



Barriers and Challenges of Information Technology in Labour Intensive Business Organization

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Abstract

Information technology in the era of globalization and business competition plays a vital role in the sustainability of business organizations. Human resources owned by management must be managed well in order to have the competencies required by the company and as a power to produce quality products. In this study, the main problem is how the application of information technology to business organizations in Indonesia and what are the obstacles and challenges in its form. From these problems, the purpose of this study is to determine the application of information technology to business organizations as well as barriers and challenges it faces. From the results of research conducted on 20 business organizations that exist in Bandung regency, obtained data as follows: 2 companies have applied information technology, 4 companies are already utilizing information technology, and 14 companies still rely on the power of human resources. The main obstacle that he faced was related to the quality of his human resources (competence) and financial. While the challenge is related to the global economic situation, there will be a reduction of employees, as well as marketing of production.

Keywords: Information Technology, HR Competency, Business Organization.

1. Introduction

Monitoring the second half of the millennium, several companies have started to what will happen in 2020 upcoming. This prediction is a preventive action measure to prepare for, and strategies that companies must take in order can stay afloat in a business position expected. The realization of the ASEAN Economic Community has become opportunities as well as significant challenges for Indonesia, especially in improving its competitiveness. One of the objectives of AEC is to increase ASEAN competitiveness[1]–[6]. The rapid development of information technology has an impact on all aspects of life[2], [7]–[12], especially in business organizations. Business organizations must adapt quickly so that the company's survival can be guaranteed to provide excellent service to customers. One of the efforts to create competitive advantage in today's highly dynamic business market situation is to utilize information technology [13]–[17]. Use of data innovation assumes a vital part in guaranteeing the smoothness and advancement of administrations to clients and enhance the execution of an organization[18]–[20]. In the writing on administration, the idea of technique was truly tended to in the second of the twentieth century. At first, a substantial volume of studies and research in the key administration field was centered around system plan. As of late, in any case, a clear move of center from procedure plan to system usage has happened. The presence of information technology in addition to bringing changes to the business environment is mainly related to the consumer's view and competition of production also requires the company to improve product quality and production cost efficiency[21]. In addition, information technology can

also save energy and human resources and can make improvements related to data and information. To achieve these objectives that every organization must be formed from three main pillars of process, human resources and technology. All three elements must be integrated in accordance with market needs (customers)[22]. In addition, information technology can help organizations to manage information dynamically and affect business competitiveness, especially with regard to making decisions to make investments and decisions. exhibited that IT underpins customer centricity, with purchasers having the capacity to utilize innovation to choose and alter their items and additionally to customize their experience. That data innovation has made central effect in transit business forms are done. IT can never again be seen as an upgrade to customary business strategies yet rather as a development specialist that empowers new and diverse choices in activity of business association [23]. This new pattern will shade venture states of mind of business groups on the planet towards usage of IT in the coming years. Given the importance of technology in business organizations in Indonesia to be able to compete in the globalization of the world economy, the authors are interested to discuss the existing problems, namely how the application of information technology to business organizations in Indonesia and what obstacles and challenges in implementation [24]. The purpose of this study is to determine the application of information technology to business organizations in Indonesia and obstacles and challenges faced by the implementation.: IT within an organization is an investment in an effort to develop and as an industry competitiveness in the future[25]. To achieve this, then the business organization needs to implement the strategy and analyze the factors that can influence it. opinion that the success factors in information

systems strategy, consist of: (1) Focus on external rather than internal: pay attention to customers, competitors, suppliers, even other business, and business relationship and similarity with business world outside. Traditionally information technology has focused on internal processes and existing problems; (2) Added value, not cost reduction: although the decline in costs may increase due to business expansion at a reduced marginal cost. This matter consistent with the company's requirements to differentiate itself from better competing products and services; (3) Share profits within an organization, with suppliers, customers, consumers, and competitors[26]. The social collaboration of a business relationship can be talked about as far as how frequently individuals from the organizations meet, or how well the gatherings know each other. It is contended that relying upon the degree of the utilization of data innovation for various trades, the effect on the social communication designs that are done without data innovation might be affected. The use of information technology according to Thompson, et.al [27]. is a benefit expected by users of information systems in carrying out their duties or behavior in using technology while doing the work. The estimation depends on the force of use, the recurrence of usage, and the quantity of uses or programming utilized. Utilization of appropriate information technology and supported by the expertise of personnel who operate it can improve the performance of the company and individual performance concerned. According to the model developed by Thompson, et.al. the factors that influence the application of information technology are social factors, affect, complexity, task conformance, long-term consequences, and conditions that facilitate the utilization of information technology [28].

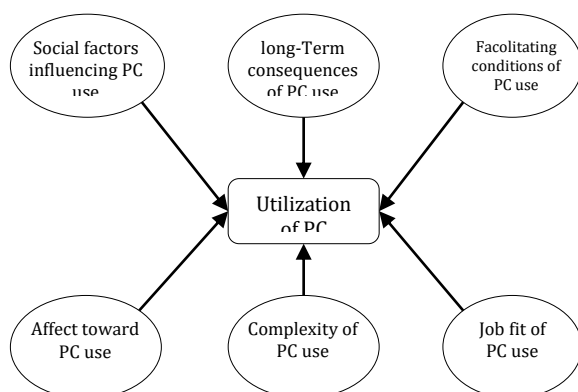


Fig.1: Factors that affect personal utilization computer

Business competition in the era of globalization lies in the business organization of managing human resources in order to have the competencies required for the achievement of goals. The management is not only how organizations provide services to employees is also related to the organization's efforts to improve the skills of its employees[29]. Consideration of competency needs includes future demand in relation to the organization's strategic and operational plans and objectives; anticipate the need for a change of management and employees; Changes to processes and technology and organizational equipment; evaluation of the competence of employees in carrying out the activities and operations established. According to Murgianto, et.al [30]. Skill is the eagerness and capacity of a generally stable person when looked with circumstances and work environments that are shaped from the cooperative energy among the character, self-idea, interior inspiration, and also the limit of calculated learning. Though as indicated by Robbins and Judge, the standards of individual conduct are capacity or ability, work fulfillment, sense of duty regarding association, identity and qualities, and inspiration. Furthermore Diane Piktialis as quoted by Sukoco & Fadillah argues that companies now need one of a kind the competence of which he calls the generational skill in managing talents, namely Generational Competence is our ability, you, HRD managers, top management, executives, or shareholders to understand, appreciate and meet the needs,

desires and aspirations of various generations of employees present simultaneously in one organization. Therefore with the availability of qualified, productive, and highly competitive workforce, it can be done in multiple ways including:

- Development of standardization and certification of competence.
- Increasing the relevance, quality, and efficiency of job training through coaching and empowerment of work training institutions.
- Socialization of production values and culture, cadre development, and product experts.

A business organization is an organization whose main purpose is to make a profit. These benefits can be obtained if the management can manage the organization and employees in accordance with organizational goals and place employees in accordance with the competencies they have[31]. Thus, the hope to survive to grow the business can be achieved. According to Bygrave & Macmillan the drive to survive in the industrial world and liberalism then evolved into a nightmare of materialism as well as a difficult-to-control wealth seeker community. This has a direct impact on exploited company workers through the imposition of overtime and inhumane human resource management practices. The fact that happens certainly contrary to the concept of organizational development that should have a positive impact on the lives of managers and workers. The drive to survive in the industrial world and liberalism is evolved into the world as a wealth-to-control wealth seeker community[32]. This has a direct impact on the exploitation of human resource management practices. The fact that people expect contrary to the concept of organizational development. In order for a business organization to survive and develop in accordance with the expected goals, the organization must have the identity and business strategy as outlined in the vision and mission of the organization. Successful business strategies can be seen from the existence and growth of the company so as to compete with competitors. Research shows that, companies that survive to date have the characteristics of flexible, agile, and resilient to change. The role of information and communication technology in the business world is also very large, especially in terms of supporting the marketing process and efficiency of administrative work. Managers and supervisors of an organization play an important role in helping the organization achieve its goals by improving and maintaining high employee productivity. Effectiveness and efficiency in the implementation of work will support the organization's performance to produce products and services that can meet the needs and expectations of customer[33].

2. Methodology

This research uses a qualitative approach that is done to dig information related to the problem studied. This research is explorative means research conducted to uncover the data and information about the topic or the latest issues aimed at the importance of deepening or further investigation. The type of data collected is primary data obtained by in-depth interview to the source of information. In conducting the survey, researchers use a personal approach (personally administered questionnaires) to get information related to the application of information technology to business organizations. This research was conducted in February-May 2016. The informant who became the source of information, namely the company located in Bandung regency of West Java Indonesia which amounted to 20 informants. Data analysis techniques in this study using the descriptive qualitative interactive model in the form of data collection, data reduction, display data, and conclusions/Verification interpretative.

3. Results and Discussion

Data innovation assumes an essential part in all parts of life. Business improvements entering the time of mechanical upset 4.0 that

prompt creative business and use digital change. Some characteristics of industrial revolution 4.0 include:

- a. Disruptive technology is present so quickly and poses a threat to the giant industries.
- b. The size of the company does not need large, but what is required is the company's agility and utilization of information technology.

Companies that are able to survive in the era of industrial revolution 4.0 are companies that:

- a. Look carefully at opportunities in the disruptive technological period.
- b. Transforming business quickly, adapting to the tastes of consumers as well as the business environment.
- c. Not a large company, but an innovative and efficient company in operation.

Of the 20 business organizations (companies) that became the object of research related to the application of information technology obtained data and can be seen in the following graph:



Fig.2: 20 Business organizations in Bandung Regency

Figure 2 can be explained that the application of information technology to business organizations located in Bandung Regency, in particular, is still manual, meaning that the utilization of human resources to conduct business activities is still a mainstay. Of the 20 existing business organizations, there are only 2 companies that have applied information technology to facilitate its operations, while 4 companies some of the work has been utilizing information technology and 14 companies have not utilized information technology in running their business. Results of interviews with company management obtained some information related to the application of information technology in his company. Companies that have applied technology argues, that in business competition technology support required in order to produce a quality product and can perform efficiency both labor and financial. Another opinion is that management has not fully implemented information technology. They argue, that labor (employees) are still dominant in Indonesia. Because if the transfer of technology is done thoroughly, it will impact on increasing the number of unemployed. But unlike the delivered by the management who have not applied information technology. They argue, that information technology is not a top priority. Employees can be provided with education and training to improve their skills in order to increase company productivity. In addition, by applying information technology will impact on the increasing number of unemployment in Bandung regency. From the results of these interviews, it can be seen that the application of information technology to business organizations has several obstacles and challenges in the implementation, among others:

Table.1: Barriers and Challenges in Implementing Information Technology

No	Barriers	Challenges
1	There are still many unemployment figures in Indonesia, especially in Bandung regency.	Industrial competitiveness and product quality
2	High investment	Limited human resources to manage information technology
3	Need for human resource enhancement for equipment maintenance.	Work culture and organizational culture
4	High prices of information technology devices.	Unfamiliar Indonesian people buy products online

Based on the above data, it is evident that information technology has a positive impact on the continuity of business organizations in the future. In addition, with the implementation of information technology, so many positive values that can be obtained by the organization, including efficiency and effectiveness in financial expenditure also for employees can improve the competence that affects the improvement of welfare. The results of this study are supported by research conducted by Brockbank & Urlich related to the application of information technology to business organizations. Based on Brockbank & Urlich survey of 160 California corporate executives, there are three main factors driving reengineering: cost reduction, improved service quality, and organizational culture changes. The results of this study indicate that the cost reduction factor is the first sequence of 78% of respondents' answers, the second order to improve the quality of service (76%) while the order of the three (70%) change the corporate culture aimed at reducing bureaucracy and empower the company. With standardized re-engineering of human resources using information technology, it is expected that services will be more targeted and have high value and competitiveness. The results of the study based on Brockbank & Urlich reinforced by research conducted by Febriana that business organizations are required to make innovative information technology appropriate and follow the development of the era. In order for technology to adapt to any changes, it is necessary maintenance periodically. The main obstacles, however, are the lack of skilled personnel, the lack of project management practices, uneven data allocation, fragile operational management, and poor data security management.

4. Conclusion

From the results of the above research, the researchers can give some conclusions, as follows: Application of information technology in the era of globalization and industrial revolution 4.0 is entirely done by business organizations in order to survive and improve the productivity of the organization's work. With the application of information technology, the business organization will be useful and efficient both related to commercial and labor usage. The biggest obstacle to the implementation of information technology in Indonesia, especially in Bandung Regency is to create new unemployment that impacts on national economic development. Challenges in the use of data innovation are the absence of gifted (specialists) in the field of change and the high cost of care. By applying information technology, the quality of production is getting better, and the number will increase and product marketing more broadly.

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