MIS is not just a technology, but also a foundation for better decision making, targeted business strategies, and successful adaptation in a dynamic business environment.

The importance of Integrated Management Information Systems (IMIS) on company efficiency can be described as follows:

### 1. Business Process Optimization

Integrated Management Information Systems (IMIS) play a crucial role in improving a company's operational efficiency. Better integration between various information systems from different departments or functions allows companies to streamline their business processes. With IMIS, redundancy in data collection and processing can be minimized, avoiding unnecessary duplication of work and speeding up the overall workflow. Moreover, IMIS paves the way for companies to adopt a more holistic approach to information management, enabling more effective and efficient data management.

Optimized business processes through IMIS can also contribute to increased productivity and service quality. Companies can reduce the time and effort required to complete operational tasks, respond more quickly to market changes, and overall increase competitiveness. In addition, IMIS facilitates a better understanding of the flow of information within the company, enabling management to conduct more accurate evaluations of the performance and effectiveness of various functions.

### 2. Fast and Correct Decision Making

Integration of information from various sources is the main key in giving company leaders access to comprehensive and accurate data. In a business era full of complexity and dynamics, leaders do not only depend on data from one source. This integration allows for the unification of information from different departments such as sales, marketing, finance, and human resources, creating a more complete picture of company performance. By having access to holistic data, leaders can identify trends, patterns and relationships that might be missed if the data were only viewed in isolation.

Better understanding of the company's overall situation through information integration supports faster and more precise decision making. Leaders can respond to market changes more proactively, make more informed decisions, and reduce the risk of errors. Overall, information integration strengthens managerial and strategic capabilities, provides a strong foundation for the development of long-term business plans, and ensures the company is on a sustainable growth path. By leveraging integrated information, companies can explore new opportunities, overcome challenges, and increase competitiveness in an ever-changing marketplace.





### 3. Operational Efficiency

Integrated Management Information Systems (IMIS) have a positive impact on managing company resources in a significant way. Through the integration of various related information systems, IMIS allows companies to optimize inventory management, production and distribution. Inventory management becomes more structured and efficient because information about stock and movement of goods can be accessed in real-time. In this way, companies can maintain optimal inventory levels, avoiding excess or shortage of stock which can impact operational efficiency and customer satisfaction.

Not only that, IMIS also contributes to increasing productivity through more efficient management of the entire company value chain. By utilizing system integration, companies can reduce the time required to complete daily operational tasks. Production processes become more coordinated and responsive to market demand, which in turn can improve overall efficiency. Additionally, the ability to integrate operational data can reduce operational costs by avoiding duplication of work and minimizing human error.

### 4. Responsibility to Customers

Integrated Management Information Systems (IMIS) give companies more holistic access to customer information. By combining data from multiple sources, such as sales, customer service, and feedback from previous interactions, IMIS creates a complete picture of customer preferences, needs, and behavior. This allows companies to identify trends and patterns of consumer behavior, helping in designing more targeted marketing strategies and personalizing services.

With integrated customer information, companies can provide more responsive and personalized services to customers. IMIS enables more efficient customer service, with the ability to provide rapid responses to customer questions or problems. A deeper understanding of customer needs also allows companies to offer products or services that better suit their preferences. As a result, customer satisfaction levels increase, creating a more positive customer experience and strengthening long-term business ties. By utilizing IMIS for integrated customer information management, companies can build stronger and more sustainable business relationships. Better responsiveness to customer needs can increase loyalty, generate positive feedback, and even open opportunities for business growth through recommendations from satisfied customers.

### 5. Adaptation to Market Changes

Dynamic market changes are a big challenge for modern companies, and flexibility is the main key in facing them. The Integrated Management Information System (IMIS) has proven its success in facilitating company adaptation to market changes in a faster and more responsive manner. Through the integration of information from multiple sources, IMIS enables companies to access real-time market data, providing a deep understanding of real-time market dynamics.

With real-time access to market information, companies can respond to changing trends and customer needs more quickly. Accurate and timely information allows companies to identify new opportunities, anticipate changes in demand, and adjust marketing or production strategies immediately. These capabilities provide significant competitive advantages, allowing companies to remain relevant and adapt to the rapidly changing business environment. By relying on IMIS, companies can create an adaptive culture that is more responsive to market changes. This not only increases competitiveness, but can also set the stage for innovation and the development of new products or services.

### 6. Internal Communication Efficiency

Information systems integration plays an important role in improving internal communication between various departments and levels of the organization. With an integrated information system, different departments can share information efficiently. For example, the marketing department can easily coordinate with the sales team to identify new market opportunities or respond to changing customer demands. An integrated understanding of the activities and initiatives of these departments creates better visibility and reduces the likelihood of errors or ambiguities that can occur in communications.

Furthermore, integrated information systems also facilitate collaboration between teams, eliminating information silos that can form without good integration. Teams can easily access and share relevant data, speeding up workflows and decision-making processes. This not only improves operational efficiency, but also strengthens relationships between team members. With more open and effective internal communication, companies can respond more quickly to market changes, increase productivity, and optimize the potential for creativity and innovation in the work environment. Therefore, information







systems integration is not just about technology, but also about creating a collaborative and responsive work culture.

## 7. Information Security

The presence of an Integrated Management Information System (IMIS) has a significant positive impact on managing information security in the company environment. An integrated system allows companies to provide tighter access control to data and information produced and used by various departments. With careful access controls in place, companies can ensure that only authorized parties have access to sensitive data, reducing the risk of theft or misuse of information that could harm the company.

Apart from that, IMIS also has an important role in protecting sensitive data from the risk of leakage. System integration allows for the implementation of uniform security measures across the organization, including the use of data encryption and strong security protocols. An integrated system also facilitates comprehensive security monitoring and reporting, so that any security threats or incidents can be detected quickly and responded to in a timely manner. By using IMIS, companies can increase compliance with applicable information security standards and data privacy regulations. This not only involves protecting the company's own data, but also maintaining customer and client trust in the company. Overall, IMIS proves itself to be a crucial tool in building a robust information security defense, making it a key element in a data protection strategy and maintaining corporate integrity in this digital era.

## CONCLUSION

In order to face the complexity and dynamics of modern business, the implementation of an Integrated Management Information System (IMIS) brings a number of significant benefits to companies. IMIS enables better integration between various information systems in different departments or functions of a company. In this way, business processes can be optimized, redundancy reduced, and information flow accelerated. These benefits include increased operational efficiency, better responsiveness to customers, the ability to adapt to market changes, and faster and more informed decision making. Through information integration, IMIS also provides more holistic access to customer data, enabling companies to provide more responsive and personalized service. Management of company resources becomes more efficient, including inventory, production and distribution. Additionally, IMIS strengthens information security by providing strict access controls, protecting sensitive data and reducing the risk of information leakage. IMIS is not only a technological tool, but also a foundation for increasing efficiency, adapting companies to market changes, and maintaining information security. By integrating information systems, companies can build a collaborative work culture, improve internal communication, and respond more responsively to business challenges. Therefore, IMIS is not only a means of increasing competitiveness, but also a critical element in achieving company sustainability and success in an era of business that continues to develop.

## REFERENCES

1. Aminah, A., & Andriyani, D. (2020). Analisis Efisiensi Keuntungan Usahatani Padi Sawah Dengan Teknik Tanam Pindah Dan Teknik Tanam Benih Langsung Di Kampung Alue Jangat Kecamatan Darul Ihsan Kabupaten Aceh Timur. *Jurnal Ekonomi Pertanian Unimal*, 3(1), 1-8.
2. Anggito, A., & Setiawan, J. (2018). *Metodologi penelitian kualitatif*. CV Jejak (Jejak Publisher).
3. Anggraeni, R., & Maulani, I. E. (2023). Pengaruh Teknologi Informasi Terhadap Perkembangan Bisnis Modern. *Jurnal Sosial dan Teknologi*, 3(2), 94-98.
4. Arisuniarti, D. M. (2016). Pengaruh teknologi informasi dan sistem informasi manajemen terpadu terhadap kinerja karyawan di lingkungan Universitas Warmadewa. *Public Inspiration: Jurnal Administrasi Publik*, 1(1), 50-64.
5. Gilman, R. (1977). Introduction to management information systems.
6. Harahap, U. Y., & Nasution, M. I. P. (2023). Pengembangan Sistem Informasi Manajemen (Sim) Untuk Kompetitif Organisasi:(Analisis Keunggulan Kompetitif Melalui Implementasi Sistem Informasi Manajemen Yang Terintegrasi). *Kohesi: Jurnal Sains dan Teknologi*, 1(12), 51-60.
7. Hariyanto, S. (2016). Sistem Informasi Manajemen. *Publiciana*, 9(1), 80-85.
8. Ismail, M. (2004). Konsep Sistem Informasi Manajemen.





9. Laratmase, P. (2023). BAB 3 TEKNOLOGI INFORMASI DAN KEUNGGULAN BERSAING. *Sistem Informasi Manajemen*, 23.
10. Laudon, K., & Laudon, J. (2013). *Essentials of Management Information Systems*. 10.
11. McLeod, M. R., (2004). *Management Information System*.
12. Moleong, L. J. (2014). *Metode penelitian kualitatif edisi revisi*. Bandung: PT Remaja Rosdakarya.
13. Palupi, N. W. I. (2017). *Analisis Efisiensi Biaya Operasional Dalam Meningkatkan Profitabilitas (Studi Pada Home Industry Bistik Rolade Nurul Huda Di Gabus Pati)* (Doctoral dissertation, STAIN Kudus).
14. Salwa, R., & Nasution, M. I. P. (2023). Inovasi Bisnis Organisasi Melalui Pemanfaatan Sistem Dan Teknologi Informasi. *CEMERLANG: Jurnal Manajemen dan Ekonomi Bisnis*, 4(1), 21-31.
15. Sharma, S., & Thakur, K. S. (Eds.). (2015). *Management information system*. Horizon Books (A Division of Ignited Minds Edutech P Ltd).
16. Sharp, B., Filipe, J., & Cordeiro, J. A. M. (Eds.). (2001). *Enterprise information systems II*. Kluwer Academic Publishers.
17. Suryadharma, S. I. M., Triyani Budyastuti, S. E., & Ak, M. (2019). *Sistem Informasi Manajemen*. Uwais Inspirasi Indonesia.
18. Wijoyo, H. (2021). *sistem informasi Manajemen*.

