
Digitalization, Current Working Conditions and Environment: Comparative Study of Several Countries in ASEAN

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Abstract

Digital technology changes the way of work. It can improve connections between an organization's technical and social systems as well as connections with external networks through the sharing and exchange of digital information. The average worker in ASEAN wants a salary increase and wants a promotion, and some others want to change jobs. Respondents who want to change jobs come from Indonesia. Most respondents in ASEAN want job satisfaction, and many believe that job skills will change in the next five years. Apart from that, most respondents in ASEAN also believe that their organizations will be able to stay in business for more than 10 years. Respondents from Indonesia rated the highest on variables related to workplace culture, empowerment, fairness and feedback. Meanwhile, respondents from the Philippines gave the lowest assessment to variables related to new job opportunities, opportunities to learn new skills and increased productivity with the presence of artificial intelligence. Employee welfare needs to be a priority for companies, so companies need to collect data about employee desires and motivations, segment employees and prioritize action plans for management in the company.

Keywords: digitalization, working conditions, work environment, artificial intelligence

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1. Introduction

ASEAN (Association of Southeast Asian Nations) was founded in 1967, as a forum for cooperation in the Southeast Asian region which is committed to improving the welfare and prosperity of the ASEAN Community. With its various initiatives in the areas of employment, education, poverty alleviation and health, ASEAN has raised living standards and increased access to essential services in the region. How well the region performs, and where ASEAN is headed in the next 20 years, will depend on the ability of its people to evolve and develop resilience amidst uncertainty and disruption.

Geopolitics in the ASEAN region is influenced by complex relationships between major powers. ASEAN also faces socio-economic challenges such as unemployment rates, rapidly aging societies, urban-rural disparities, the impact of artificial intelligence on education and employment, workforce relevance, climate change, and an increase in climate-related disasters and public health emergencies. The pandemic has exposed the ASEAN region's vulnerability to a spectrum of health and unemployment risks. All external developments and regional challenges are testing the resolve to build a stronger and more united ASEAN Community.

ASEAN is working hard to ensure that its member countries can overcome labor challenges and ensure that current and future generations of ASEAN citizens can take advantage of the benefits offered by existing developments. ASCC (ASEAN Socio-Cultural Community) not only improves the lives of ASEAN people, but also advances regional socio-economic development. ASCC has made great progress in addressing climate change and increasing resilience to advance partnerships and technological advancements. The ASCC Blueprint 2015-2025 sets direction and guides plans for sectors to be developed in ASEAN (The ASEAN, 2023). The initiatives in the blueprint have been implemented in the fields of health, youth, education, poverty alleviation, gender empowerment, disaster management, labor and civil services, environment, culture and information.

The following are several socio-economic trends and issues that are expected to receive policy attention in ASEAN in the next few years, such as sustainable development which focuses on the readiness of ASEAN countries to face future problems in the financial and health sectors, increasing economic and digital resilience, overcoming gaps in social protection, and transitioning to a sustainable and green economy. Demographic changes will affect several ASEAN member countries which face challenges to ensure sustainable economic growth with an aging workforce, increasing numbers of youth and working age.

The next trend is digital transformation. Even though there has been rapid internet adoption in the Southeast Asia region, with around 71.2 percent of the total population of the ASEAN region using the internet, there are still significant disparities in technology access in the region. Only 53 percent of children and teenagers in rural areas have an internet connection at home, compared to 72 percent of children in urban areas. Despite high mobile penetration in most ASEAN countries, many still do not have internet access on their mobile devices. The price for accessing digital networks is also too expensive, limiting internet use.

ASEAN needs to make new breakthroughs to prepare for the digital future, namely: (i) ASEAN member communities need to improve their skills, knowledge and learn new skills to remain relevant; (ii) digital transformation in business needs to consider the work environment. ASEAN needs to harness digital innovation and accelerate new and existing jobs, in digitalization for the future of work and education. The ASEAN community is also undergoing Industrial Revolution 4.0, which is characterized by information technology, robotics, artificial intelligence, connected devices, big data and the Internet of Things. This will open new opportunities,

challenges and risks for ASEAN. This technology will influence almost all aspects of human life, from how we work and learn to how society interacts with its environment.

This study aims to analyze the response of ASEAN society to current working conditions in line with the development of digital technology, and to analyze the response of ASEAN society to the current work environment with digitalization.

2. Research Methods

This study uses descriptive analysis through a bibliometric approach with the data source coming from Scopus. Data was collected on February 17th 2024. The keywords included were "work AND condition AND ASEAN" with a total of 52 documents and "work AND Environment AND ASEAN" with a total of 72 documents. The data collected is then processed using the VOSviewer application. Through VOSviewer, you will get a visualization of bibliometric mapping in the form of relationship patterns between data. The visualization is displayed in an overlay visualization which can display visualizations based on the year the article was published (Zakiyyah and Winoto, 2022).

VOSviewer, is a computer program used to observe and build bibliometric mapping visualizations. VOSviewer has a text-mining function which is useful in building and displaying visualizations in the form of relationships or networks (correlations) of words in published documents. The visualization displayed is divided into several methods and functions, such as zooming, scrolling and searching mapping systems. Through this program, publication mapping is carried out in more detail. Bibliometric results are presented specifically via VOSviewer, making it easy to analyze existing relationships (Tupan, 2016).

Apart from using data sourced from the Scopus database, this study also uses secondary data sourced from the results of a survey conducted by PricewaterhouseCooper (PwC) in 2023. For Indonesia, the number of respondents was 1,000 people consisting of Gen Z (16%), millennials (57%), Gen X (18%) and baby boomers (9%); In Malaysia, the number of respondents was 1,500 people consisting of gen Z (14%), millennials (59%), gen X (23%) and baby boomers (3%); The number of respondents in the Philippines was 1,000 people consisting of gen Z (19%), millennials (55%), gen X (19%) and baby boomers (6%); In Singapore, the number of respondents was 1,000 people consisting of gen Z (15%), millennials (43%), gen X (30%) and baby boomers (12%); The number of respondents in Thailand was 1,000 people consisting of Gen Z (10%), millennials (56%), Gen X (29%) and baby boomers (5%).

3. Results and Discussion

3.1. Labor Force Participation Rate (TPAK)

Digital technologies are changing how, when, and where work is done, as well as by whom and for whom it is utilized (Bailey et al. 2019). With the current potential for change, questions

arise related to work and organizational aspects, such as coordination, learning, flexibility, professional roles and boundaries, skills and competencies, socialization practices, and others (Bailey et al. 2019). Research that focuses on the interaction between digitalization and organizational change has been partly carried out by Bodrožić and Adler (2018); Ford (2015); Zuboff (2019) argues that digitalization can empower jobs and organizations or vice versa (Moore and Robinson, 2016).

Compared with traditional business environments, digitalization provides a new organizational setting for companies, as it can improve the connections between technical and social systems of organizations as well as connections with external networks through sharing and exchanging digital information (Za et al. 2014). Thus, work systems can be integrated through a network of digital platforms, artificial intelligence and machine learning, and sophisticated analytical capabilities (Wang et al. 2016). Therefore, digital transformation encourages integration between social and technical aspects as well as the integration of companies with their ecosystem, such as suppliers and customers (Schuh et al. 2017). Hirsch-Kreinsen (2016) sees greater opportunities to create symmetrical relationships between people, work and technological systems, which also represents new opportunities for optimization.

Digital technology spans the entire product lifecycle (Wang et al. 2016), encouraging a higher level of connectedness among systems within an organization (Schuh et al. 2017). Moreover, digital platforms encourage and support horizontal integration (Frank et al., 2020), to ensure the exchange of relevant information between production with suppliers and distribution centers (Pfohl et al. 2017). Environmental preservation, design and user experience, technological literacy, talent management, flexibility and agility, artificial intelligence and big data and creative thinking are priority skills and skills needed (Suryadi, 2023).

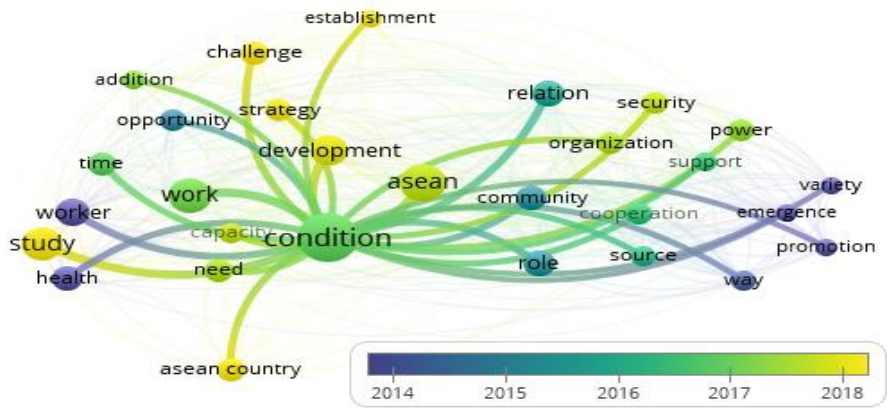


Figure 1. Overlay visualization with respect to working conditions
Source : Processed from the Scopus 2024 database

Based on Figure 1, it can be seen that working conditions are connected with several words such as condition, work, opportunity, challenge, relationship, security, power, variety, need,

community, cooperation, source, organization, support, role, relationship, ASEAN, development, strategy, and others in the time period between 2014 and 2018 and above. Color degradation shows the development of research themes over time.

Dalam konteks digitalisasi, pada ekosistem digital, perusahaan perlu mengadopsi alat dan sistem baru dalam operasi dan manajemennya (Autio, 2017), sebagai kunci untuk pertumbuhan dan daya saing perusahaan dalam jangka panjang (Frank et al. 2020). Proses adaptasi perusahaan terhadap transformasi digital, melibatkan penyesuaian kembali model bisnisnya, kegiatan sosial dan teknis, serta praktik-praktik dengan konteks yang baru. Pemikiran ekosistem sosioteknik dikonseptualisasikan sebagai sarana untuk meningkatkan produktivitas sekaligus menyediakan pekerjaan yang lebih bermakna, dengan keunggulan yang ditawarkan oleh teknologi digital (Pasmore et al., 2019).

Digitalization in the production process and the application of digital technology will significantly change how goods and services are produced. Technologies such as big data, artificial intelligence (AI), Internet of Things (IoT), and computing are increasingly being used, enabling the use of intelligent robots to replace physical and cognitive work previously performed by humans. Experts argue that robots can be used to handle social tasks that involve empathy (Manyika et al., 2017). Robots can also learn information and adapt in an effort to increase efficiency in their tasks. Thus, digitalization can increase productivity and efficiency in the production process of both goods and services.

The benefits of digitalization vary greatly between sectors, it is expected to reduce production costs by 17.6% and increase income by 22.6% (World Economic Forum, 2016). One of the well-known concepts of digitalization of production is Industry 4.0, which combines digital technology and the internet to create transformation in the production process carried out by companies (Davies, 2015). Industry 4.0 provides greater production flexibility, increased product quality and customization, as well as reduced production time and increased productivity. This allows customers to obtain products that suit their tastes more quickly and at lower costs (Davies, 2015).

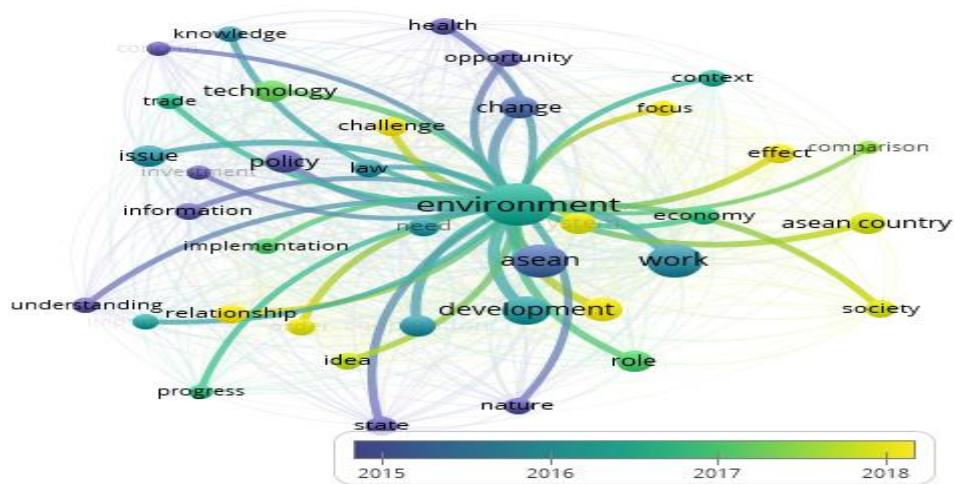


Figure 2. Overlay visualization with respect to the work environment

Source: Processed from the Scopus 2024 database

Based on Figure 2, it can be seen that the work environment is connected with several words such as environment, work, development, economy, opportunity, health, focus, effect, society, role, nature, need, relationship, understanding, progress, information, implementation, issue, policy , law, technology, knowledge, challenge, and other words in the time period between 2014 and 2018 and above. Color degradation shows the development of research themes over time.

In its report on the future of the workforce 2035, Kuosa¹ stated that thanks to technological advances such as virtual reality and immersive technology, the work environment has become easier. Working with talent from all over the world with diverse backgrounds, abilities and ages certainly provides opportunities that open horizons for future workers to discover new perspectives and knowledge every day. Artificial intelligence and automation have taken over many daily activities, allowing workers to maximize their talents to the fullest. Continuous learning will be truly incorporated into the work. Future workers will enjoy discovering something new and their work will have special meaning that aligns with their values.

Jobs that used to be static and safe have developed quickly and constantly changed. The many rapid shifts and changes worldwide, such as the 4th industrial revolution, rapid technological advances, and changes in employee expectations, have made the work environment more dynamic. By 2022, the global workforce will number 3.3 billion employees, up from 2.27 billion in 1991. Dynamic changes in society and work itself will encourage these workers to become resilient and agile. The increasing number of seniors will increase dependency ratios, lengthen retirement ages and lead to talent shortages and a multi-generational workforce.

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¹ <https://www.futuretaleslab.com/>

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As technology advances like never before, especially in the fields of AI and the Internet of Things, work will become much more efficient and effective. However, this also requires the workforce to catch up and remain relevant in terms of skills and competencies. By 2023, 82% of the world's countries face a skilled labor shortage and by 2030, 47 million jobs in Southeast Asia are expected to remain unfilled due to skills shortages. Competition in capturing and developing global talent has become crucial in this period of transformation, creating a narrative of creativity and cooperation to bridge the gap in demand and supply of global talent.

Issues of diversity, equity, and inclusion in the workplace are changing as we move into the future. Diversity will expand to multidimensional aspects that include social, occupational, relational, cognitive, physical and value diversity. Companies need to dig deeper into diversity issues to understand their actual impact on the business. Accepting and embracing diversity will improve business culture and can uncover untapped potential, resulting in an inclusive workplace that can encourage business growth. Despite the benefits of diversity, equity, and inclusion, achieving consistent alignment across an organization remains a challenge.

As the world develops rapidly, the work landscape will also change dynamically, towards new standards in working, namely anywhere, anytime and anyway. Even though hybrid work systems have become commonplace, employee expectations continue to change. Expectations for greater flexibility in deciding when, where and how one works are becoming increasingly common. Organizations recognize that building a flexible work culture based on clear communication, trust, effective planning and efficient technology infrastructure is critical to the success of the new era. Advanced workplace management systems, will be the most important factor in driving work to be truly synchronous, autonomous and remote. This system will empower workers to reach their full potential in the workplace by helping them work smoothly and effectively despite their diverse needs and preferences.

3.2. Working Conditions in Several Countries in ASEAN

Working conditions refer to various aspects that influence an employee's experience and well-being at work. Several things that need to be considered in describing working conditions include: compensation, promotions, job satisfaction, workforce skills, business continuity and others.

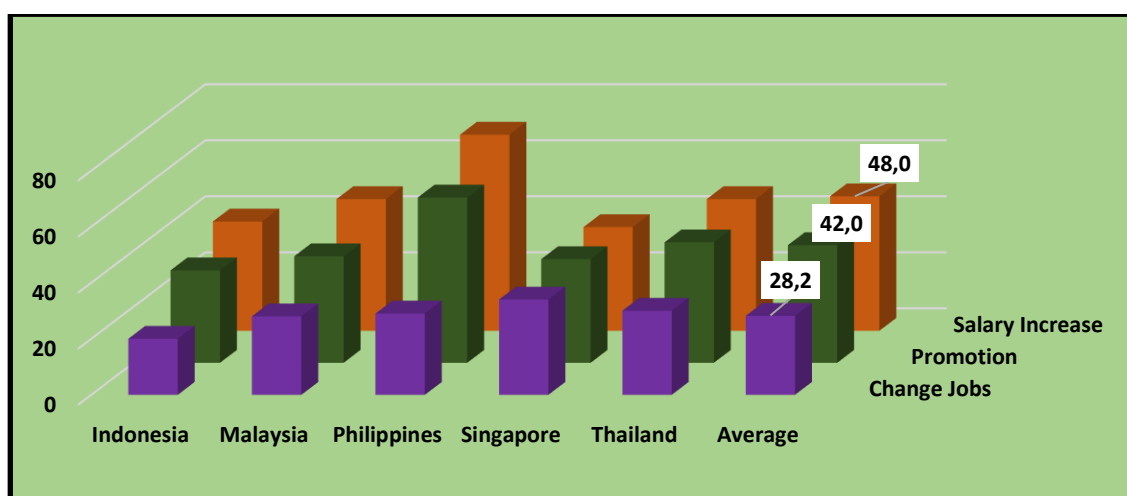


Figure 3. Opinions of respondents from five ASEAN member countries in relation to salary increases, promotions and job changes

Source: Data processed from the results of the 2023 PricewaterhouseCoopers survey

Based on Figure 3, respondents who want a salary increase rank highest with an average of 48.0 percent, followed by the desire to get a promotion at 42.0 percent and those who want to change jobs at 28.2 percent.

Respondents from the Philippines had the highest desire for a salary increase, namely 70 percent. Other countries such as Indonesia, Malaysia, Singapore, and Thailand have a percentage below the average. Good working conditions include fair pay and competitive compensation appropriate to the industry and job role. Salary payments greatly support job satisfaction, welfare, and workers' quality of life. Several factors might cause respondents from the Philippines to have a high desire to get a salary increase, such as the low-income level of the majority of the population. A pay raise can be crucial for many workers to make ends meet. The cost of living in the Philippines, especially in big cities like Manila, continues to increase. The job market in the Philippines is very competitive; a salary increase can be considered a recognition of good contribution and performance. Many people in the Philippines dream of improving their quality of life for themselves and their families. A salary increase can open up opportunities to improve living standards, such as buying a better home, getting a higher education, or accessing better health services. Corporate culture in the Philippines may also influence the desire for a salary increase. If, in a certain work environment, a salary increase is considered the main way to appreciate and motivate employees, then employees will tend to be more motivated to get a salary increase.

Respondents from the Philippines and Thailand had the highest desire to get a promotion at work, with 59 percent for the Philippines and 43 percent for Thailand. There are several reasons why respondents from the Philippines and Thailand have a high desire to obtain promotions at work, such as increasing social status, this social status is very important. Obtaining a promotion

at work is often considered a proud achievement and can improve a person's social status in society. Increased income, as promotions often mean increases in salary or other benefits. Promotion in the workplace is a form of recognition of a person's achievements and contributions to the company. In societies where values such as hard work and dedication are highly valued, promotions are considered the result of a person's hard efforts. Getting a promotion usually means having more responsibility and the opportunity to grow in your career. Many people in the Philippines and Thailand have the ambition to continually improve their skills and knowledge and advance in the organizational hierarchy. In some families and cultural environments in the Philippines and Thailand, there is pressure to achieve career success and achieve a high position in the workplace. Promotion is often seen as a way to meet family and community expectations. The job market in both countries can be very competitive. In an effort to maintain and advance in their careers, employees often seek promotions as a way to differentiate themselves from their coworkers.

Job switching is when a person decides to leave their current job to work elsewhere. The decision to change jobs can be influenced by various factors, including better career opportunities, increased compensation, dissatisfaction with the current work environment, geographic changes, and other personal factors. Based on Figure 3 above, the Philippines, Singapore, and Thailand have a higher rate of respondents wanting to change jobs compared to the average of 29.0 percent for the Philippines, 34.0 percent for Singapore, and 30.0 percent for Thailand. The high desire of respondents from the Philippines, Singapore, and Thailand to change jobs is caused by a number of factors, such as career growth, faster career growth, or expansion of experience. One of the main reasons for changing jobs is to get better compensation. Respondents want a work environment that is more positive, inclusive, or in line with their values.

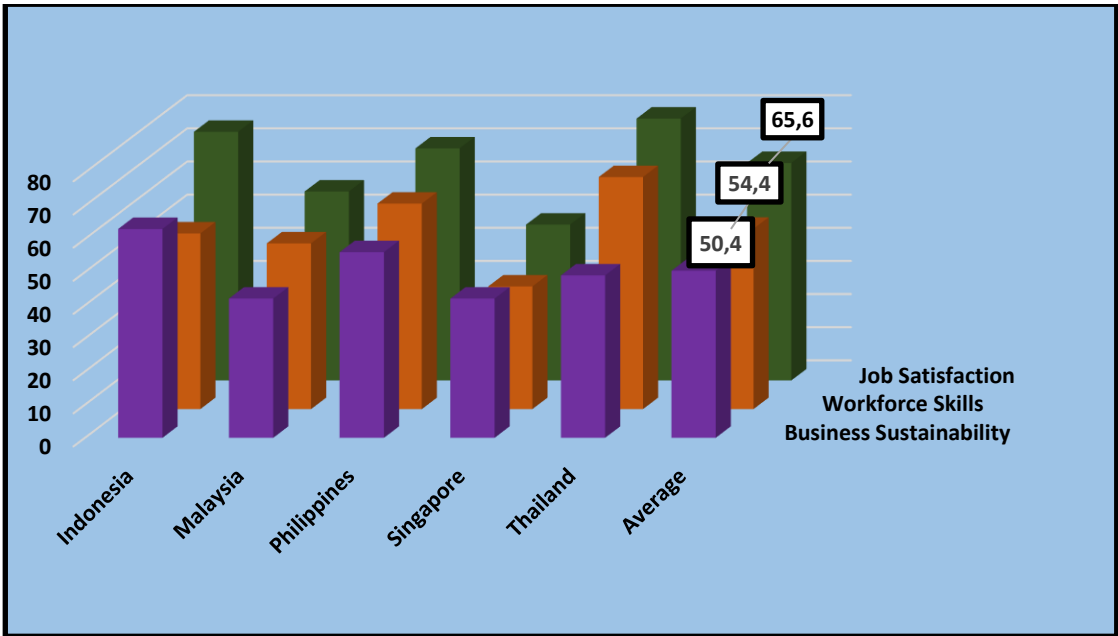


Figure 4. Opinions of respondents from five ASEAN member countries in relation to job satisfaction, workforce skills and business sustainability

Source: Data processed from the results of the 2023 PricewaterhouseCoopers survey

Based on Figure 4, respondents who want job satisfaction rank highest with an average of 65.6 percent, followed by workforce skills at 54.4 percent and business sustainability at 49.0 percent.

As many as 75.0 percent of respondents from Indonesia, 70.0 percent from the Philippines and 79.0 percent from Thailand wanted job satisfaction, this is higher than the ASEAN country average of 65.6 percent. The high desire for job satisfaction is partly due to the desire to obtain a positive work culture in the workplace such as collaboration, open communication and support between colleagues. Recognition of employees' achievements and contributions by superiors and co-workers can also increase their job satisfaction. If employees feel appreciated and recognized for their efforts and work results, they will be more satisfied and motivated to continue performing. Safe, healthy and comfortable working conditions will bring satisfaction to employees.

Work skills are the abilities or expertise that a person has to carry out certain tasks effectively and efficiently in the workplace. Job skills can cover a wide range of things, from technical skills specific to a profession, to interpersonal skills needed to collaborate with others. As many as 62.0 percent of respondents from the Philippines and 70.0 percent from Thailand believe that their job skills will change significantly in the next five years. These job skills are essential in the modern world of work to achieve success in a fast-changing and competitive work environment.

Business sustainability refers to the ability of a company to operate effectively in creating financial profits, considering social and environmental aspects in every business decision taken. Based on Figure 4, it can be seen that Indonesian (63.0 percent) and Filipino (56.0 percent) respondents believe that the organizations they work for are able to stay in business for more than 10 years if they stay on their current path. Several important things in relation to business sustainability include environmental aspects, social aspects, economic aspects, innovation, stakeholder involvement and risk management. By paying attention to these aspects, companies can ensure that their operations are sustainable in the long term, creating value for all stakeholders and contributing to sustainable economic, social and environmental development.

3.3. Work Environment in Several Countries in ASEAN

The work environment in ASEAN countries has unique characteristics and dynamics. While each country has different cultures, policies and practices, there are some general trends in the work environment in the region:

- a. ASEAN is a very culturally diverse region, and this is reflected in its work environment. In the work environment in ASEAN, you will find various cultures, languages and traditions that influence the way people work, communicate and collaborate.
- b. Most ASEAN countries are developing countries with economies that continue to grow. The work environment is often dynamic and full of opportunities, especially with the rapid growth of sectors such as technology, manufacturing and services.
- c. Work cultures in ASEAN countries vary, but values such as friendliness, collaboration, and respect for authority are generally appreciated. Hierarchy in organizations and interpersonal relationships can influence team dynamics and decision making.
- d. ASEAN countries are experiencing demographic changes, including an increase in the number of young people in the workforce. This can impact work culture, with demands for flexibility, work balance and more innovative approaches to work.

Figure 5 shows the opinions of respondents in five ASEAN member countries regarding the work environment. An average of 62.4 percent of respondents actively seek input and use it to improve their performance. An average of 60.8 percent stated that their managers treated them fairly and equally. An average of 60.6 percent of respondents felt their work was satisfying because of empowerment and 29.6 percent agreed that their managers usually tolerate failure in terms of workplace culture.

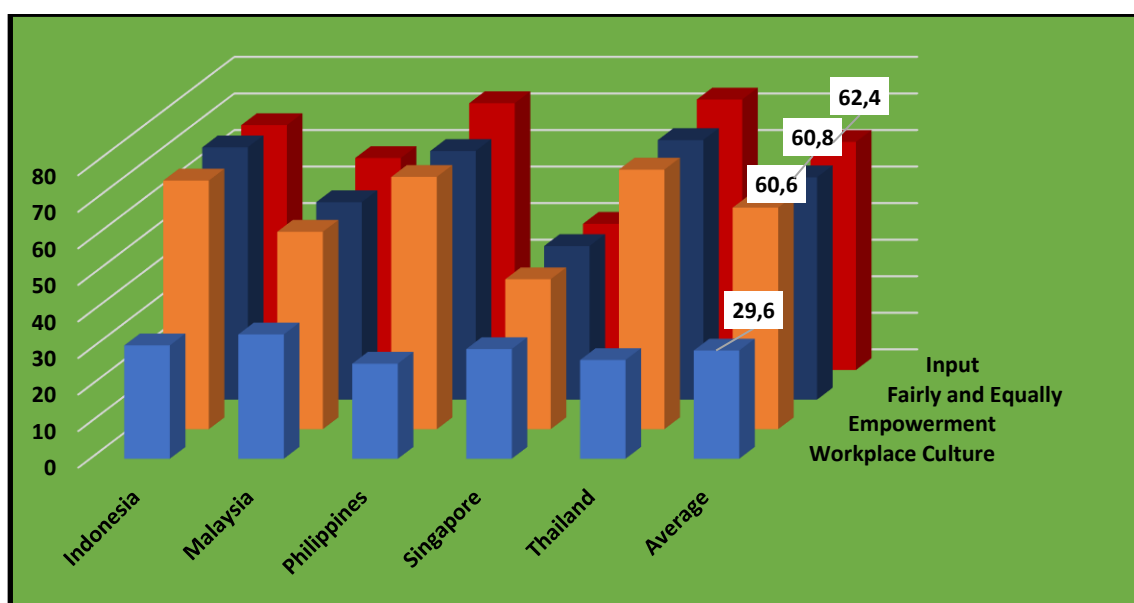


Figure 5. Opinions of respondents from five ASEAN member countries in relation to feedback, fairness, empowerment and culture in the workplace

Source: Data processed from the results of the 2023 PricewaterhouseCoopers survei

Several respondents from countries in ASEAN such as Indonesia (67.0 percent), the Philippines (73.0 percent), Thailand (74.0 percent) agreed to input in the form of feedback to improve their performance compared to the average of only 62.4 percent. Job feedback (input) has many benefits and is important for employees in relation to career development and performance improvement. Feedback provides information about areas where employees are performing well and where they can improve their performance. By getting regular feedback, employees can identify their weaknesses and take steps to improve their performance. Feedback also helps employees in the development of their skills and knowledge. By knowing the areas where they need to improve or develop new skills, employees can focus on relevant learning efforts to enhance their competencies. In addition, positive feedback can increase employee motivation by providing recognition for their good performance. On the other hand, constructive and supportive feedback can help employees who are experiencing difficulties to stay motivated and try to improve their abilities. Input helps in clarifying job expectations and goals. By understanding their supervisor's and company's expectations for their performance, employees can adjust their behavior and actions to achieve desired results.

Fair treatment in the workplace is very important because it has a major impact on employee well-being and satisfaction, as well as the productivity and sustainability of the organization as a whole. As many as 69.0 percent of respondents in Indonesia, 68.0 percent of respondents in the Philippines and 71.0 percent of respondents in Thailand stated that their managers treated workers fairly and equally. Some of the reasons why fair treatment in the workplace is so

important is that when workers feel that they are treated fairly, they tend to have higher levels of well-being. This can reduce the stress and tension they experience, as well as increase overall happiness and life satisfaction. Fair treatment can increase employee motivation and engagement. When employees feel valued and recognized for their contributions, they tend to be more motivated to give their best in their work and become actively involved in organizational activities. Employees who feel they are treated fairly tend to be more dedicated and committed to their work. This will increase productivity because employees feel motivated to achieve better results.

Job satisfaction due to empowerment refers to the positive and satisfied feelings felt by employees when they have autonomy, responsibility, and the opportunity to make influential decisions in their work. As many as 68.0 percent of Indonesian respondents, 69.0 percent of Filipino respondents and 71.0 percent of Thai respondents felt that their work was satisfying because of empowerment. Other ASEAN countries are below the average, reaching 60.6 percent. Some important aspects of job satisfaction are due to empowerment, namely employees who feel empowered are given significant responsibility in their work. They have an important role in completing tasks and achieving goals, which provides a high sense of accomplishment and increases job satisfaction. Through empowerment, employees have the opportunity to develop new skills and competencies. They may engage in challenging and meaningful projects that allow them to grow professionally and personally. Empowered employees feel valued and cared for by the organization. They realize that their roles and contributions are important to the company's success, which increases their motivation and engagement in their work. Job satisfaction due to empowerment encourages collaboration and effective teamwork. Employees feel motivated to work together to achieve common goals, because they have a significant role in the decision-making process and strategy implementation.

As many as 31.0 percent of respondents in Indonesia, 34.0 percent of respondents in Malaysia and 30 percent of respondents in Thailand consider workplace culture to play an important role in shaping employee experience, influencing employee performance, motivation, satisfaction and retention. Workplace culture refers to the norms, values, attitudes, beliefs, and behaviors that occur in the work environment of an organization. The values espoused by an organization will form the foundation of workplace culture. It includes principles such as integrity, cooperation, innovation, quality, and social responsibility. The norms implemented around these values guide employee behavior in the work environment. A good workplace culture encourages openness and effective communication at all levels of the organization. Employees feel comfortable raising their ideas, issues, or concerns, and management listens carefully and responds appropriately. A collaborative workplace culture and teamwork, enabling employees to work together effectively to achieve common goals. This creates an inclusive atmosphere and builds strong relationships between team members. A workplace culture that emphasizes equality and fairness treats all employees fairly, regardless of background, gender, race, or other factors. This creates an inclusive work environment and reduces the possibility of discrimination or unfair treatment.

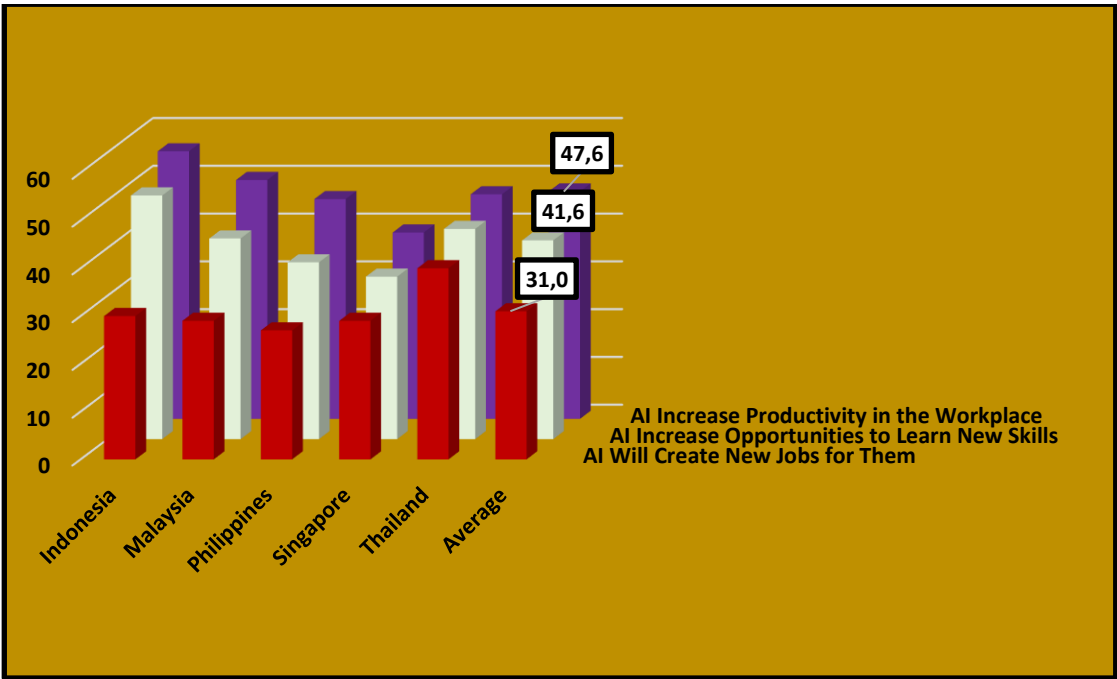


Figure 6. Opinions of respondents from five ASEAN member countries in relation to Artificial Intelligence (Artificial Intelligence)

Source: Data processed from the results of the 2023 PricewaterhouseCoopers survey

Artificial intelligence is a branch of computer science that aims to create machines or systems that have the ability to learn, think and act like humans. The main goal of artificial intelligence is to develop technology capable of performing tasks that typically require human intelligence, such as natural language processing, pattern recognition, decision making, and problem solving. Based on Figure 6, it can be seen that an average of 47.6 percent of respondents in ASEAN stated that artificial intelligence would help them increase productivity in the workplace, 41.6 percent stated that artificial intelligence would increase opportunities to learn valuable new skills and as many as 31.0 percent stated that artificial intelligence will create new jobs for them.

Artificial intelligence has the potential to increase work productivity in a variety of fields, enabling companies in which they work to better compete and innovate in an increasingly competitive market. This is because artificial intelligence can be used to automate repetitive tasks, such as data processing, form filling, or transaction processing. By removing these tasks from human work, time and resources can be allocated to more value-added activities. In addition, artificial intelligence is able to analyze data on a large scale quickly and accurately. This enables better and faster decision making based on relevant information. With better data analysis, companies can optimize their strategies, identify new opportunities and better manage risks. Artificial intelligence can also be used to optimize business processes by identifying areas where efficiency can be improved. As many as 56.0 percent of respondents in Indonesia and 50.0

percent of respondents in Malaysia stated that artificial intelligence would help them increase work productivity. Respondents in both countries gave higher assessments than the average scores given by respondents from other countries.

As many as 51.0 percent of respondents in Indonesia, 42.0 percent of respondents in Malaysia and 44.0 percent of respondents in Thailand thought that artificial intelligence would create opportunities for them to learn valuable new skills. By leveraging machine learning techniques, artificial intelligence can identify patterns, trends, and insights from complex data, providing opportunities for individuals to learn new skills in data analysis, predictive modeling, and data-driven decision making. Artificial intelligence systems can be used to create learning experiences that are adaptive and tailored to individual needs and abilities. Through analyzing learning behavior and user responses, artificial intelligence can adjust learning materials, teaching methods and difficulty levels to maximize learning effectiveness. This allows individuals to learn new skills more efficiently and effectively. Artificial intelligence can also be used to create simulations and virtual environments so individuals can practice and test new skills without the risks or costs associated with real situations.

Artificial intelligence has opened up new job opportunities and changed the job landscape completely. Of the five countries in ASEAN, only respondents in Thailand gave a higher assessment than the average ASEAN respondent, namely 40.0 percent, who thought that artificial intelligence could provide new job opportunities. The growth of the artificial intelligence industry has created a huge demand for experts and professionals skilled in the development of AI technologies. This includes data scientists, machine learning engineers, AI researchers, and AI software developers. New job opportunities continue to emerge in this field, both at large technology companies and at AI-focused start-ups. Artificial intelligence will require in-depth data analysis to produce effective models. This creates a high demand for data science professionals skilled in collecting, cleaning, analyzing, and interpreting data. New job opportunities in the data analytics field continue to grow, with companies across industries looking for data experts to help them make better decisions based on data. Artificial intelligence is enabling the emergence of new job opportunities in a variety of specialized fields, such as health (bioinformaticians for genome analysis), finance (risk analysts using predictive models), transportation (experts in autonomous vehicles), and many more. Professionals with specialized knowledge and skills in this field are highly sought after.

4. Conclusion and Suggestions

Digital technology is changing the way work is done. When compared with the traditional business environment, digitalization provides a new organizational setting for companies, because it can improve the connection between the technical and social systems of the organization as well as connections with external networks through sharing and exchanging digital information. Work systems can be integrated through digital platform networks, artificial

intelligence and machine learning, and analytical capabilities. Thanks to technological advances, the work environment has become almost easier. Artificial intelligence and automation have taken over many daily activities, allowing workers to maximize their talents to the fullest. Future workers will enjoy discovering something new and their work will have special meaning that aligns with their values. Jobs that used to be static and safe have now developed very quickly and are constantly changing.

Employee welfare will influence employee behavior in increasing employee involvement with work and also with the organization. Organizational support also increases employee engagement with the job and also with the organization. When workers feel support from the organization, their sense of belonging to the organization will become stronger. On average, 48.0 percent of workers in ASEAN want a salary increase and the highest desire comes from workers in the Philippines at 70.0 percent. Furthermore, an average of 42.0 percent of respondents from ASEAN wanted a promotion and respondents from the Philippines occupied the top position with 59.0 percent. Around 28.0 percent of respondents in ASEAN wanted to change jobs, the lowest number of respondents who wanted to change jobs came from Indonesia, which reached 20.0 percent.

Employee involvement is a source of emotional connection between employees and the organization, so there needs to be alignment between employees' personal goals and organizational culture in increasing employee productivity. Engaged employees will work with a progressive attitude, which will build the organization's reputation and value. As many as 65.6 percent of respondents in ASEAN want job satisfaction. Respondents from Indonesia, the Philippines and Thailand wanted higher satisfaction than average. Furthermore, as many as 54.4 respondents in ASEAN believe that skills in work will change in the next five years, the countries of the Philippines and Thailand occupy a higher position than the average. As many as 50.4 percent of ASEAN respondents believe that their organizations will be able to stay in business for more than 10 years. Respondents from Indonesia and the Philippines are above average in believing in business sustainability.

As many as 62.4 percent of respondents in ASEAN actively seek input and use it to improve their performance. There were 60.8 percent of respondents in ASEAN stating that managers treated them fairly and equally. In addition, 60.6 percent of respondents thought that their work was satisfying due to the empowerment carried out by the organization where they work and as many as 29.6 percent of respondents in ASEAN agreed that their managers tolerated small-scale failure which was part of the culture in their workplace. When compared with other member countries, Indonesian respondents rated the variables asked highest regarding workplace culture, empowerment, fairness and feedback.

The demand for working professionals who understand artificial intelligence and related technologies has increased. Based on survey data, as many as 47.6 percent of respondents in ASEAN thought that artificial intelligence could help them in their efforts to help increase their productivity. There were 41.6 percent of respondents who stated that artificial intelligence would

create new opportunities for them to learn valuable new skills and 31.0 percent of respondents in ASEAN thought that artificial intelligence would provide new job opportunities. When compared with other member countries, Filipino respondents gave the lowest assessment of the variables asked regarding new job opportunities, opportunities to learn new skills and increased productivity with the presence of artificial intelligence.

Workers with digital skills will gain a particular advantage in ASEAN as companies still have a significant skills shortage in this area. Employers strive to upskill their employees, but companies often see upskilling as a short-term solution to cover urgent skills shortages rather than as a way to develop a strategic and competitive workforce. Skills development must be profitable for both parties, namely the company and employees.

The new work environment offers leaders the opportunity to completely rethink their approach to managing talent. Leaders who can listen carefully to what their employees expect and respond more flexibly will benefit in improving their performance.

Worker welfare needs to be a priority for companies. Meaningful work, and payment of fair wages, need to be addressed. Companies need to collect data about employee desires and motivations, segment employees and prioritize action plans for management in the company.

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