



MY CYBER BOSSES: THEY SAY I'M INDEPENDENT, BUT THEY RULE ME EVEN HARDER (THE AFFLICTION OF GOJEK'S DRIVER-PARTNERS)

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ABSTRACT

As a renowned and leading platform-based on-demand ride-hailing decacorn in Indonesia, Gojek, owned and run by PT. Aplikasi Karya Anak Bangsa, operates a sharing economy business model. The model promotes rhetorical promises i.e., participation, self-organization, and collaboration. The novel business concept attracts a large degree of the workforce to enter the ecosystem as driver-partners. Users also celebrate the enchanting application (app) in fulfilling their daily needs with plenteous promos. On top of that, the Government welcomes and endorses the platform for providing employment and alternative transportation mode and drives the Indonesian digital economy at a time. Using a qualitative approach and gathering data through in-depth interviews and observation, the paper reveals how the platform works as cyber bosses to its driver-partners by lurking, controlling, and ruling the driver-partners through the harnessing of gamification and algorithms at the same time. The study also argues that in the context of Gojek's business, driver-partners are loyal to the corporation not solely for the fulfillment of their financial needs, but because of the way it articulates power with affective values e.g., flexibility, freedom, involvement, and autonomy wrapped through an app designed by the platform.

Keywords: *(sharing economy; digital capitalism; digital labor; gojek, gamification; algorithms)*

INTRODUCTION

The global movement of the 4.0 Industrial Revolution has led to notable alterations in many features of human life. Fuchs (2008) suggests that when a society enters the era of information, fields of work related to information as the main commodity are created with the implication of the emergence of digital labor workers. Digital labor in this era is labeled with the lure of high work flexibility, the opportunity to access widespread job possibilities, and the opportunity to earn a high additional income (Sinicki, 2019: 1-2).

The euphoria of digital labor considered to open up the barriers of time, space, and the expansion of opportunities to negotiate on a wider scale in the competitive workforce, is not



constantly as smooth as the initial reverie. In the dynamics of digital labor, we have to face the reproduction of inequality, exploitation, and alienation to a much higher degree. However, since this digital labor is hegemonic, affective, and sophisticated, its dark side is often ignored by those who are immersed in it. For example, Fish and Srinivasan (2011: 1-2) argue that the phenomenon of digital labor on the one hand is a celebration of the emergence of user-generated content from free time and the highly-intended contribution of millions of people. On the other hand, several exploitation records highlight the dystopic impact of capitalist labor and outsourcing. In line with that, Juliawan (2020: 14) claims that the freelancing work model in the digital sphere is in high demand by many young people who prioritize freedom in managing the time and place of work and refuse long-term commitments with one party. With this freedom, they can work on several projects at once, work from home, or while studying. Whereas, the inherent precariousness in this type of digital labor seems to be ignored.

Gojek, founded by Nadiem Makarim in 2010, is a ride-hailing platform from Indonesia. It has garnered a lot of attention because from a business perspective it is arguably the perfect disruptive technology phenomenon. If Uber is a pioneer for online taxi services that use four-wheeled vehicles as a mode of public transportation, then Gojek is a pioneer in providing one-passenger public transportation services using two-wheeled motorcycles which are inspired by similar services that have existed before, namely traditional motorcycle taxi called ojek.

Starting from this online motorcycle taxi, Gojek then innovated by developing its business in other forms of services, such as food/beverage delivery, goods delivery, shopping, financial technology, to the latest innovation e.i, gold investment, and insurance services. Gojek has developed more than 20 platform-based services.

Gojek possesses the compilation of all the activities of its users, both driver-partners and consumers, which is called big data. From the perspective of the customers, Gojek possesses the compilation of the users' personal data, travel track records, types of food purchased, grocery lists, types of drugs consumed, massage schedules, to vehicle washing schedules. The data are not discarded because they are very valuable commodities. The data are stored and processed which will produce predictions of what the users expect to do. If the application through big data processing can guess the users' expectations, then the users do not need to do a lot of clicking or typing, because what they intend to do can already be guessed by the application by providing choices. Psychologically, the ability of the application to predict and immediately provide various choices to the users, giving them a sense of pleasure and satisfaction. Applications will be considered very understand them. After being satisfied and content with the services provided by the application, users will automatically be loyal and even addicted to the application.

From the perspective of driver-partners, big data containing consumer behavior is used by Gojek to regulate which driver-partners get what orders. Data on the behavior of Gojek driver-partners show that they are often picky about orders. Some driver-partners avoid ordering at certain restaurants at certain hours, some others often cancel orders to

certain locations. An algorithm will work for this. For example, driver-partner X never takes orders at Restaurant Z from seven to nine in the evening. So in the future, through algorithm work, the driver-partner will no longer be given GoFood orders at the restaurant. Apart from not disappointing consumers, Gojek also doesn't have to constantly subsidize drivers to motivate them to take orders they do not expect. In turn, this is efficient for Gojek's finance.

As a digital platform, the working system built between Gojek and its driver-partners is fully application-based, and the application is one of the corporate apparatuses to practice hegemony towards its partners. The hegemonic nature of Gojek's business is manifested in a working system with the concept of gamification. Gamification refers to a design that seeks to increase the user's intrinsic motivation (usually an application) to engage in certain activities or behaviors and interact with the system more like an attractive game (Hamari & Koivisto, 2015: 421). Gamification is manifested in the forms of tasks that must be carried out by driver-partners, targets to be achieved, awards obtained in the form of points, and job performance, among others, as measured by rating one to five stars in the Gojek application by customers. With the concept of gamification, partners are engaged in the type of work that is ostensibly "fun". They are motivated to complete missions in exchange for income that they will bring home to their families. With this concept, driver-partners do not feel "controlled" by the corporation.

The article elaborates how the gamification system deployed by Gojek, plays roles as cyber bosses for its driver-partners. Gamification along with algorithm determines the work performance of every driver-partner, how many orders s/he gets, how much money s/he can earn every day. These cyber bosses don't have to use physical afford to control the driver-partners, they only have to process the data voluntarily submitted by the driver-partners then they command, regulate, scrutinize, reward, and punish the driver-partners automatically.

METHOD

As the mentioned aim of the article, the authors employ a case study research method. Case studies are one of the unique alternative research methods. Patton (2014: 393) argues that scientists and methodologists do not yet have a common perception of what is meant by case studies. Patton also emphasizes that there is no agreement on what is meant by case studies, giving researchers the space and opportunity to determine the case definition according to the context and focus of the researcher's study in a responsible way.

Patton (2014: 782) argues that the case study approach in qualitative analysis is a special way of collecting, organizing, and analyzing data that represents the analysis of a process. The purpose of this approach is to produce a comprehensive, systematic, and in-depth study of a case with the results in the form of a case study. The term case study can refer to either the process of analysis or the product of analysis or both.

Whilst Robert Stake (in Denzin & Lincoln, 2018: 557) states that a case study is an act of selecting an object to be observed. The same thing is also accentuated by Patton (2014: 394) that case studies are discussed as a product, which is a very in-depth and detailed

description of a person, organization, campaign, event, program, or whatever it is as the focus or unit of analysis of the study. In this study, the case raised is the new constellation of soft capitalism in the digital platform phenomenon in the form of the Gojek business with the sharing economy concept implemented by PT. AKAB.

With the research objectives as described previously, the authors divide the data sources of this research into human and non-human. Human data sources are the Gojek driver-partners. The non-human data sources include the Gojek application, Gojek's social media, Gojek driver-partners' social media, government regulatory documents related to Gojek business, news in mass media related to Gojek business, and other relevant documents.

RESULTS AND DISCUSSION

Gojek has made progressive business growth. Less than a decade, in its eighth year, Gojek has managed to record achievements as a unicorn start-up from Indonesia. A year later in 2019, Gojek managed to take the position as the first decacorn from Indonesia with a valuation of more than 10 billion USD.

PT. Aplikasi Karya Anak Bangsa (PT. AKAB) as the owner of Gojek application, is considered to bring fresh air in providing solutions to transportation problems in Indonesia, which has a very high level of congestion in big cities, such as Jakarta, Bandung, Surabaya, and Medan. Substantively, the problem of severe congestion is a reflection of the Government's inability to build a qualified public transportation system that can encourage people to devolve from private transportation to public transportation to reduce the level of congestion as well as the air pollution.

The government feels that it has benefited greatly from the presence of Gojek, as stated by the Minister of National Development Planning/Head of the National Development Planning Agency of the Working Cabinet, Bambang Brodjonegoro. Bambang states three things that make Gojek help the government in creating job opportunities; First, Gojek is considered an agent of change in the informal sector of motorcycle taxi work into the formal sector (formalization of the informal sector) because it is considered capable of making motorcycle taxi drivers have clear job status and earn a definite income. Then, with job clarity, workers will feel protected, both themselves and their customers, in the event of an accident. This statement is in stark contrast to the actual situation. The Gojek business is not a form of formalization of the informal employment sector because there is no working bond between the corporation and the driver-partners which has a significant impact on the rights and obligations or responsibilities of each party. As a consequence, the corporation does not have any obligations in providing social protection to its driver-partners. Second, with the clarity of work, workers will feel protected, both themselves and their customers, in the event of an accident. Third, the contribution from the business will be in addition to improving the country's economy. The statement from the Minister of PPN/Head of Bappenas reflects the Government's lack of understanding of the Gojek business phenomenon. Gojek is positioned as a "savior" for several problems that the government is unable to solve. Apart from being

considered a solution to the complexity of transportation problems, Gojek is also considered a job provider as well as one of the pioneers and the drivers of Indonesia's digital economy.

PT. AKAB does provide insurance to its driver-partners with various schemes. In collaboration with PT Asuransi Allianz Utama Indonesia, PT. AKAB provides personal accident insurance for all GoRide driver-partners with the premium paid by PT. AKAB, but this premium is charged to driver-partners included in the service fee component as stated in the attachment to the Decree of the Minister of Transportation (Keputusan Menteri Perhubungan/Kepmenhub) No. KP 348 of 2019 concerning Guidelines for Calculation of Service Fees for the Use of Motorcycles for the Interest of the Community Done by Applications.

Lampiran I Keputusan Menteri Perhubungan tentang Pedoman Perhitungan Biaya Jasa Penggunaan Sepeda Motor Yang Digunakan Untuk Kepentingan Masyarakat Yang Dilakukan Dengan Aplikasi
 Nomor : KP 348 TAHUN 2019
 Tanggal : 25 Maret 2019

PEDOMAN PERHITUNGAN BIAYA JASA PENGGUNAAN SEPEDA MOTOR YANG DIGUNAKAN UNTUK KEPENTINGAN MASYARAKAT YANG DILAKUKAN DENGAN APLIKASI

NO	KOMPONEN BIAYA
A. BIAYA LANGSUNG	
1	Penyusutan Kendaraan
2	Bunga Modal Kendaraan
3	Biaya Pengemudi
	a. Penghasilan Pengemudi
	b. Jaket Pengemudi
	c. Helm Pengemudi dan Penumpang
	d. Sepatu Pengemudi
4	Asuransi
	a. Asuransi Kendaraan
	b. Asuransi Pengemudi
	c. Asuransi Penumpang
5	Pajak Kendaraan Bermotor
6	Bahan Bakar Minyak (BBM)
7	Ban
8	Pemeliharaan dan Perbaikan
	a. Biaya Accu
	b. Biaya Service Kecil
	c. Biaya Service Besar
	d. Biaya Pemeliharaan Body
	e. Biaya Penggantian Suku Cadang
	f. Biaya cuci kendaraan
	g. Biaya Overhaul mesin
9	Biaya Penyusutan Telepon Seluler
10	Biaya Pulsa atau Kuota Internet
SUB TOTAL A	
11	Profit Mitra (Sub Total A x Prosentase Keuntungan Mitra)
SUB TOTAL B	

Figure 1. The attachment to the Decree of the Minister of Transportation No. KP 348 of 2019 concerning Guidelines for Calculation of Service Fees for the Use of Motorcycles for the Interest of the Community Done by Applications

Apart from that, there is one point that needs to be highlighted. Previously, in April 2018 Allianz X as the digital investment unit of the Allianz Group had invested in PT. AKAB worth US\$35 million. This funding is the first time Allianz X has invested in the Southeast Asian region.

Other cooperation between PT. AKAB and Allianz Group are partners in offering health insurance and life insurance, but it is optional because the driver-partners have to pay

the premium for these insurances of IDR 2,300 per day. Family members of the driver-partners (husband/wife and children) can also apply for the insurance by paying a premium according to the number of registered family members. This means there is a particular business interest of PT. AKAB in the assigning of Allianz Group as the insurance provider for its driver-partners.

Gojek business does not provide any pension plans as well, there is no overtime policy even though the driver-partners have to work more than 12 hours per day, there is even no legal protection that can guarantee and protect their rights as workers. Therefore, the type of work as Gojek driver-partners cannot be said as a formalization of the informal sector. In fact, with the higher level of competition due to the increasing number of driver-partners, what is found in the field is increasingly worrisome conditions both from the safety and aesthetic aspects. Many Gojek driver-partners occupy public spaces, such as sidewalks, under bridges, or on the roadside, which exacerbates congestion. Wicaksono (2020) calls this phenomenon a reproduction of conventional motorcycle taxi culture by Gojek driver-partners. Wicaksono emphasizes that the adoption of information technology in the Gojek business did not necessarily eliminate the old culture of the conventional motorcycle taxi tradition.

Gojek, as a digital labor provider, is part of the sharing economy. Sharing economy conveys a rhetorical ideology with the cradle of flexibility, autonomy, partnership, increased welfare, convenience, the sophistication of work tools, which seduces many people to become part of this digital economy business (Hall & Krueger, 2015; Ackaradejuangsri, 2015; De Stefano, 2016; Sinicki, 2019). The following data show the hegemony practiced by PT. AKAB through the concept of work and the platform working system.

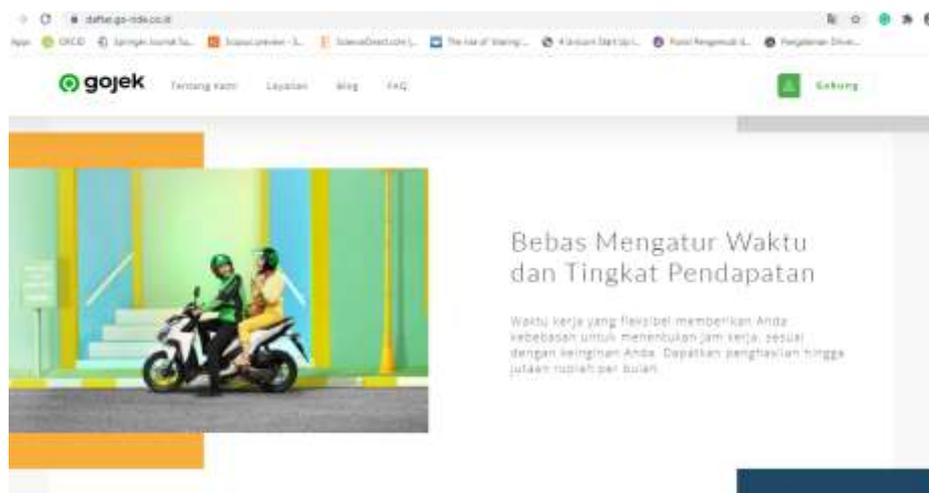


Figure 2. The persuasion for Joining as Gojek Driver-partners

From Gojek's official website in the registration section for prospective driver-partners, Gojek uses the phrase "Free to Manage Time and Income Level" in capital letters followed by the sentence "Flexible working hours give you the freedom to determine your

working hours according to your wishes. Earn up to millions of rupiah per month" (see Figure 2). This phrase represents the work flexibility and autonomy that prospective driver-partners will have because there are no official working hours that regulate and must be obeyed by the driver-partners and they have full autonomy to determine when they want to work and when not to work, and there are income opportunities up to millions of rupiah per month, with a series of efforts.

This is in line with what an informant, MKA, stated that he initially worked as a staff in a private office. He then decided to switch his job to a driver-partner for Gojek because he prefers a job that is not strictly regulated.

"I used to work in the private sector. It's really troublesome because you have to follow office rules when you work. If you are late, take a pay cut. Working hours are also set strictly. I work in Jakarta, my home is on the outskirts of the Sawangan area, so I have to leave at dawn if I don't want to get stuck in traffic, even if I use a motorbike. Now, it's better on Gojek, I'm free to be on-bid at any time." (MKA, 17 December 2020).

When a driver-partner decides to activate the application, there is a commitment he must make, which is to receive and execute every order that enters his account. If a driver-partner cancels an order, it will affect his/her daily performance. However, an informant stated that the working of such a platform become his trigger to be enthusiastic in carrying out the missions that came from the application.

"We can't cancel the order, it's a Gojek rule. We really can't disappoint customers. But for me, a system like that makes us enthusiastic to work, not lazy to choose the comfy orders, all orders must be served. We don't always get a good order, but we also don't always get a bad order. It's a risk, but every order has to be done, we will get the good results later on" (AI, January 26, 2021).

The information conveyed by the informant again implies the hegemony of the Gojek platform towards its driver-partners. The informant understands and believes that with his status as a driver-partner, he must treat customers as well as possible according to corporate rules. He also believes that the working system designed by the platform can motivate him to conform to this work logic enthusiastically because by conforming to such work logic he will get the desired results, good income that can be taken home.

The implication of order cancellation as stated by AI, in addition to a decrease in daily performance, is recorded by the algorithm that will categorize a driver-partner as a non-priority one. Likewise with the option not to activate the application, meaning that they do not earn income, even though most of the Gojek driver-partners are full-time drivers. This is based on the results of a survey conducted by the Research and Development Agency (Balitbang) of the Ministry of Transportation in five cities (Jabodetabek, Bandung, Makassar,

Surabaya, and Yogyakarta) in early May 2019 which showed that 84.4% of the online motorcycle taxi drivers (ojol) taking the job as the main job. An informant, DN also admitted that because he does his job as a Gojek driver as his main job, he chooses to always activate his application to keep getting orders. If he does not activate the application, then he does not earn income.

"I choose to be on-bid every day so that there is a lot that I can take for my wife and children. There are some consequences, work harder. But life does have to work hard, it's very natural in my opinion" (DN, 24 September 2019).

The informant's statement that his hard life as a Gojek driver-partner is a natural thing. DN admitted that he chose to set his Gojek account on auto-bid mode so that the opportunity to become a priority driver-partner is greater. Successfully meeting the targeted points so that he can get the bonus triggers him to work from 7 in the morning and go home at around 8 in the evening. However, he admitted that he enjoyed his job and that he was happy when he managed to close the points and get a bonus that he could give to his wife and children. One of the authors at that time hired the service of this informant for GoRide before the interview was conducted, and felt how the informant rode his motorbike tended to speed up. The informant admitted that that day at around 20.30 he had already managed to collect 18 points and was chasing two more points to get the bonus. His desire to be able to immediately reach the targeted point that day caused him to quickly complete the service that one of the authors used so that he could immediately get the two left orders. In this context, there is a tendency of the driver-partners to put safety aside to complete their mission.

Thus, the flexibility that Gojek offers will never happen as its rhetorical idea because the consequences of deciding to activate the application or not will always place the driver-partners as the aggrieved party from the technological side and lead to financial implications.

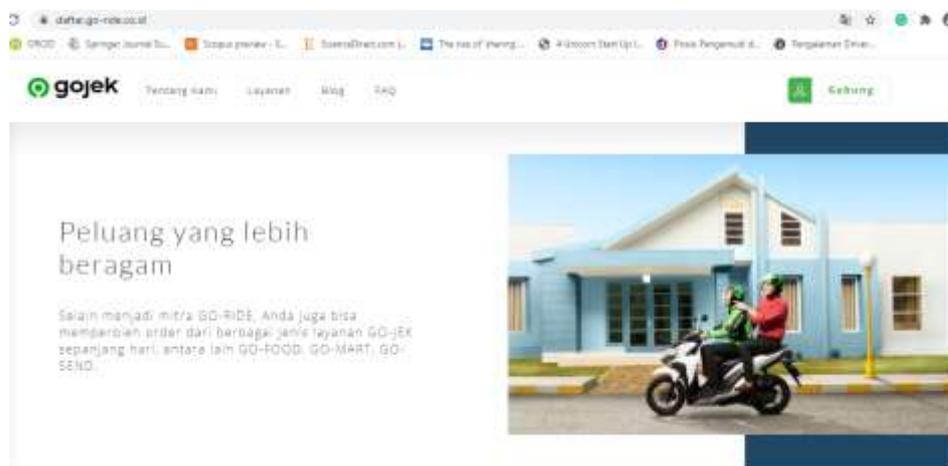


Figure 3. Offering Various Opportunities

Another rhetoric idea carried out by PT. AKAB is the big possibility to earn income through the phrase "More diverse opportunities" followed by the sentence "In addition to being a GoRide partner, you can also get orders from various types of Gojek services throughout the day, including GoFood, GoMart, and GoSend" (see Figure 3). In reality, this opportunity will depend on the work of an algorithm that will determine which driver-partner gets what order based on the track record of each driver-partner. This is as conveyed by the founder of Gojek, Nadiem Makarim that through works on the algorithm, PT. AKAB has succeeded in achieving efficiency because it does not need to spend the extra effort that is measured economically to motivate them to take orders they do not want. Dyer-Whitford (2015: 3) calls this phenomenon the cost-cutting automation of work.

Canceling orders is something that the driver-partners try to avoid because it will have implications on their daily performance. For the corporation, the rate of cancellation of services by driver-partners must be suppressed because that will disappoint the customers. A high cancellation rate will make consumers respond negatively to the platform and affect their loyalty to the application, which in turn will affect the corporate profits.

Based on the work of the algorithm, not all driver-partners have the same opportunity to get orders for other Gojek service variants, such as GoFood, GoMart, GoMed, or GoSend. Only those who perform well based on mathematical calculations are included in the category of the priority driver-partners, with very high-performance qualifications, which on average can only be done by driver-partners with online hours above 12 hours per day and no offline days, from Monday to Sunday. This work pattern is certainly not healthy. Even though they are not served as workers who work for a company, the working hours of these driver-partners can at least refer to the provision of proper working time as regulated in the Job Creation Law Article 77 Paragraph 2 Items a and b which states that the working hours of workers are 7 (seven) hours 1 (one) day and 40 (forty) hours 1 (one) week for 6 (six) working days in 1 (one) week; or 8 (eight) hours 1 (one) day and 40 (forty) hours 1 (one) week for 5 (five) working days in 1 (one) week.

Thus, this more diverse opportunity designed through algorithm work will only be given to driver-partners who are very dedicated and obedient to the application working system. Then, what does the Gojek application work like? The following sub-chapter will elaborate on the working system of the Gojek platform which implements the concept of gamification and bases its working pattern on algorithms.

Zichermann & Cunningham (2011: xiii-xiv) define gamification as "The process of game-thinking and game mechanics to engage users and solve problems". They then argue that "Games are the future of work, fun is the new "responsible," and the movement that is leading the way is gamification". Gamification is a strategy of adopting game mechanics in a realm outside the game. In this context, gamification or game mechanics are implemented in the realm of work. The concept of gamification is widely adopted in the realm of work because the fun of playing makes those involved in it not feel like they are working, but feel

they are playing which creates a sense of fun, psychologically motivated to give the best performance, and motivated to complete the missions given by this technology-based game.

Furthermore, Zichermann & Cunningham (2011) describe that elements outside of games that can be adopted for the realm outside of games include points (the main elements of the entire gamified system), leaderboard (media to display the best order of all aspects of player interaction), badges (as the symbols of certain conditions or achievements), Challenge and Quest (directions what system users or players should do), and Social Engagement Loops (social engagement circles which psychologically motivate users or players in completing missions with certain rewards).



Figure 4. *Social Engagement Loop* (Zichermann & Cunningham, 2011: 68)

The implementation of gamification in the Gojek application is as follows. Gojek driver-partners in carrying out their job must deal with four components, namely performance, rating, points, and bonuses. In addition, another determining factor is whether or not there are complaints from customers regarding the services provided by them in every order they carry out. Performance is affected by online hours (the length of time a driver-partner activates his account/on-bid), the acceptance rate, and mission completion rate.

Performance quality assessment is seen from the average daily performance of driver-partners. If a driver-partner does not cancel orders which causes performance to drop, then the performance score will be very high. The average performance will be accumulated and averaged over the past month.

Table 1. The Average Scores of Driver-partners' Performance

The Average Scores	Category
0.0 – 85.0	Very Poor
85.0 – 95.0	Poor
95.0 – 98.0	Good
98.0 – 100.0	Excellent

Quality rating is the total rating given by customers to partners for the last 30 days. So the more customers who give a good rating to partners, the higher the partner rating score in this performance summary. The average rating score is divided into four categories as shown in the following table.

Table 2. The Categorization of Rating Performance

Rating Performance	Category
1.0 – 4.80	Very Poor
4.80 – 4.97	Poor
4.97 – 4.99	Good
4.99 – 5.00	Excellent

Customer complaints are the sum of the low ratings that have been given by customers for 30 days and have been verified by Gojek's customer service. Reports that are counted can be in the form of reporting reckless driving, being rude, unfriendly, or taking a long time to arrive at the pick-up point. Uncounted reports are reports beyond the control of the partner, for example, price differences, poor food quality, or overpayments. The fewer complaints that partners receive, the better the quality rating of these complaints.

From the tables that become the performance parameters of the driver-partners, it can be seen that the performance qualifications are very high. For example, in the rating parameter, a driver-partner can be categorized as “Good” if he reaches a rating of 4.97. If the rating is less than that, then it is categorized as “Poor”.

Another parameter to assess the performance of a driver-partner is through online hours. The calculation of online hours obtained from the length of time a driver-partner has activated the GoPartner application for the past 30 days. Online hours are divided into two, online hours during peak hours and overall online hours.

These online hours will be calculated if the driver-partner activates the GoPartner application and completes at least one order on that day. If the driver-partner activates the application just to add online hours but they don't complete an order that day, then the online hours are not taken into account.

Online hours during peak hours apply from 05.00 – 08.00 AM, 11.00 AM - 02.00 PM, and between 04.00 – 08.00 PM. The online hours score during peak hours is divided into five categories according to the length of online hours.

Table 3. The Categorization of Online Hours on the Peak Hours

Online Hours	Category
0.0 – 40.0	Very Poor
40.0 – 80.0	Poor
80.0 – 120.0	Fair
120.0 – 160.0	Good

160.0 – 300.0	Excellent
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The total online hours is a calculation of the length of hours the partner has activated the GoPartner application for the last 30 days. But what counts is only the online hours where the driver's partner has completed at least one order in one day. The overall online hours are divided into five categories as follows.

Table 4. The Categorization of the Overall Online Hours

The Sum of Online Hours	Category
0.0 – 75.0	Very Poor
75.0 – 150.0	Poor
150.0 – 225.0	Fair
225.0 – 300.0	Good
300.0 – 720.0	Excellent

The adoption of game elements in the implementation of the Gojek application is as follows. Point (points) is a target reward that will be obtained by the driver-partners when completing a mission to get a bonus from the corporation.

Table 5. Points and Bonuses of Gojek Driver-partners

Days	The Sum of Points and the Bonuses	Note
Monday - Sunday	<ul style="list-style-type: none"> • 14 points = Rp15,000 • 16 points = Rp25,000 • 20 points = Rp40,000 	When completing 20 points in one day, the maximum bonus that can be obtained is Rp80,000

Orders that come from customers are the implementation of Challenge and Quest elements that contain missions that must be carried out, whether GoRide, GoSend, GoFood, GoShop, GoMed, or GoMart. In this mission, driver-partners are informed of the pick-up and drop-off point, the order fares, or the name of the items and the distance between, or the food/beverages or the items that must be purchased.

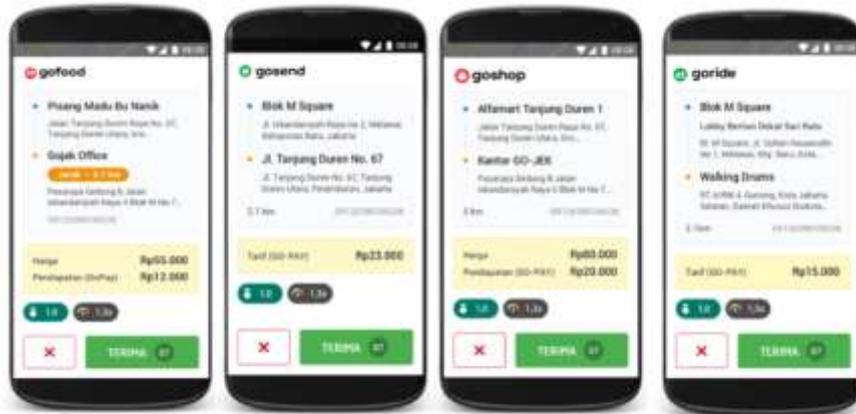


Figure 5. Orders in Gojek Application

Badges on the Gojek application are manifested in the form of the 'Emblem Award' feature for all driver-partners in Indonesia which are divided into two types; Achievement Emblem if the driver-partners have succeeded in carrying out certain achievements, then there is a Mission Emblem if the driver-partners complete an order mission within a certain period. Gojek explained that the functions of this award emblem are as a form of appreciation, the expression of pride for the driver-partners, and the trigger for challenges for the next mission



Figure 6. The Emblems of Appreciation

In addition, awards or Gojek programs in choosing the best drivers or Gojek champion partners are also appreciated in the form of giving badges to the selected top-notch partners.



Figure 7. The Badge of Driver *Jempolan* (Excellent Drivers)

The driver-partners performance record which contains information on total completion, points collected, target points to be achieved, and performance assessment, is the implementation of the leaderboard element of the game mechanism.

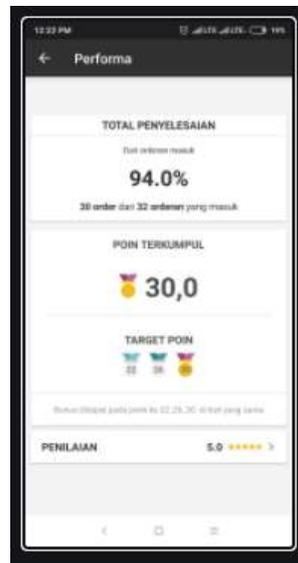


Figure 8. The driver-partners Performance Record

The success of a driver-partner in completing his mission and then getting rewards in the form of income, points, and ratings from customers, where later the points collected can be converted into rupiah in the form of bonuses is the implementation of the Social Engagement Loop.

Overall, the adoption of gamification in the Gojek application used by driver-partners can be described as follows:

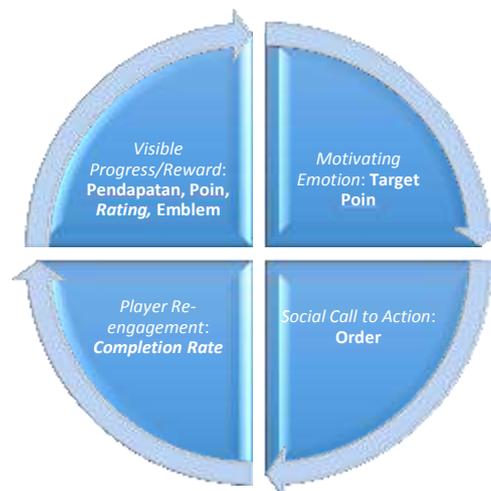


Figure 9. The Adoption of *Social Engagement Loop* on Gojek Application

Every action performed by Gojek driver-partners is recorded by the algorithm. The algorithm will then recommend priority driver-partners who get privileged orders from various variants of Gojek services.

An algorithm refers to a 'coded procedure for converting input data into the desired output, based on specified calculations' (Bellanova 2017: 330). In app-based companies, algorithms are a way to distribute service orders among company partners (i.e. drivers) based on a combination of factors including driver performance. The owner of the data, namely the company, has the power to decide which output is desired and certain calculations in its algorithm can benefit the company, namely increasing the company's revenue. In other words, algorithmic politics is a form of power that emerges from a system that is fully controlled by the company, and which determines the tenure of drivers, including who gets orders and who doesn't. Here, power circulates and is exercised through the design and use of the device (Latour 1986 in Bellanova 2017: 330).

Overall, the working system carried out by Gojek driver-partners through gamification and algorithms can be described as follows.

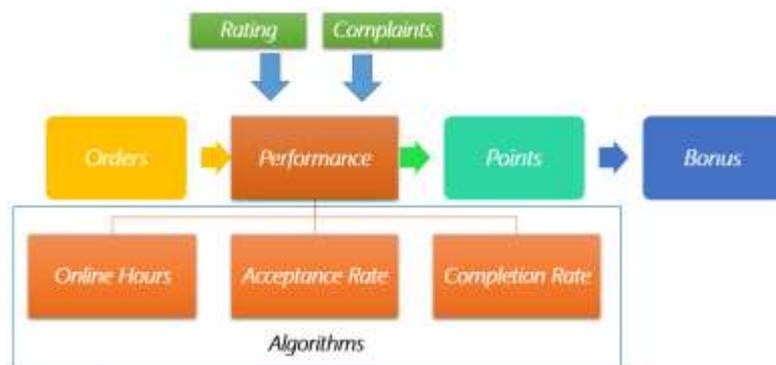


Figure 10. The Illustration of Gojek Working System

Thus, the concept of flexibility glorified by PT. AKAB is merely an illusion to most driver-partners. With various algorithmic and mathematical calculations as described above, the performance of each driver-partner is highly monitored by the system and will affect his "fate" in front of the application which in turn greatly affects his income. The cyber-bosses of these driver-partners don't have to use "hard" power to dictate them.

CONCLUSION

Gojek platform with an algorithm-based gamification working system design is not only the result of purely technological work that uses technological logic but is also the work of social logic, a logic to get more surplus value. The very high-performance parameters of the driver-partners and the creation of the Gojek working system game arena are not based solely on the results of technological work but are the power of the technology elites, the engineers of PT. AKAB, who designs the platform's work and sets the standards for those

parameters. The entire application working system that is built leads to the accumulation of corporate profits. A clear example of human determination over technology is one of Panimbang's findings (2021: 17) that the algorithm can give privileges to driver-partners who still have to pay off the jacket and helmet installments that are deducted from the driver's account every day. The algorithm will prioritize them to get more intense orders. However, once their installments were paid off, that privilege disappeared.

Gojek after all is a business entity with a profit-seeking orientation. At the beginning of this business, there may still be a humanist mission carried out by Nadiem Makarim to empower conventional motorcycle taxi drivers so that their income can increase with the adoption of information technology. This is as claimed by ride-hailing actors carrying the sharing economy that their business has a mission of sharing and carries the values of solidarity and fosters social connections between those who need each other (Jacquet, 2018: 2).

However, along with the development of Gojek's business, which is finally ogled by global investors and gets more massive funding, the orientation of seeking for profit is increasingly dominant. When Gojek was founded, their main target was to make Gojek the top-of-mind online motorcycle taxi brand. Gojek is burning money on a large scale through the imposition of super-cheap rates supported by various promotions. Gojek also attracts many job-seekers to join as their driver-partners with the lure of fantastic income since at the beginning of this business the tariffs given to driver-partners are relatively high, the level of competition is still low, and the bonuses given are also high.

Gojek continues to carry out various innovations for the sustainability of its business and maintain investor confidence. The pseudo-partnership wrapped in the concept of sharing economy provides many privileges for the corporation as the platform owner to alter the rules of the game under the pretext to improve the welfare of the driver-partners. When in fact, those actions are taken for the sake of the corporate's profit and put the driver-partners as the riskiest party in this business scheme.

Viewing Gojek business phenomenon from the perspective of digital capitalism -a capitalism in the digital era that uses rhetorical promises and idealistic values without us realizing it, such as participation, self-organization, and cooperation (Fuchs & Mosco, 2016: 24), then Gojek's hegemonic strategies are indeed a cover for this type of capitalism practice. Capitalism in this digital era practices capitalism to a higher degree, where driver-partners are exploited to give their best energy to the corporation through the cradle of gamification and the power of algorithms with their capital, they must bear all the risks, but they must share the profit to corporations for the sacrifices they make.

From the study, the authors find the unique statuses of Gojek driver-partners which are not found in other types of digital labor workers. The uniqueness is first, Gojek driver-partners are low-skilled labor. However, the type of work requires driver-partners to have more strategic skills due to the nature of their work as multitaskers. Likewise, because of the powerful gamification system and algorithm control over their performance, they must also



have at least middle-skills in strategy to win the matches and complete the missions given by the platform as their cyber-bosses.

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THE URGENCY OF HISTORIC DIGITAL LITERACY AS AN EFFORT TO BUILD STUDENTS HISTORICAL AWARENESS

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ABSTRACT

Education and literacy are two components that cannot be separated. In today's educational world, however, students are reluctant to read books due to technological developments. Indeed, the existence of technology will make it easier to access various knowledge and information, including learning history. History learning plays an important role, namely not only as a process of conveying ideas but also as a process of maturation in students to understand the identity, identity and personality of the nation through understanding historical events. The lack of historical awareness influences the lack of knowledge about the history that exists in the area. Historical consciousness is ultimately not only a link to dark events in the past, but also to learn lessons from every incident in the past as a driving force for the spirit of struggle to strengthen the sense of love for the homeland and national identity. Therefore, this research focuses on integrating technology, namely the importance of digital literacy in an effort to build historical awareness in students. In this case, the author uses the literature study method by collecting a number of articles from research results that are in line with the theme of the research and other written sources. As a result of this research, historical learning using digital literacy can improve students' ability to better interpret historical events in students' lives, thereby building historical awareness. Digital literacy is one of the tools for shaping students' critical, analytical and creative thinking skills. Implementing digital literacy in schools is an important matter so that everyone can become aware of the progress of the country.

Keywords: Digital Literacy; Historical Awareness

INTRODUCTION

This digital era learning media is very influential in the student learning process in this case learning history, media as a tool to channel information or messages of special teaching materials between teachers and students. In history learning, literacy in the digital era is very influential in the history learning process, especially in creating innovation or creativity in history learning so that learning is interesting, not boring, and learning feels alive. Students in responding to literacy activities are expected to foster innovation and creativity in learning so as to produce quality education. To prevent negatively charged content and false news or hoaxes, students in this digital era are expected to follow the development of digital technology.



Education is the pillar of the development of science and technology that has brought this nation into the modern era. Education aims to build a national order wrapped in academic values, sensitivity, and concern for the life of the nation and state. The Law of the Republic of Indonesia Number 20 of 2003 concerning the National Education System is the legal basis for implementing and reforming the national education system. The law contains the vision, mission, functions, and objectives of national education, as well as a national education development strategy, to realize quality education, relevant to the needs of the community, and competitive in global life. Soyomukti Nurani (2001) quoting from (Fatmawati, 2018) said in a narrow sense education, namely teaching held in schools as institutions for educating. Education is all the influences that the school strives for on children and adolescents who are handed over to the school so that they have perfect cognitive abilities and mental readiness to enter society, establish social relationships, and have their responsibilities as individuals and as social beings.

However, in reality the quality of education in Indonesia is still lacking when compared to the quality of education in developed countries. Indonesian people, especially students, still have a low interest in reading when compared to countries where reading interest is much higher. Several government programs to support increasing student interest in reading have been launched, including literacy programs in schools. The government through the Ministry of Education and Culture develops literacy movements in accordance with the Regulation of the Minister of Education and Culture Number 23 of 2015 concerning the Growth of Character. This Regulation of the Minister of Education and Culture was in place as a response to the birth of public encouragement for significant changes in the world of education, especially regarding the moral decadence that is spreading among students today.

The school literacy movement began to be implemented when the Minister of Education and Culture Regulation Number 23 of 2015 was issued concerning the Growth of Character. Understanding School Literacy is an effort that is carried out as a whole to make schools a learning organization whose students have the intention of reading for life. The development of the current era is very fast, marked by increasingly sophisticated technology and makes human life more practical. The spread of information today also has an impact on the social, cultural, economic and political order. In the current era, literacy has moved into the use of existing technology. (Hendriani, Nuryani, & Ibrahim, 2018), said that in the 21st century, literacy developed into a thinking skill in reading words and the world and looking for relationships between the two to solve life's problems.

The current developments have the impact of increasing openness and the spread of information and knowledge from all over the world across the boundaries of distance, place, space and time. The reality is that in human life in this digital era, it will always be related to technology. Technology has influenced and changed people in everyday life, so if you are currently "technological stuttering" it will be too late to master information, and you will also be left behind to get various advanced opportunities. Information has an important and real role, in the era of the information society or knowledge society (Munir, 2017). Advances in



information technology and the internet today have resulted in very abundant digital information resources. Everyone is free to enter information in cyberspace without restrictions. The term digital native implies that the younger generation currently lives in the digital era, where the internet is a part of everyday life.

The current state of students, especially high school students, is very dependent on technology in their education. This results in reduced use of quality resources available in school libraries and changes in student behavior in utilizing and managing information. According to (Kurnianingsih, Rosini, & Ismayati, 2017) this diversity of forms and types of information should encourage students to be more selective and able to maximize the use of the results of advances in information technology. This massive wave of the digital world is unstoppable, delivering anyone who can make good use of it but not infrequently it causes crime and even destroys someone in various ways.

The ignorance of many people in the digital world makes various abuses of digital media occur at the personal, social and national levels. Therefore, the use of digital literacy-based learning is very necessary and very important at this time. Especially in history learning, it is undeniable that the development of the world of information also affects the quality of history learning in schools. The introduction of historical concepts with the old method, namely a long narrative from the teacher, tells how a historical event is out of date, all information is widely available digitally. Even students who are more mature towards information technology can sometimes even use the old method of the teacher to make them bored so that the student's paradigm of history subjects is getting less and less desirable. This means that at this time it is very necessary to manage digital literacy-based history learning.

Historical education in today's global era is facing challenges and its contribution is required to further foster historical awareness of the students, of course utilizing existing technology, both in their position as members of the community and citizens, as well as strengthening the spirit of nationalism and a sense of love for the homeland without neglecting a sense of togetherness. in the life of the nations of the world. History education can increase historical awareness in order to build the personality and mental attitude of students, as well as raise awareness of the most basic dimension of human existence, namely continuity. Continuity is basically a continuous movement of transitions from the past to the present and the future.

In addition, historical education is also required to pay attention to the development of thinking skills in the learning process. Through history education, students are invited to examine the interrelationships of life, society and their nation, so that they grow into a young generation who have historical awareness, take lessons from various historical events in Indonesia whose aim is to encourage the formation of thinking patterns towards thinking rationally-critically- empirical, and no less important is history learning that develops an attitude of respecting human values. So, based on the explanation above, the author wants to research about “THE URGENCY OF HISTORIC DIGITAL LITERACY AS AN EFFORT TO BUILD STUDENTS HISTORICAL AWARENESS”.

METHOD

This study uses a library research approach, this approach is carried out by examining theories, concepts and principles related to the discussion. Literature study is understood as a theoretical study based on books, journals and other relevant references (Nasution, 2003). Meanwhile, data collection was carried out using document study techniques, namely data obtained from the relevant literature. The data were analyzed by qualitative descriptive analysis, in which all the collected data will be analyzed systematically.

RESULT AND DISCUSSION

Digital Literacy

Literacy comes from English, namely literacy which is defined as the ability to read and write. While the word digitl comes from the word digitus, which in Greek means fingers. If a person's fingers were counted it would be ten (10). The value of ten consists of 2 radix, namely 1 and 0. Therefore, digital is a description of a number condition consisting of the numbers 0 and 1 or off and on (binary number system), can also be referred to as bits (Binary Digits).

The use of the term digital literacy was first introduced by Paul Gilster in his book of the same title Gilster (1997) citing (Riel, Christian, & Hinson, 2012). He stated that digital literacy is the ability to use technology and information from digital devices effectively and efficiently in various contexts such as academics, careers and everyday life (Riel, Christian, & Hinson, 2012)

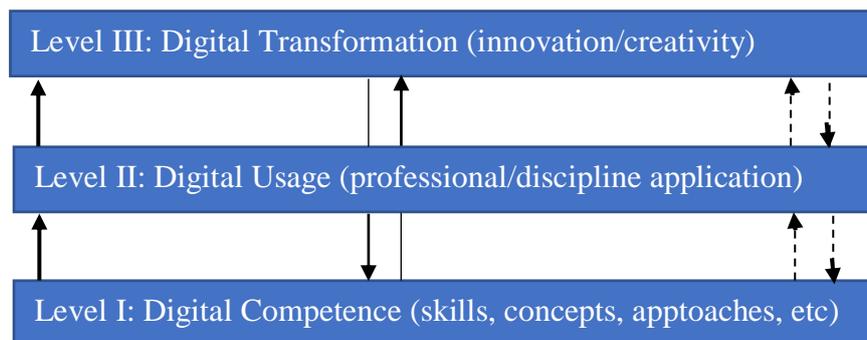
The understanding related to digital literacy was expanded by Bawden (2001) quoted from (Sormin, Siregar, & Priyono, 2019) he argues, digital literacy is rooted in computer literacy and information literacy. Computer literacy developed in the 1980s, when microcomputers were increasingly used, not only in the business environment, but also in society. However, information literacy only spread widely in the 1990s when information was more easily compiled, accessed, and disseminated through networked information technology. Thus, according to Bawden's opinion, digital literacy is more associated with technical skills in accessing, compiling, understanding, and disseminating information.

Digital literacy is intended as the ability to understand and use information from various digital sources. Digital literacy in general can be defined as the interests, attitudes and abilities of individuals who use digital technology and communication tools to, manage, integrate, analyze and evaluate information, build new knowledge, create and communicate with others in order to participate effectively in society (Hermiyanto, 2013).

In line with what Hermiyanto (2013) quoted from (Tim Gerakan Literasi Nasional, 2017) that digital literacy is the interests, attitudes, and abilities of individuals in using digital technology and communication tools to access, manage, integrate, analyze and evaluate information, build new knowledge, create and communicate with others in order to actively participate in society. The concept of digital literacy, in line with the terminology developed by UNESCO in 2011, refers to and cannot be separated from literacy activities, such as reading and writing, as well as mathematics related to education. Therefore, digital literacy is

a skill (life skills) that not only involves the ability to use the technology, information, and communication, but also the ability to socialize, ability in learning, and have the attitude, critical thinking, creative, and inspiring as digital competencies (Tim Gerakan Literasi Nasional, 2017).

Alwasilah (2012) in (Tim Gerakan Literasi Nasional, 2017) reveals that there are seven basic principles of literacy that are developing today, while the seven principles are as follows: 1) Literacy is life skills that enable humans to function optimally as members of society. ; 2) Literacy includes receptive and productive abilities in an effort to speak in writing and orally; 3) Literacy is the ability to solve problems; 4) Literacy is a reflection of mastery and appreciation of culture; 5) Literacy is a reflection activity (self); 6) Literacy is the result of collaboration; 7) Literacy is an activity of doing interpretation. Martin (2006, hlm. 255) explains digital literacy quoted from (Shavab, 2020), namely “*Digital Literacy is the awareness, attitude and ability of individuals to appropriately use digital tools and facilities to identify, access, manage, integrate, evaluate, analyse and synthesize digital resources, construct new knowledge, create media expressions, and communicate with others, in the context of specific life situations, in order to enable constructive social action; and to reflect upon this process*”. There are three stages of digital literacy for development proposed by Martin and Grudziecki (2006) quoted from (Shavab, 2020) which are presented in the following figure:



Gambar 1. Tahapan Literasi Digital

At level one digital literacy, digital competence, a person must master basic skills, concepts, approaches and actions when dealing with digital media. At level two, digital use, one can apply applications for productive/professional purposes for example using digital media for business, teaching, social campaigns etc. While at the top level, digital transformation, someone is able to use digital media to innovate and be creative for the wider community.

Based on the explanation above, it can be concluded that digital literacy is knowledge and skills to use digital media, communication tools, or networks in finding, evaluating, using, creating information, and using it in a healthy, wise, intelligent, careful, precise, and law-abiding manner. in order to foster communication and interaction in everyday life.



The Urgency of Digital Literacy in Learning

Technological developments in the digital era are able to shift the use of manual and analog technology to switch to digital (Setiawan, 2017). The renewal of digital technology also continues to be improved, such as the renewal of the use of computers for learning, switching to using laptops which are increasingly lighter and simpler. Setiawan added, the latest digital era trend is paperless, where all activities that use paper in this era change to digital data storage in the form of electronic files and convert them to e-book form. The learning system is also getting easier with the advancement of technology. Students do not need to bring books in large and thick quantities, just by using search engines such as Google and online encyclopedias (Example: Wikipedia), any information is easy to obtain.

With technological advances, it is easier for the media to have practical value that aims to generate learning motivation, make abstract concepts concrete, for example in explaining historical stages through graphic films, overcoming classroom boundaries in displaying objects that are too large such as temples, and can In addition to overcoming the differences in the personal experiences of students from one another, the media can also display objects that are too small and rare to be observed directly. So in this case the educational media in learning in schools is very useful to achieve the goal so that the teaching and learning process can take place effectively and efficiently.

Literacy is also known as literacy or literacy. The meaning of literacy is increasingly being expanded so that known literacy is not only limited to the ability to read and write in the context of language and literature. There are many types of literacy that have been developed because they are adapted to the demands of the times and the fields of knowledge that are mastered. The types of literacy include digital literacy, computer literacy, information literacy, media literacy, statistical literacy and so on. So in other words, the notion of literacy can be adapted to the respective fields of science studied.

The success of literacy in education as it is today can be helped by the use of information and communication technology. Eskicumah (2015) in (Munir, 2017) states that the use of technology in education has affected the structure of the education system, thus technology can also be used in learning activities. Literacy culture is now a major concern of the government because it plays a role in creating quality resources so that they can be in harmony with the times and technology. With the birth of a literacy culture in Indonesia, of course, it will also contribute to the effort to realize a developing and advanced Indonesian nation.

The existence of technology provides its own benefits in an effort to make the Indonesian people aware that literacy culture needs to be improved, because literacy is an important competency that one must have in an effort to face the times. Digital literacy is present in order to answer the challenges of the development of the era 4.0, especially in the development of science and technology. Digital literacy is related to individual skills in using, searching for, and processing a variety of information obtained through gadgets.



Historical Digital Literacy in Building Historical Awareness

Learner-oriented learning can be done by building learning system that allows learners to have the ability to learn more interesting, interactive, and varied. Learners must be able to have competencies that are useful for their future. Along with the development of technology and its supporting infrastructure, efforts to improve the quality of learning can be carried out through the use of the technology in a system known as Digital Learning (digital learning).

Digital learning is a system that can facilitate learners to learn more broadly, more, and varied. Through the facilities provided by the system, learners can learn anytime and anywhere without being limited by distance, space and time. The learning materials studied are more varied, not only in verbal form, but also in more varied forms such as text, visuals, audio, and motion. Historical education in today's global era is facing challenges and its contribution is required to further foster historical awareness, both in its position as members of the community and citizens, as well as to strengthen the spirit of nationalism and love for the homeland without neglecting the sense of togetherness in the life of nations in the world.

History education can increase historical awareness in order to build the personality and mental attitude of students, as well as raise awareness of the most basic dimension of human existence, namely continuity. This is reinforced by Kartodirjo (1993: 51) quoting from (Dwi Syahputra, Sariyatun, & Ardianto, 2020), that historical awareness itself can form historical insights and historical views that display the continuity of everything. Then explained again by Vubo (2003:598) quoting from (Dwi Syahputra, Sariyatun, & Ardianto, 2020) who argued that history is related to the development of a nation. It can be concluded that studying history is able to raise awareness of the nation and state. Studying history is not only learning about technical events, years, place names, and characters, but also to practice the values of an event. The main goal of learning history is to increase understanding and deep understanding of the past which can be known as historical awareness. Continuity is basically a continuous movement of transitions from the past to the present and the future.

Historical awareness is actually not just remembering dark events in the past such as destruction, war, defeat, dates, places in general, but historical awareness to learn lessons from every event in the past as a trigger for the spirit of struggle in order to strengthen the nation's identity. Then from this historical awareness, the identity of Indonesia as a great nation began to solidify. Making the Indonesian people a people who will not forget the great history of their own nation.

In addition, historical education is also required to pay attention to the development of thinking skills in the learning process. Through history education, students are invited to examine the interrelationships of life experienced by themselves, society and their nation, so that they grow into a young generation who has historical awareness, gets inspiration or wisdom from stories of heroes, as well as national tragedies, which in turn encourages the formation of patterns of thinking. towards thinking in a rational-critical-empirical manner and



what is no less important is history learning that develops an attitude of respecting human values.

Therefore, it is necessary to have a continuous "literacy" process both related to technological developments as well as historical knowledge and other scientific developments. Today's digital literacy is very much needed with the hope that the education and learning process will become more collaborative and elaborative. All of this with the aim of not only increasing students' knowledge, but supporting them to strengthen their personality, and develop their potential and competencies to enter the world of work (Schuster, Plamannis, & Grob, 2015). Information from the internet should be positioned as a "healthy internet" program, which is one model of an advocacy strategy on "online ethics" and digital literacy for the community. For this reason, healthy internet introduces how "parents" and "teachers" know about basic internet knowledge, internet use, internet dangers, and information literacy, security and privacy protection (Gede A, 2021).

Marshall Maposa & Johan Wassermann, distinguish between "literacy in history" and "historical literacy". Literacy in history refers to the ability to read and write when studying history, while historical literacy implies that what one gets from studying history should be adapted to the context of space and time described by Mapora & Wassermann (2009:62) quoted from (Gede A, 2021). Therefore, national education must be carried out contextually and functionally. Our education must be rooted in the aspirations and needs of the supporting community which are socio-cultural and in their natural environment. Therefore, Abduhzen (2018) explains, quoted from (Gede A, 2021) that education in the 4.0 century needs to instill the values of citizenship (good citizen), good worker, and human values (good human).

The existence of these facilities can be used by teachers to apply digital literacy to students. Based on the results of relevant research, there are several ways to carry out digital literacy in learning activities. One of them is explained by Alperi (2018), quoted from (Shavab, 2020) that "In learning with Edmodo digital class, students will be given study material in the form of e-books, presentations, quizzes, assignments, and examinations. Students can read all the sources given by the teacher". Furthermore, Alperi said that the interesting thing is that students are first given the competence to use computer media. The existence of this actually has a positive impact on students regarding the application of digital literacy (Shavab, 2020). The results of research from (Amin, Mansur, & Sulistiono, 2020) that literacy activities are carried out with the Discovery Learning strategy, namely providing a stimulus to find references that match the theme, identify problems, then the search is presented and discussed together, and closed with the conclusions of the teacher. Digital literacy activities from research (Amin, Mansur, & Sulistiono, 2020) reveal that digital literacy is also able to enrich digital insight and student motivation because it encourages students to seek information through various reference sources, but in finding reference sources, students must under the supervision of the teacher to avoid misunderstandings and the emergence of destructive indications such as copying and pasting files. Technically, the application of digital literacy is explained by (Pratama, Hartini, & Misbah, 2019) namely through digital literacy providing e-books in the form of power point and pdf files, online



discussion forums, virtual PhET practicums, and providing links to learning resources that are connected to library applications. digital (ipusnas). In history learning activities, digital literacy can be carried out in the core learning activities.

CONCLUSION

The rapid development of technology and information affects various aspects of life and has an impact on changes in the way of life and daily human activities, including in the world of education. Education is also experiencing rapid development, including the emergence of digital learning systems. Digital learning begins with a good plan, then the way the learning material is delivered (delivery content) to the learner must refer to the plan. History learning at this time should maximize Digital Literacy, as a supplement to student learning. Digital literacy-based historical learning requires teacher professionalism in designing learning that can utilize digital literacy in introducing historical concepts to students.

Digital literacy activities in history learning can be carried out in the core learning activities section. The digital literacy process has begun to be seen when the teacher provides materials and assignments that must be done by students. This early stage has seen the statement process, where students must already understand the problem or task that must be completed and have prepared a solution. Through historical education by applying historical digital literacy in learning, students are invited to examine the interrelationships of life experienced by themselves, their communities and their nation, so that they grow into a young generation who have historical awareness, get inspiration or wisdom from stories of heroes, as well as national tragedies. which in the end encourages the formation of thinking patterns towards rational-critical-empirical thinking and which is no less important is history learning that develops an attitude of respecting human values.

ACKNOWLEDGEMENT

All praise and thanks to the author to the presence of the Lord Jesus Christ who has bestowed the grace so that the author can complete a paper entitled "The Urgency of Historic Digital Literacy as an Effort to Build Student Historical Awareness". The author is fully aware that without the help of various parties, the writing of this paper would not be completed on time. Therefore, the authors would like to thank Prof. Dr. Sariyatun, M. Pd, M. Hum and Dr. Susanto, M.Si as a lecturer who has guided and directed the author with great tenacity and patience so that the author can finish writing this paper and to friends and all parties who have helped in completing this paper.

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