

# Gender Versus Digitalization: How Men and Women Facing Digital Platforms to Applying For Work

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## Article Info

Volume 83

Page Number: 743 - 750

Publication Issue:

May - June 2020

## Abstract:

Industrial revolution 5.0 has stimulated a plethora of human resources in all areas of work to be susceptible to digitalization technology. This research aims to find out how men and women applying digital technology in their workplace and how the phenomenon of gender currently related to the issue. This study used a mixed-method which is a combination of qualitative and quantitative analysis techniques. In the initial stage, it will be tested quantitatively according to the results of respondents' answers about the research issue, then explained descriptively by adding interview results which in addition to being sourced from respondents also from media print and electronic media. The research subjects are employees who work in government and the private sector in Ambon. The results showed that quantitatively in Ambon city there were 60% of men who have the capability in using digital technology skillfully in the workplace and 33% of women were capable of using digital technology in their workplace. The results indicated that there were still gender inequalities in the world of work due to the competences and capability in using digital technology which is still dominated by men consequently strategic positions in an organization or company are held by men.

## Article History

Article Received: 11 August 2019

Revised: 18 November 2019

Accepted: 23 January 2020

Publication: 09 May 2020

**Keywords:** Gender, Digital, Technology, Workplace

## INTRODUCTION

Responding to the challenges of the industrial revolution 5.0, the Indonesian people must still improve themselves in all aspects of life. Industrial technology that is developing quickly requires this nation to prepare natural and human resources capable of facing the challenges of the 5.0 revolution. Indonesia is a country rich in natural resources thus, Indonesia needs human resources that can manage these natural resources. To survive and play a role in the era of digitalization, the ability of human resources must be veritably tested because, in this digital world, it must equip humans with up-to-date science and technology to compete globally. Besides, they nowadays run the modern industry

through sophisticated technology with digital systems. The level of difficulty in the application of digital systems in the industrial world is an important issue that must fend off by users. This raises a sense of competition between individuals to master technology and achieving preferable performance. Professionals must be able to arm themselves with high skills and competencies in this digital age. An Industry is running systemically requires human resources who can master digital technology. Human resources itself is professional workers who are competent and tested in their fields. These professionals comprise men and women who view and position themselves as someone competent to master and can apply their abilities in the work of industry. Technology mastery is an important factor

for both male and female professionals in the current era of industry 5.0. The tendency to master technology is their biggest motivation for surviving and achieving high performance in the workplace. In Indonesia, women, and men now have the same opportunity in all fields. The emancipation of women which enables women to stand as tall as men so that women are no longer weak creatures who only rely on men to provide for them. D. Shah's research, (2019) states that in the 21st century, the feminism movement in Asia has declared that women have the right and power to decide everything in their lives but still gender inequality sense in the economic, political, legal and social fields in Asia. These problems, in fact, still occur in Indonesia. Men still dominate important positions in industry and state administration. Implicitly it can explain that men play a major role in nation-building. Women have proven that in the digital age, they can interact, shown by how women do business through the internet therefore women can master digital technology in conducting business or official employment. It has proven this in Duffy's research (2015) which interviewed 18 women who developed feminist sites such as beauty, fashion, and retail. The research explains that women who do business through digital media unconsciously have applied gender-oriented creativity. Based on the above facts, gender is still an issue in various countries and no doubt men still dominate important positions in the industrial world which automatically, men are more in control of systems and technology than women. However, some previous studies show significant differences between men and women in terms of technological mastery, including research by King *et al.* (2002) in Pelamonia and Sandanafu (2017) which shows that men are calmer in using technology hence, they can learn to master technology quickly compared to women. In contrast to King *et al.*'s research, Siann *et al.* (1990) in Pelamonia and Sandanafu (2017) showed that women are more positive about using technology so they are more relaxed and not worried if they make a mistake in

applying technology. Recent study conducted by Pelamonia and Sandanafu (2017) which proves that there is no significant relationship between gender variables with anxiety using technology (technophobia) in Ambon city. Rashed (2016) using a sample of 5 developing countries namely Bangladesh, Brazil, Ghana, Chile, and the Philippines with 5000 respondents using access to information and technology such as the internet and computers proves that Bangladeshi women are more difficult and avoid using digital technology than other countries and Additional education factors and the ability to use digital technology daily extremely affect women in the digital inclusion process. The inconsistency of previous studies above is the reason for researchers to re-investigate gender phenomena in the digital industry in Indonesia, especially in the city of Ambon. Based on the 2013 National Development Planning Agency (Bappenas) projections, the population of Indonesia in 2018 will reach 265 million. The number comprises 133.17 million men and 131.88 million women and only 5% of women hold directorships in the business world, 17.3% of women who sit on the DPR-RI board membership internationally should be 30% of women sit in legislative seats. This shows that in Indonesia there are only around 101 women legislators out of 560 members of the DPR-RI (Kumparan.com, 2018). Maluku Province BPS data shows that the workforce of women in 2016 numbered 60,404 people and in 2017 it decreased to 58,048 people (BPS 2018). This implies that female workers have not yet gained full trust in the industry's management because the quota for recruiting women workers is not comparable to men. The low quality of life of women will affect the Indonesian human development index completely and will harm the development process (Ministry of Women's Empowerment and Indonesian Children, 2012). On this occasion, it can explain that gender equality in Indonesia overall and Maluku, in particular is still problematic.

## LITERATURE REVIEW

### Gender Concept

In principle, the concept of gender focuses on the different roles of men and women, the community forms which under social norms and social-cultural values of the community concerned. Gender is also define as a social-cultural construction that distinguishes masculine and feminist characteristics. Gender differs from the sexes of men and women biologically (Moore, 1998 in Kudiran. 2002). Analysis and elaboration on gender in economic and social aspects cannot be separated from the concept of family. Women play an important role in the family, family financial management relies on the pattern of housewives so that the concept of gender in the economy cannot be separated from the family concept. The gender gap according to Chafetz (1998) occurs because of an imbalance in access to scarce resources in society. Rare sources meant are prestige power, freedom, the opportunity to get education and training and also medical care. Moreover, Gender stereotypes state that science and technologies are maskulin subjects (Swarup, 2019). The gender disparity that has occurred has shaped a social reality that has unwittingly been preserved until now. The increasing number of women workers in the industry will affect gender diversity itself (Zahro, *et al.* 2014)

### Equilibrium Theory

Equilibrium theory or balance theory emphasizes the concepts of partnership and harmony in the relationship between women and men. This view does not contradict women and men, because the two must work together in partnership and harmony in the family's life, society, nation, and state. To realize this idea, then in every development policy and strategy, the balanced interests and roles of women and men should be taken into account. This theory implies that male and female relationships are not conflicting relations but are complementary.

Male strengths can complement the weaknesses of women so this theory teaches the existence of synergy between men and women in developing themselves in their professional world.

### Digital Concept

Digital comes from the word "Digitus" which from Greek means fingers. Descriptively, human fingers number ten. The value of ten comprises the number 1 and the number 0 so that digital is understood as a depiction of a state of numbers comprising numbers 0 and 1 or off and on (binary numbers). All computer systems use a digital system as the database. It can also be referred to as Bit (Binary Digit). Although digital signals are often associated with binary digital systems used in electronics and computers, digital systems have been around for a long time, not necessarily binary or electronic. Some digital systems include:

1. The text was written in books that have limited character types and use of the alphabet as discrete symbols.
2. Morse Code uses dot and line codes to symbolize characters. This code is used to send messages using waves or light.
3. The Braille letter system is the first binary system for character coding, using 6 bits of code that are displayed using a dot pattern.
4. Semaphores use flags or other objects, held in a certain position to send messages to recipients are at a certain distance.
5. A modem converts analog signals, such as sound, into binary electronic information.

Digital is developing rapidly in the current industrial era. Large companies use digital technology in their operations. Digital has a positive effect which includes work being systemized, facilitating access, can be done anytime and anywhere and digital users will be more creative,

innovative and imaginative. However, users are advised to be more vigilant and wise in using digital technology because digital can also have negative effects such as problems if the internet connection is slow, a lot of fraud, piracy, and dependence so it will affect the quality of life of its users. (Wikipedia.org)

## RESEARCH METHOD

This research is mixed research that uses quantitative methods to find out the level or percentage of men and women able to apply digital technology in the workplace and qualitative methods to explain data that has been measured quantitatively by adding other supporting data relevant to the research topic. Data were obtained based on the results of respondents' questionnaires related to gender and the use of technology, respondents and informants were professional workers in the private and government sectors in the city of Ambon. We selected the sample of this study by purposive sampling with the assumption it has worked for over 5 years and has a productive age of 25 to 45 years. We conducted the study in the city of Ambon, eastern Indonesia with the object of research being the Provincial Public Works office, Ambon TVRI station, bank employees and Ambon city Telkomsel employees. The reason for choosing these four offices is that the four government and private agencies in their operations often use digital technologies or in this case employees and employees work based on computerized systems. We arrange interview questions related to gender issues in the digital industry based on research objectives.

## FINDING AND DISCUSSION

The geographical and socioeconomic conditions of the research location are factors that contribute to a descriptive qualitative description of the research issue. Thus, in this study, researchers describe clearly these two things:

### a. Maluku Geographical Conditions

Maluku is one province in the eastern part of the Republic of Indonesia which has a strategic position, because its position is between parts of West and Central Indonesia with Papua in the East, and connecting the South region, namely the State of Australia and Timor Leste with the North, North Maluku and, Sulawesi. Also, Maluku Province is on an international crossing route, 3 passes which (three) Indonesian Archipelago Sea Lines (ALKI). This position has a very strategic meaning in the fields of economy, trade, and investment. Geographically, Maluku Province is bordered by North Maluku Province in the North, West Papua Province in the East, Timor Leste and Australia in the South, and Southeast Sulawesi and Central Sulawesi in the West. While astronomically, it locates Maluku Province between 2o30 ' - 8o30' LS and 124o - 135o30 'BT.

As an archipelago, Maluku Province has an area of 712,480 Km<sup>2</sup>, comprising about 92.4% of the sea and 7.6% of the land area with 1,412 islands and a coastline of 10,662 Km. Its crystal clear that 90% of the Maluku area is the sea. Since 2008, Maluku Province comprises 9 districts and 2 cities with Ambon City as the capital of Maluku Province. (<http://www.dpmtsp-maluku.com>)

### b. Social, cultural and economic conditions

The Maluku people (Mollucans) are familiar with a system of social relations known as 'pela gandong'. This social system shows that Maluku people have and consider people from other villages or countries to be their relatives. With the oath of brotherhood and kinship (Pela Gandong), the community or one village that considers a certain village as their gandong, is forbidden to marry the people of their gandong village because it is believed they have the same blood or one blood and there are consequences if the pela gandong oath is violated. The culture of Pela and Gandong that is embraced by the Moluccan people unwittingly occurs in all aspects of the life of the Moluccans, especially the city of Ambon such as



in the world of work. In the world of work, an official or employee who knows that he has a brother who accidentally meets him in work activities will be more concerned, respectful and afraid to offend his *gandong* 'if there are problems related to work. The nature of 'shame' is a term for the people of Maluku if they want to help coworkers who incidentally have *pela* and *gandong* ties. Until now, the culture of '*pela gondong*' is still maintained by continuing to hold a 'hot *pela*' culture which is a culture of reminding that village A has a relationship to village B accordingly they can assist one another and maintaining fraternity. Maluku's geographical condition, when viewed from the business and investment sector has considerable potential. Maluku which is rich in marine products will be excellent in the fisheries and marine sector business in addition to other sectors such as tourism, trade and oil and gas. The overall economic condition of the Maluku province is increasing every year. This can be seen based on the Human Development Index (HDI) which indicates positive changes in all aspects of social, economic, political, cultural and environmental life in Maluku showing an increase in 'moderate' status. Data sourced from 'Maluku in

numbers' shows that the highest HDI is in Ambon city at 79.82. This proves that the welfare of the people in Ambon city increases. This can be seen from the development of the business, education, information and, technology sectors in Ambon City going well and quickly considering Ambon City is becoming a center of digitalization by workers. In terms of education, according to BPS data for Maluku province in 2017, the average population of male Maluku has more literacy skills than women. This condition implies that men will play a greater role in the development of people and nations rather than women so that gender inequality is still felt in all aspects of life. With the ability to absorb higher learning from women, men are automatically preferable to apply digital technology in their work so that men will contribute more and have higher performance than women.

## 2. Respondent Demographics Data

The demographic data of respondents and informants in this study are described in the following table:

**Tabel 1. Respondent Demographics Data**

No	Institution/Company	Gender	
		Men	Women
1	Public Work Office Maluku Province	6	4
2	Bank BCA Ambon Branch	3	4
3	TVRI Ambon Station	2	4
4	PT Telkomsel Ambon	4	3
		15	15
	Total Respondents	30	

The data above shows that there were 15 male respondents and 15 female respondents. Of the 30

respondents, only 12 respondents were willing to be interviewed or become informants. Data informants can be seen in the table below:

**Table 1.2 Number of Informants**

No	Institutions/Company	Male	Female
1	Public Work Office Maluku Province	2	2
2	BCA Ambon Branch	1	1
3	TVRI Ambon Station	1	1
4	PT Telkomsel Ambon Branch	2	2
	TOTAL		12

Table 1.2 shows the total respondents who were willing to become informants from the four agencies namely 12 people with a ratio of men and women is 1: 1

From the results of the respondents' answers to the questionnaire questions with choices 1 to 5, namely 1 = V, 2 = Not Advanced, 3 = Average, 4 = Advanced and 5 = Very proficient is shown in the following table:

**Table 1.3 Distribution of Female Answers**

	Very Proficient (5)	(4)Advanced	Average (3)	Not Advanced (2)	Very Not Advanced (1)
1	5				
2	5				
3		4			
4	5				
5		4			
6	5				
7		4			
8		4			
9	5				
10	5				
11	5				
12		4			
13		4			
14	5				
15	5				
	9 Orang	6 Orang			
%	60%	40%	-	-	-

**Table 1.4 Distribution of Male Answers**

No	Very Proficient	Advanced (4)	Average (3)	Not Advanced	Very Not Advanced
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	nt (5)			d (2)	(1)
1	5				
2		4			
3			3		
4			3		
5			3		
6	5				
7			3		
8		4			
9	5				
10			3		
11	5				
12			3		
13			3		
14	5				
15			3		
	5 Orang	2 Orang	8		
%	33,3%	13.3%	53,3%	-	-

According to the table 1.3 and, Table 1.4 above shows that there are 9 or 60% of men proven to be very proficient in using digital technology and 6 men or 40% of men are adept at applying digital technology in the workplace while there are no men or 0% who feel normal in using digital technology at work. For female respondents, there were 5 people or 33.3% of women who could very operate digital technology and 2 people or 13.3% who could operate digital technology and 53.3% felt normal in running technology in their workplaces. According to the results of interviews with 12 informants consisting of 6 men and 6 women workers, it can be concluded that “men are more prominent in terms of ambition and achievement of goals to trigger men to achieve these targets by wanting to master technology and information systems, therefore, men are more ready to face the progress of the era or the era of the industrial revolution 5.0 “. Male informants answered loudly that “men are born as leaders, consequently they must be able to provide the best for themselves and the environment because men will weigh and decide everything. Men also

have a huge responsibilities in the family thus, men should work harder than women”. Instead of the 6 women interviewed, 4 women stated that “women would feel enough if they could follow a small part of the times in the sense that women did not feel too ambitious in mastering something thus, they felt they had contributed enough in profession”. The role of women in the family is also a determining factor that women are not overly ambitious in mastering technology. Women naturally will be mothers to raise the children hence, women workers will be an additional task for them, and most women feel exhausted quickly. In consequence, the resulting performance is not optimal. Also added by female informants that “psychological factors play a role in achieving this”. Some of them can manage their psychic, can improve their performance at work and vice versa. Female informants acknowledge that in their place of work, men dominate those who hold strategic positions , therefore the firm and dignified natures of their character are inversely proportional to women who prefer the gentle nature which

consequently women use feelings in acting and decide.

## CONCLUSION AND SUGGESTION

The results implicitly prove that gender is still an issue in terms of the use of digital technology by employees in Ambon city, where men still dominate work in the field of digital technology. It reflects in the respondent's answer data and interviews with informants where men feel very capable and have the ability to operate and process digital in the industry. Women are still considered not to have the ability and competence in operating digital technology due to the dual function of roles that are a majority-owned by women. Women do not feel enjoy competing because for them, knowing and understanding technology is enough in their career development. The discussion above also describes that several factors are still inherent and difficult to escape by women that can interfere with their performance as workers in the digital age. These factors such as natural factors can not be avoided and also psychological factors of working women who are not the same as male workers. In this study, the informant only explained 2 factors of discrimination of women in work namely nature and psychological factors so it was necessary to add several factors in a questionnaire and interview question items for further research such as cultural, environmental, personality and social-political factors. We expect the research method for further research to use a more complex quantitative analysis technique by adding several variables thus the results will obtain further clarify the research issue. We also recommend an experimental technique for future research to know how men and women react when applying digital technologies.

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