

## ***Effectiveness Of The Use Of Technology In The Development Of Marketing Strategies In The Company***

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### ***Abstract***

*In today's increasingly competitive business environment, developing Information Technology is having a major impact on the Company's ability to compete. In order for the company to be competitive, the company must continuously keep pace with the development and progress of information technology. The use of economic criteria with measures of effectiveness, efficiency and productivity is one of the advantages of the competitiveness of the company. Information technology implementations are designed to increase the effectiveness, efficiency and productivity of people and organizations to generate targeted margins with minimal risk and cost.*

**Keywords:** *information technology, effectiveness, efficiency and productivity.*

### **1. Introduction**

One of the challenges we face in the era of globalization in various aspects of life is information and communication technology. Especially in the face of an increasingly competitive business environment, information technology has become an inseparable part of the business world. The need for information technology is a basic requirement for companies to survive in a competitive business world. Information technology has driven advances in product and process technology as well as the formation of an information society.

The changes brought about by globalization affect changes in the business environment, which include technological changes, changes in consumer perceptions, and product competition. As a result, companies are required to be able to improve product quality, service, efficiency, production costs and increase company productivity.

Finally, mastering information technology is a requirement that must be owned by the company.

In addition, the development of information technology has a great impact on the company's competitive advantage. The company's competitive advantage can be assessed based on economic criteria using measures such as effectiveness, efficiency, and productivity. The development of information technology creates products with large capacity, energy saving, and can perform more and more functions and types of work, and with information technology can process, store, and display data and information.

In order to achieve the desired goals of the company, every organization is composed of three main pillars, namely processes, human resources and technology. When designing a set of processes, these three elements must be combined according to the market (customer) needs. It is necessary to pay attention to the human resources that operate the process, technology is also used to support the process, especially information technology. Technology plays an important role together with processes and human resources. (Racmawati, 2004: 28).

Today, there are many predictions that thanks to the use of microfilm, tapes, diskettes, CD room and the like, the future will be seen "paperless office". It is also certain that computerization and its applications will become more widespread. Everyone will admit that information technology (IT) is developing so rapidly (Siagian, 2002: 209).

## 2. Methodology

This article uses a qualitative method (qualitative research) by conducting a literature review or library research. Specifically, in the context of Management Information Systems Studies / Postgraduate Master of Management Program, the literature will be reviewed according to the theories discussed. In addition, the analysis will be adapted to several reputable scientific articles. The results of scientific articles from journals that are not reputable will be combined. The results of the articles used as references are then cited from Mendeley and Google Scholar.

As a result, the use of qualitative methods in research can lead to a more in-depth study of a phenomenon. Qualitative research, which pays attention to humanism or individual people and human behavior, is a response to the awareness that all consequences of human actions are influenced by the internal aspects of the individual.

Qualitative research begins with an idea expressed in a research question. Questions in this research can then be used to determine data collection methods and ways to analyze them. This method is dynamic, always open to updating, replacing, or adding data. In qualitative research, a theoretical study must be able to be used by several methodological assumptions, namely, that the inductive methods can be used, so that they do not direct the questions posed by the investigator. One of the reasons for conducting qualitative research is when the stated research objectives require a more detailed and in-depth understanding.

The data collection process is divided into several types of data collection methods. These include observation, literature review, and visual analysis. Furthermore, the data or information collected is then analyzed to obtain the results of a study to draw a conclusion.

## 3. Result & Discussion

The term information is defined differently by experts. According to the international definition, information is defined as the result of processing data, which in principle has more value or worth. Information is (Hariandja, 2002: 23): (1) processed data, (2) in a form that is more useful and meaningful to those who receive it, (3) is a description of an event and a real entity, (4) is used for decision making.

Technology is the development and application of tools, machines, materials, and processes that help people solve their problems. Furthermore, information technology is a technology used to process data, including the processing, collection, assembly, storage, and manipulation of data by various means to produce quality information, namely information that is relevant, accurate, and timely, which is used for personal, business, and governmental purposes and is strategic information for decisions. is strategic information for decisions (<http://computers-ins.blogspot.com>).

In the meantime, Martin defines that information technology is not only limited to the computer technology (hardware and software) used to process and store information, but also includes the communication technology used to transmit information so that everyone has access to them (Kadir, 2005).

The most important driving force behind the globalization of various fields has been the rapid development of information technology. The infrastructure that triggers and enables globalization in all areas, such as the economy, information, etc., can only be built thanks to these technological advances. These advances and their applications are so rapid that the products produced come and go quickly. This can be seen, for example, in the computers that appear almost every year with ever more powerful capabilities.

Today, information technology plays a role in most aspects of a company's business, from new product development to sales and service support, from the provision of market intelligence to data

for decision analysis. For a global company, the ability to take information from different systems and make it widely available to managers and employees is very important (Dewi, 2005: 161).

Advances in information technology have not only facilitated the flow of global communications, but have also been the catalyst for a tremendous growth rate of information. Computers and Information Networks Computers and information networks accelerate the exchange of thoughts and information, generate new theoretical ideas, and shorten and simplify the research process. In other words, the progress of information technology is promoting the development of science and the development of information. At the same time, the number of people involved in producing information will also increase, thus increasing the amount of information produced.

In today's business world, much larger companies do not always win against smaller companies. Information technology can give companies a competitive edge. Conversely, mismanagement of information technology can lead to competitive defeat. This can take the form of losing customers, making product mistakes (not in line with market demands), losing reliable employees, and so on.

As the discovery of information technology develops on a mass scale, it has changed the shape of society from a local world society to a global world society, a world that is very transparent to the development of information, transportation and technology, which is so fast and large that it has an impact on the civilization of mankind, so the world is nicknamed the big village, namely a big village where people know each other and greet each other. Network access can be easy and fast, so it becomes one of the factors to improve the performance of employees. Information technology has led organizations to an increasingly flat and shrinking form (Bungin, 2006: 159).

For example, the use of e-mail makes it easy for employees to communicate directly with anyone without having to go through bureaucratic chains and chains of command. Employees can communicate directly with anyone without having to go through a long chain of bureaucracy and chain of command. In addition, information sent through technology arrives at its destination in seconds (Anatan, 2009: 18).

The philosophy and spirit of productivity has been in existence since the beginning of human civilization, because the meaning of productivity is the desire (will) and effort (effort) of people to constantly improve the quality of life and livelihood in all fields. According to the British Encyclopedia mentioned that productivity in economics means the ratio of the results obtained to the sacrifices incurred to produce something. Meanwhile, after the formation of the National Productivity Board (NPB) Singapore, it is said that productivity is a mental attitude (attitude of mind) that has the spirit to make improvements. In 1983 National Productivity Council report, it is said that productivity implies a mental attitude that always has the view that "quality of life today must be better than yesterday and tomorrow better than today" (Sedarmayanti, 2001: 56-57).

In general, productivity implies a comparison between the results achieved (output) and the total resources used (input). The level of productivity achieved is an indicator of efficiency and economic progress for the size of a nation. Thus, it can be concluded that: Productivity is how to produce or improve the results of goods and services as high as possible by using resources efficiently.

Thus, we may say that the concept of productivity has two dimensions, namely effectiveness and efficiency. The first dimension is related to the achievement of maximum work in terms of meeting quality, quantity and time objectives. The first dimension has to do with the achievement of maximum work in terms of quality, quantity and time objectives, while the second dimension has to do with the effort to compare the input with the realization of its use or the way of work performance (Sedarmayanti, 2001: 58).

The statement is an expression of productivity as a whole, i.e. the output produced is the result of all the inputs in the organization. These inputs are commonly referred to as factors of production. The resulting output is obtained from the inputs that perform the process of activities, which can be in the form of real products or services. Inputs or factors of production can be labor, capital, materials, technology, and energy. One of the inputs, such as labor, can produce outputs known as individual productivity, which can also be referred to as partial productivity.

Efficiency is a measure that compares the planned use of inputs with the actual use of inputs. If the actual use of inputs is greater, the level of efficiency is higher, but if the actual use of inputs is less, the level of efficiency is lower. The definition of efficiency here is more input-oriented, while the issue of output is less of a concern.

Effectiveness is a measure that illustrates the extent to which the goal can be achieved. This definition of effectiveness is more output oriented, while the issue of use of inputs is less of a concern.

Quality is a measure of the extent to which various requirements, specifications, and expectations have been met. This concept can be focused on inputs, outputs, or both. In addition, quality is also related to the production process, which will affect the quality of the results achieved as a whole.

Efficiency should be thought of as a measure of the quality of work output within a technology. In other words, organizational efficiency refers to how an organization should use a particular technology. While organizational effectiveness can be seen as a measure of the quality of an organization's relationship with its environment (Winardi, 2003: 179).

It is imperative for any organization to adhere to the principle of efficiency. In simple terms, the principle of efficiency basically means avoiding all forms of waste. Given the fact that the ability of an organization to hold and have facilities and work infrastructure which is also referred to as a source of funds and resources that are needed to keep the wheels of the organization turning is always limited while the goals to be achieved are not. limited while the goals to be achieved are unlimited, then there is never any justification for allowing waste to occur. The experience of various organizations clearly shows that there are many factors that cause inefficiency, for example, waste can occur due to dysfunctional behavior of organizational members and due to the mismatch of knowledge and skills of the actors in using and utilizing the facilities and infrastructure that are owned.

Efforts to increase labor productivity should not be seen as a purely technical matter. Other aspects that can play a role in determining the success of these efforts are what absolutely must happen is that all accept the goal as something reasonable, feasible, and worth achieving. Thus, the actors will be willing to be involved in making a greater commitment towards the success of the organization including increased work productivity.

Management states the direction the organization will take to achieve a desired state at some point in the future to achieve the ultimate goal. In other words, management must explicitly state its view of the future shape of the organization it wants. This is called a vision. Based on the formulation of the vision, the mission can be determined. The mission is something that must be carried out by all components of the organization in the form of main activities, all of which are carried out in the context of the achievement of predetermined goals. Thus, it is clear that the vision and mission must have a strong connection and high relevance to the goals to be achieved.

Strategies are tips usually used by top management to win wars involving organizations. Strategies are usually used by the top management of an organization for winning wars within the organization. In the business community, one can say that strategies are a general declaration by the top management about what business activities the organization does now and in what business areas the organization will move in the future. Top management must know very well what are the organization's strengths, what are its weaknesses, what are the opportunities and how to take advantage of them, what are the threats and how to take advantage of them, and what are the most effective threats to deal with. On the other hand, you need to know the strengths and weaknesses of your adversary in order to determine the correct tips to prevent him from taking advantage of your opportunities and, if possible, to prevent him from taking advantage of your opportunities and to prevent him from taking advantage of your threats.

The use of technology and work productivity is undeniable as breakthroughs that occur in the field of technology can contribute greatly to increasing the work productivity of an organization. If chosen properly, technology can be applied to all types of activities in the organization. It is undeniable that information technology is growing rapidly with its diverse applications, partly due to the equally

rapid development in the field of software. Various breakthroughs in this field have succeeded in creating computers that are increasingly sophisticated, in the sense that they are smaller in size, higher in capability, easier to use and cheaper in price. The implications are more and more, such as in the traditional decision-making process in many organizations that used to be centralized, but because access to hardware and software is getting wider and easier, it has turned decentralized. Such is the prevalence of information technology today that it is very difficult to imagine any aspect of life and organizational activities that are not touched by computerization.

Information technology consists of various types of technology. The technology used in information technology systems is computer technology, communication technology, and any technology that provides added value to the organization (Jogiyanto, 2009: 7).

Plays an important role in the effective implementation of business performance by significantly increasing the choices available to the business. Influence the marketing strategy development process because information technology provides more information to managers through the use of decision support systems (DSS). Information technology has the ability to integrate different parts of the organization and provide a lot of information to managers. For example, the Executive Information System (EIS) affects the vertical flow of information within the organization. It gives management greater access to information and reduces the dependence of information sources on middle managers. Telecommunications networks allow information to flow easily and quickly between different departments and divisions.

Information technology also impacts between organizations and the environment, such as customers and suppliers. Interorganizational systems equipped with data exchange create closer relationships between organizations and suppliers, facilitate more efficient inventory management, and enable timely reordering. Helps generate product innovation. From product design to more effective and efficient production processes, information technology can help.

The purpose of implementing technology for business is to create a value chain from information technology that is useful in all aspects of the business. It focuses on increasing the effectiveness, efficiency, and productivity of employees and organizations to achieve targeted margins with minimal risk and cost. According to the results of a study conducted by Yeung and Brockbank (1994) on 160 executives of large Californian corporations, the three main factors driving reengineering are reducing costs, improving service quality, and changing corporate culture. The results of the study showed that the cost reduction factor ranked first with 78% of the respondents' responses, service quality improvement ranked second (76%), while culture change aimed at reducing bureaucracy and empowering the organization ranked third (70%). With HR reengineering, it is expected that after important and routine HR services are managed and standardized using information technology, HR functions can be freed from these standards and directions to focus more on high value-added HR activities (Rachmawati, 2004: 28-29).

Using Information Technology in an organization is very important, to apply Information Technology, the characteristics of the organization need to be seen. Information technology can increase the efficiency of a company, so in applying information technology, reliable people are needed so that the company can run well.

The role of the information technology for an organization can be seen by using the categories introduced by G.R. Terry, there are 5 basic roles of the information technology in an organization:

1. Operational functions, which will make the organizational structure leaner, have been taken over by information technology. Due to the diffuse nature of its use across organizational functions, the unit related to information technology management will carry out its function as a supporting agency where information technology is considered a firm infrastructure.
2. Monitoring and control function means that the existence of information technology will be an inseparable part of activities at the managerial level in each manager's function, so that the

organizational structure of the unit related to it must be able to have a span of control or peer relationship that allows effective interaction with managers in related companies.

3. The Planning and Decision function elevates information technology to a more strategic role because of its existence as an enabler of the company's business plan and is a knowledge generator for company leaders who are faced with the reality of making a number of important decisions on a daily basis. It is not uncommon for companies to finally choose to place the information technology unit as part of the corporate planning and / or development function because of the strategic functions mentioned above.
4. The Communication function is principally included in the firm infrastructure in the modern organizational era where information technology is positioned as a means or medium for individual companies to communicate, collaborate, cooperate, and interact.
5. Interorganisational function is a role that is quite unique because it is triggered by the spirit of globalization which forces companies to collaborate or establish partnerships with a number of other companies. The concept of strategic partnerships or information technology-based partnerships such as the implementation of Supply Chain Management or Enterprise Resource Planning has made companies make a number of important breakthroughs in designing the organizational structure of their information technology units.

The business objectives stated by Porter, namely operational effectiveness and strategic positioning are further linked to the application of information technology, If the company focuses on operational strategy, then with the application of information technology, the company can increase efficiency with: (Talon: 1999) 1). reducing operating costs; 2). improving product quality; 3). speeding up production; 4). increasing the effectiveness of the company in general.

Therefore, in an effort to improve the efficiency, effectiveness, and productivity of the company, the application in the field of information technology requires managers to think about and take steps to be able to utilize human resources by providing employees with new skills through training.

#### 4. Conclusion

The role of information technology in companies, both large, medium and small companies, requires information systems that can integrate information so that it can support company productivity. The application of information technology in the organization must be supported by reliable human resources, therefore in an effort to increase the efficiency, effectiveness and productivity of the company can be done by providing skills through training to employees. It is necessary to master information technology to be applied to all production processes and systems and increase the reliability of managers as decision makers.

#### References

- Adewale, T. A., & Ola-David, O. (2018). The impact of social media on recruitment: Are you LinkedIn?. *International Journal of Applied Business and Economic Research*, 16(6), 1- 16. <https://doi.org/10.5296/ijabr.v16i6.13709>
- Aguinis, H., & Solarino, A. M. (2019). Transparency and replicability in qualitative research: The case of interviews with elite informants. *Strategic Management Journal*, 40(11), 1907- 1930. <https://doi.org/10.1002/smj.3072>
- Al-Swidi, A. K., & Al-Hosam, A. (2015). Impact of e-recruitment and job seekers perception on intention to pursue job opportunities: A study on graduates in Yemen. *Journal of Economics*,

- Business and Management, 3(1), 27-33.  
<https://doi.org/10.7763/JOEBM.2015.V3.159>
- Bendick, M., & Nunes, A. P. (2012). Developing the research basis for controlling bias in hiring. *Journal of Social Issues*, 68(2), 238-262.
- Blacksmith, N., Willford, J. C., & Behrend, T. S. (2016). Technology in the employment interview: A meta-analysis and future research agenda. *Personnel Assessment and Decisions*, 2(1), 2. Bogen, M., Rieke, A., & Ahmed, S. (2018). Help wanted: an examination of hiring algorithms, equity, and bias. *Upturn*.
- Breaugh, J. A. (2018). Employee recruitment: Current knowledge and important areas for future research. *Human Resource Management Review*, 28(3), 231-245.
- Broughton, A., Foley, B., Ledermaier, S., & Cox, A. (2013). The use of social media in the recruitment process. *Acas*.
- Bungin, Burhan (2008), *Riset Komunikasi*, Penerbit: Kencana Pranada, Media Group, Jakarta.
- Cascio, W. F., & Aguinis, H. (2011). *Applied psychology in human resource management*. Pearson.
- Chapman, D. S., Uggerslev, K. L., Carroll, S. A., Piasentin, K. A., & Jones, D. A. (2005). Applicant attraction to organizations and job choice: a meta-analytic review of the correlates of recruiting outcomes. *Journal of Applied Psychology*, 90(5), 928-944.
- Chen, C. P., Chiu, S. F., & Huang, H. F. (2019). Predicting job performance using a big data approach: A preliminary study. *Computers in Human Behavior*, 92, 327-333.
- Chen, Y., Yu, C., & Chang, W. (2021). The impact of digital HRM on employee job satisfaction: A perspective of diversity and inclusion. *International Journal of Environmental Research and Public Health*, 18(6), 3156. <https://doi.org/10.3390/ijerph18063156>
- Davenport, T. H., Guha, A., Grewal, D., & Bressgott, T. (2018). How artificial intelligence will change the future of marketing. *Journal of Interactive Marketing*, 43, 17-26.
- Dewi, Ike Janita (2005), *Rethinking Information Technology Management: Integrasi Teknologi Informasi dengan Strategi*, Penerbit: Amara Books, Yogyakarta.
- Edwards, L., & Veale, M. (2017). Slave to the algorithm? Why a 'right to an explanation' is probably not the remedy you are looking for. *Duke Law & Technology Review*, 16(1), 18- 84.
- Ellitan, Lena dan Lina Anatan (2009), *Sistem Informasi manajemen "Konsep Dan Praktis"*, Penerbit: Alfabeta, Jakarta.
- Farndale, E., Raghuram, S., Gully, S. M., Liu, H., & Phillips, J. M. (2019). The role of HRM and social capital configuration for knowledge sharing in post-M&A integration: A framework for future research. *Human Resource Management Review*, 29(2), 137-153.
- Galindo, R. H., & Chiang, E. P. (2017). Understanding the impact of applicant tracking systems on job-search outcomes. *Journal of Vocational Behavior*, 101, 1-12.
- Gibbs, J. R., Rosenbusch, K., & Karim, N. (2017). The impact of videoconference technology on selection interview ratings: The role of interviewee gender. *Employee Relations*, 39(7), 985-1004.
- Hacker, J., von Bernstorff, C., & von Bernstorff, S. (2018). Can artificial intelligence techniques reduce discrimination in the labour market? *Intereconomics*, 53(5), 276-281.
- Hariandja, Marihat Tua Efendi (2002), *Sumber Daya Manusia*, Penerbit: PT Grasindo, Jakarta.  
<http://computers-ins.blogspot.com>. Diakses 25 September 2012.
- Jogiyanto, H. M. (2009), *Sistem Teknologi Informasi*, Penerbit: BPFE, Yogyakarta.
- Jones, S., Murphy, F., & Kervick, A. (2016). The role of data analytics in predicting HR attrition. *International Journal of Business and Management*, 4(3), 58-71.
- Kadir, Abdul, dan Tera Ch Wahyuni (2005), *Pengenalan Teknologi*, Penerbit Andi, Jakarta
- Lievens, F., Peeters, H., & Schollaert, E. (2015). Situational judgment tests: A review of recent research. *Personnel Review*, 44(4), 547-568.
- Park, Y. A., Lee, H. J., & Lee, D. (2020). The impact of information technology on recruitment: The case of job search websites. *Sustainability*, 12(1), 179. <https://doi.org/10.3390/su12010179>

- Pritchard, K., Richardson, N., & Lillywhite, A. (2020). How do online job platforms impact the nature of work and employment?
- Racmawati, Eka Nuraini (2004), *Paradigma Baru Manajemen Sumber Daya Manusia Sebagai Basis MeraihKeunggulan Kompetitif*, Penerbit: Ekonisia, UII, Yogyakarta.
- Rynes, S. L., & Cable, D. M. (2003). Recruitment research in the twenty-first century. *Annual Review of Psychology*, 54(1), 393-422.  
<https://doi.org/10.1146/annurev.psych.54.101601.145041>
- Sedarmayanti (2001), *Sumber DayaManusia dan Produktivitas Kerja*, Penerbit: CV. Mandar Maju, Bandung
- Shen, H., & Wang, J. (2019). The impact of e-recruitment on the recruitment process: Evidence from Chineseenterprises. *Sustainability*, 11(18), 4914. <https://doi.org/10.3390/su11184914>
- Siagian, P Sondang (2002), *Kiat Meningkatkan Produktivitas Kerja*, Penerbit: Rineka Cipta, Jakarta.
- Singh, K. (2020). Use of social media in recruitment process: A review of literature. *International Journal of Research in Engineering, Science and Management*, 3(8), 293-297.  
<https://doi.org/10.47607/ijresm.2020.380>
- Talon Paul P, K.L.Kramer and V.Gurbaxni (2000), *Executif Persenton Of The Business Value of Information Technology:A Proses-orientedApproach*.
- Tian, Y., Robertson, M., & Shao, P. (2018). The impact of social media-enabled business processes on organizational performance. *Journal of Enterprise Information Management*, 31(3), 389-409.  
<https://doi.org/10.1108/JEIM-06-2017-0065>
- Turel, O., & Gligor, D. M. (2019). User acceptance of online social networks for individual knowledge sharing: Empirical evidence and implications for organizational knowledge management. *Information & Management*, 56(1), 103-117.<https://doi.org/10.1016/j.im.2018.05.002>
- Wanous, J. P., & Lawler, J. J. (2016). Recruitment. *Annual Review of Psychology*, 67(1), 39-63.  
<https://doi.org/10.1146/annurev-psych-122414-033601>
- Waseem, M., & Dhama, S. (2018). The impact of social media on employee recruitment: Evidence from the banking sector in Pakistan. *Management Science Letters*, 8(4), 343-354.  
<https://doi.org/10.5267/j.msl.2018.2.006>
- Weerakkody, V., Janssen, M., & Dwivedi, Y. K. (2011). Transformational change and business process reengineering (BPR): Lessons from the British and Dutch public sector. *Government Information Quarterly*, 28(3), 320-328. <https://doi.org/10.1016/j.giq.2010.08.006>
- Widyanto, L. A., & Juneman, J. (2020). E-recruitment: Challenges and opportunities in human resource management. *Jurnal Ilmiah Manajemen*, 10(1), 88-100.  
<https://doi.org/10.25139/jim.v10i1.2404>
- Winardi J (2003), *Teori Organisasi dan Pengorganisasian*, PT. Raja GrafindoPersada, Jakarta. Kencana Prenada Media Group
- Xu, X., Huang, X., & Zhang, L. (2020). Online recruitment behavior and online hiring performance: An empirical study based on machine learning. *Future Internet*, 12(9), 157.  
<https://doi.org/10.3390/fi12090157>
- Zhang, L., Xu, X., & Zhang, W. (2019). An intelligent decision-making model for recruitment: Focusing on candidate selection. *International Journal of Environmental Research and Public Health*, 16(9), 1501. <https://doi.org/10.3390/ijerph16091501>
- Zhang, Y., Liu, L., & Li, L. (2021). The effects of social media on recruitment and its moderating role in the impact of job embeddedness on employee retention. *Sustainability*, 13(3), 1643.  
<https://doi.org/10.3390/su13031643>
- Zikic, J., & Saks, A. M. (2009). Job search success through self-regulation: A matter of quantity or quality?. *European Journal of Work and Organizational Psychology*, 18(1), 98-118.  
<https://doi.org/10.1080/13594320802056833>