Analysis of New Business Opportunities from Online Informal Education Mediamorphosis Through Digital Platforms

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Abstract

The existence of digital and online-based technologies has aided in societal upheaval. This also altered the dynamics of the education industry, allowing it to influence the growth of digitalization, which became a watershed moment in the Industrial Revolution 4.0. Because today's learning material is relatively accessible to get through Video On Demand on the internet, the presence of formal education is beginning to gain popularity. Although, with the advent of the virtual learning paradigm, more and more institutions are providing informal education. Take advantage of this chance to give informal education for new business prospects. The researchers discovered, using Mediamorfosis Theory, that the convergence of informal education has modified the pattern of learning that is connected to technical skill for audiences who have a high level of technical skill.

Keywords: Media Convergence, Informal Digital Education, Mediamorphosis, CMC.

1. Introduction

Entering the Fourth Industrial Revolution or known as Industrial Revolution 4.0, which builds on the digital revolution, represents new ways of integrating technology into society and even into the human body. The Internet of Things (IoT) is driving the Fourth Industrial Revolution or also known as Industry 4.0. It unifies the digital and physical worlds and provides new possibilities for collecting and using information. The development of the distance education system in the formal education system like in the universities also seems to be an inspiration for the informal education institutions which offer a cognitive learning system. This is then used as a business opportunity for education service providers offering distance education services. Skills training is no longer based on face-to-face meetings in class, but in skills training, meetings...
that do not only use online digital devices such as smartphones, tablet PCs, computers, smart TVs, etc. As for a device like this, of course, it is also supported by an online application platform which can be created and developed by you and managed by you, provided that the manager of this application must also understand the use of the application itself with special attention. In the era of industrial revolution 4.0, computer skills have become a small part of the obligations that students must have. Digital-based industrialization has placed greater demands on the new generation and the old generation to adapt more intensively to the technology they use. In this generation, technology based on digital technology has developed rapidly. It also allows millennials to adapt quickly and easily to digital devices. Calcot Parsons said technology will permanently change the pattern of our daily activities.

As technology enters its third wave, the Internet of Things, this means that social and business media are already at their breaking point. Large companies are leveraging many technologies to gain efficiencies and productivity rather than having to hire big-budget labor to pay for them. It is what then becomes the potential that gives rise to a disintegrated society which, in full consciousness, creates change and progresses in new ways. The role of technology in influencing human change is not something to be questioned. Human beings cannot live without technology. In fact, the technology was originally created to make it easier for human workers to meet all of their needs. New learning innovations in skill development through informal education such as this then lead to changes in learning patterns and also the formation of new habits of acceptance of learning for students. who can learn to use the structures of digital technology such as gadgets and can be done anywhere, plus changes in the habits of the community who eventually get used to online education which is practical and which doesn't waste a lot of time, it's part of the promise of a technology. The presence of social media is also a powerful tool to facilitate the promotional activities of institutions that offer informal education services or courses to market e-learning services[1]. Social media is considered effective as social media is part of the life and way of life of today's society. Indonesia, China, America, India, and Brazil all have promising opportunities in 2017 as they are expected to witness an increase in the online learning market of $12.2 billion. Ruangguru, Bahasaotalk and Kelas.com which offer courses online or through online courses that anyone registered can access. The growth of advertising via online media is faster than that of television in Indonesia.

According to Criteo, the compound annual growth (CAGR) of TV ad spend increased 14.5% from 2014 to 2019. Users accessing the internet through smartphones and computers have reached 39.28% of the total. PubMatic's 2019 Global Digital Advertising Trends Report says Indonesia's digital advertising market is expected to grow 26%. This is the highest growth rate, ahead of European countries such as Russia, Ireland, Sweden, France, Italy and Sweden. In terms of% change on an annual basis, Indonesia is in first place with a growth rate of 26%, followed by India (20%) and Russia (19%). PubMatic also noted that total digital advertising spending worldwide in 2019 is expected to reach $327.28 billion (approximately IDR 4.601 trillion), rising to 48.5%. The longer the conventional course, which involves face-to-face teaching and direct interaction with tutors, the lower the number of students. This is because people are getting more and more digitally savvy and the level of community activity is too high. By 2020, most advertising expenditure will be on digital advertising. Online digital tools continue to provide learning facilities and convenience as there is no reliance on service users to come and interact face to face with their mentors. Apprenticeship training began to convert the apprenticeship system to blended learning. This is done by integrating multimedia devices such as video, audio and tutorial texts which are used simultaneously in an online learning. Ruangguru.com, Discussotalk and Kelas.com integrates an integrated learning system with a multimedia integration system, then also uses the Internet network. Based on this background, the researcher conducted research on the convergence of digital media as a pedagogical tool for e-learning and the changes in learning patterns and use of digital media devices.

2. Research Method
The method in this study uses a qualitative research method with a netnographic approach and the paradigm used is the constructivist paradigm. The location of this research was conducted in Jakarta, the focus of the research being start-up institutions providing informal education services for online distance learning and including education skills development services and skills university. The objects studied are three informal educational institutions, namely Ruangguru.com, Bahasa.com and Kelas.com. Netnography, or Internet ethnography, is a new qualitative research methodology that adapts ethnographic research techniques to the study of emerging cultures and societies through computer-mediated communication[2]. This type of research is also used as a market research technique, "netnography" publicly uses information on online forums to identify and understand the needs and decisions of relevant online consumer groups. Compared to traditional and market-oriented ethnography, "netnography" is much less time-consuming and complicated. What differs from traditional market-driven ethnography is that "netnography" can be done completely unobtrusively (albeit optional). In this approach, we see that the spectrum of online engagement is connected to the community which ranges from regularly reading messages to responding in real time to other members via email or other composing media. In addition, you can also observe individual communication, offer short comments, offer long comments, join and contribute to community activities, to become organizers, experts or voices recognized by the community[3].

The selection of these three elements provides distance learning facilities that can be accessed not only from a computer but also through gadgets such as smartphones or tablet PCs. In addition, these three institutions also provide legal certificates and are legal persons and the users of these three services are quite numerous and have a lot of enthusiasts, so the three objects studied have the potential to change learning through online blended learning. The data collection technique used was non-participant online virtual observation by following the distance learning process carried out by Ruangguru.com, Bahasa.com and Kelas.com which was observed based on feedback from users of the service or students of online educational institutions. Next, to examine the pattern of interaction in the process of teaching and learning in online media and the pattern of building contact between users or between users and mentors. Also, as computers or gadget applications, they function as mediators in online teaching and learning interactions. The subsequent data collection consists of structured interviews with mentors and then with users (users of informal education services) from each of the three informal education institutions studied, as well as users or participants who are members of informal education[4]. Qualitative data analysis was carried out using the flow analysis model of Miles and Huberman, which was carried out in 3 stages, namely data reduction, data presentation and drawing up of data conclusions. This process continues throughout the research, even before the data is actually collected. This study uses data analysis techniques with the term interactive model of Miles and Huberman.

Data reduction is one of the qualitative data analysis techniques. Data reduction is a form of analysis that refines, classifies, routes, eliminates unnecessary data, and organizes data so that final conclusions can be drawn. The second step is that data presentation is one of the qualitative data analysis techniques, data presentation is an activity in which conclusions are drawn about the information, thereby providing the opportunity to draw conclusions. The form of presentation of qualitative data is in the form of narrative text (in the form of field notes), matrices, graphs, networks and diagrams. The presentation of these data is also approached in the form of a discussion of a theoretical point of view and of the concepts used in this research. After reviewing data reduction and presentation, the next step is to draw conclusions, which is one of the techniques of qualitative data analysis. Conclusions are the results of the analysis that can be used for action and also for the first steps as recommendations in the development of a theory or concept through its practical and theoretical implications[5].

2.1 Literature Review

Computer Mediated Communication (CMC)
The new media theory that is currently very popular is Computer Mediated Communication Theory, also abbreviated as CMC. This theory is used as the basis for research on
communication in global media using the Internet. Among these, research with a netnographic approach. The online research examines the communication of online communities as well as on social media. This theory is used as a basic foundation to explain communication problems through online media. The virtue of computer mediated communication (CMC) basically refers to human communication performed by or with the help of computer technology[6], [7]. In general, CMC can cover almost all uses of computers, including various applications such as statistical analysis programs, remote sensing systems, and financial models, all of which conform to the concept of human communication. Defines computer-mediated communication as the process of human communication by computer involving people, being in a certain context, getting involved in the process of forming media for various purposes. Stated that CMC is the communication that occurs between human beings through computer tools. Besides seeing how scientists define CMC in theory, another good way to learn what the term is is to check scientific publications to see what is being researched and discussed on behalf of CMC. Some of the fundamental concepts of computer-mediated communication theory include:

1. Communication.

CMC in understanding the basic principles of communication from a basic understanding of (1) human communication rather than media or mass communication or communication technology and (2) social interaction. In addition to this, it is possible to further clarify our position with a series of short, related statements about how we understand the nature of communication. In CMC, communication is seen in 4 nature divisions including dynamic, transactional, multifunctional and multimodal communication[8]. Communication is dynamic, that is, communication is best understood as a much more dynamic process. The meaning of the message is not in the words, but is much more fluid and context-dependent, constantly moving from place to place, person to person, and over time. Communication is transactional. Although people sometimes like to think of communication as the exchange of messages between a sender and a receiver, communication is actually about negotiating meaning between people. Individuals are both speakers and listeners, and these roles are repeated over and over again in each other's conversations.

Communication is multifunctional. Consciously or unconsciously, communication performs many different functions and usually performs more than one function at any given time. For example, communication can be used to influence people's behavior or attention, to inform people, to seek information, to exert control over others, to win friends or seduce people, to entertain and please others, etc. Although, for analytical convenience, scientists sometimes distinguish between the interactional (or relationship-oriented) and informational (content-oriented) domains, it is usually impossible to separate the two. Communication is multimodal. As important as it is, this language is obviously only one of the many means we need to communicate. Verbal messages are always filled with other messages (or "meta-messages") that are shaped in different ways to make sense of what are commonly referred to as non-verbal modes of communication. In fact, more often than not, other modes of communication are based on verbal modalities rather than simple modalities. Each of these communication statements clearly overlaps with the next. Communication is transactional and therefore must be dynamic; Likewise, because multimodal must also be multifunctional, etc[9].

2. Mediated.

Based on what we already know about human communication, you will most likely know that all communication is mediated in some way. In turn, medium is simply the process or medium through which something is conveyed through its message. Therefore, communication is mediated through our interactions with people and through a number of different verbal and non-verbal modalities[10]. Communication can never exist in a vacuum. In the case of the CMC, of course, another level of material mediation is added, namely technological mediation. It is at this point that the general meaning of the other words medium begins to manifest or rather media in its plural form as "the medium by which news and information is communicated"[11]. Again,
CMC is generally limited in the sense of technology as a machine designed, built and used for the exchange of information and communications. This is commonly referred to as "Information and Communication Technology (or ICT)" and brings us well to the last fundamental concept of CMC.

3. Computer.

Having dealt with the intricacies of the terms "communication" and "intermediary", this may still not provide an explanation for knowing that the term computer cannot be taken for granted. Almost all activities, both professional and educational, today involve computers as working tools and therefore almost everything we do is in one way or another mediated by other computers[12]. Plus, with things like video conferencing, webcams, and voice recognition, the shift in technology is bringing us ever closer to the kind of face-to-face communication we've always used. This is how computerization, which drives so many areas of our lives, has become increasingly invisible.

2.2 Mediamorphosis

The mass media have undergone a metamorphosis quite far from the old development. Many statements that talk about the pros and cons of media in the era of the 70s and 90s, now have to be stopped with the emergence of new media. It is inconceivable that the typewriters that existed before the 18th century will now be replaced by computers, that conventional telephones will be replaced by cell phones, that mobile technology like pagers that send written messages over long distances will be replaced by mobile phones that can send text messages without having to communicate with the operator first[13].

Mass media has started to adapt to the development trend of media used by the public as the benchmark of the market. The Internet is not classified as a new medium, but as a communication channel technology that broadly opens global access. New media such as social media, news web portals, streaming media, blogs, etc. on the use of internet technology to manage their operations. Undoubtedly, the existence of the Internet also creates an information revolution that must be realized by all audiences[14], [15]. For a read-only letter, loading takes a long time. As for the mass media, it is full of uncertainty whether the submitted article will be published. Social media and online application tools can create a negative gap between individuals. Sometimes the public not only needs information, but also has an interest in informing anything, both facts and opinions. The need to disseminate this information is not met by mainstream media. According to Roger Fidler, media transformation results from the complex interplay of imaginary needs, competitive and political pressures, and social and technological innovations. The metamorphosis is supposed to be able to meet the needs of the public to inform their facts or opinions and to obtain easy and non-deviant services. Media involving the role of citizens, such as citizen journalism, can be said to be popular all over the world. Media involving the role of citizens, such as citizen journalism, can be said to be popular where media is used all over the world.

In general, mediamorphosis requires an integrated way of thinking about the evolution of communication media technology, which is an interconnected system between media forms in the past, the present, and the process of emergence. Many fail to distinguish or misinterpret mediamorphosis and media convergence are the same thing. What needs to be emphasized is that media convergence is part of the concept of mediamorphosis. In media convergence, just look at how media specifics become multifaceted, while mediamorphosis has a wider reach for media users than conventional actions and then transforms into practical, efficient, effective and modern actions. It can be said that the point of view of using the device has also changed 180 degrees. Mediamorphosis refers to the principle of animal metamorphosis. The ever-evolving mass media follows the changes as more and more technologies are discovered. The speed with which television broadcasting also brought about significant changes in the newspaper, magazine and film industry. Metamorphosis is not just a theory as an integrated way of thinking about the evolution of communication media technology. Instead of studying each form
separately, mediamorphosis encourages us to understand all forms as part of an interconnected system and to notice the similarities and relationships that exist between forms that have appeared in the past, present, and future. Here, then, is a process of media dialectics that goes hand in hand with the development of a large audience[16]. This dialectical process sees three cycles between needs, media and audience that are continuously interconnected and live in an unbroken cycle. When the need for convenience is on the rise, efforts are also made to improve the convenience of needs even though the technology itself does not always meet 100% of the needs of the audience.

Fidler divides 3 concepts into metamorphosis. Among these, coevolution, convergence and complexity. An explanation of these 3 concepts we can describe in the following table:

<table>
<thead>
<tr>
<th>MEDIAMORPHOSIS</th>
<th>Coevolution</th>
<th>Changes in the form of media are a cycle in a system. The nature of the media has always been part of the system despite the changes.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Convergence</td>
<td>The unification of various technologies and media forms that are present at the same time leads to mixed media forms resulting in the transformation of each of the entities that meet and the creation of a new entity.</td>
</tr>
<tr>
<td></td>
<td>Complexity</td>
<td>Situations and conditions that force change to occur. A state that gives birth to new ideas that transform and bring systems to life</td>
</tr>
</tbody>
</table>

Table 1. Mediamorphosis Concepts

New media have not only bridged the differences between certain media, but also the difference between the boundaries of private communication activities and the boundaries of public communication activities. These media materials and uses can be used for private and public purposes alike. In the future, this fact will influence not only the limits of different media, but also the limits of the role of media institutions. McLuhan said that as media technology developed – from oral communication to print, from print to broadcast and then to the Internet, digital media and media convergence emerged, a global village has since emerged that allows people to communicate and even go beyond the capabilities of the media. Technology previously. Technological developments are impacting the emergence of virtual communication which allows people not only to communicate in instant global communication but also to organize and manage content through hyperlinks and search engines via the World Wide Web. Although in the early stages of its development, the new media was seen as an extension of the audio-visual media that had existed before, the new media remained a challenge for the production, distribution and basic form of audiovisual media[17]. The collapse of conventional media (as explained above) cannot be separated from the form of the information revolution which is seen from the side of production, distribution and the form which has developed is that of providing easy access to the public through the media.

3. Findings

Based on the research results of these three online tutoring institutions, it can be seen that the online learning system is done with one-way learning. In one-way learning, student members of this online learning media website require each participant or student member
of this online tutoring agency website to become a member by first creating an account to enter the learning process. These members must be registered before participants perform any other transactions. Thereafter, the account holder receives instructions and procedures to participate in the learning guide and online courses on the learning materials of Ruangguru, Bahasa and Kelas.com. Participants must have gadgets such as smartphones, tablets, laptops, PCs, etc. in order to participate in online learning led by expert tutors in their fields and guided during the learning. Each participant also receives a form, direct guidance from the tutor in the form of video tutorials from the teacher or didactic tutor and some are in the form of recordings of tutor teachers, some are only in the form of voice like the language they can teach participants through voice tutorials[18].

In the teacher classroom online learning support, the learning system can be realized with voice tutorials and vector images, and also displays videos of tutors or teachers which are recorded and viewed on the web according to the menu selected by the user. The built-in interaction model is a way in which the online course guide displays messages in audio and visual form that can be accepted by users. There users can hear and see the teaching process through online gadgets easily and without a time limit[19]. Both contact and communication between teacher and students are computer-assisted and do not involve direct contact. To ensure that teaching here is carried out as efficiently as possible by minimizing direct encounters with tutors, this is only enough through interactive videos that facilitate children's learning while being accompanied by interesting visuals and an easy-to-understand learning logic, as in the case of lesson learning. Through this website, participants also have the ability to communicate and interact directly with mentors via chat to facilitate communication with virtually no additional devices.

The blended learning model offered by this class of teachers varies, ranging from visual learning, i.e. learning through modules containing written text displayed on a computer screen or gadget, so that students can choose their preferred learning depending on the subject they want to learn, so also learning through interactive video tutorials with animated animations and recorded images of the teacher or personal teaching of a subject and displayed on the screen as video recordings[20]. The language used to communicate uses a formal language. Meanwhile, the interaction with the teacher is also created through chat or video calls and the language used in the interaction of the mentor with the students is considered as a formal language and uses effective linguistic symbols which are also supported by computing devices. While media learning on the language of the media or English language guidance institutes is done first through practical exercises in English with tutors who know English by voice or call. This is to test students participating in online English learning and also to measure their level of English language proficiency. The ability to speak English is verified by an initial test that communicates directly with the mentor.

The model of interaction that is built between the mentor and the student also goes through a computer. Indeed, online tutoring institutions such as languages also use digital structures to be able to view integrated help via vector images and electronic forms, for example in the form of an ebook which also contains a form and also contains sounds for online learning as a learning video tutorial or through interactive videos, facilities provided. In addition, in online English teaching institutions, Bahasa also offers virtual learning with audio learning, so the blended learning model implemented by Language Talk is easy to learn[21]. There are different levels of English taught through Bahaso with access to 24-hour learning services, ranging from elementary to upper secondary. Then also for intermediate level to professional level, and also special online lessons for special guides for TOEFL program and others.

The model of interaction between tutors and students consists of interaction via chat media or direct communication with mentor audio. This is what makes it easier for students to
communicate with their tutors without having to face them face to face. Of course, for this teaching and learning process to go smoothly, maintenance (maintenance of the device) is required from hardware (hardware) to software (software)[22]. Students usually come from academia, then there are also teachers and even workers who are looking for learning tools for developing skills and abilities. This is obviously necessary for tutors to pay more attention to their students and also maintain the quality of their skills so that they can catch the attention of their students. Of course, the selection of tutors for this online study center is also made up of people who are experienced and selected in teaching various learning methods or models that are easily understood by students.

Each of these online higher education institutions tries to minimize the penalties for students because they assume that students of this online course are students who actually enroll because they need teaching skills and specialized training. So, in terms of direct communication with students, this also happens by paying attention to the range of participants starting from age range, gender range, to education level of tutors. By maintaining this communication, tutors also try to encourage students to be more active and to present more didactic simulations in visual form, considering that the age group most followed by these students is mainly followed by adolescents or young people still young studying or entering the world of work.

In addition to the teacher classroom and discussions, there is also the Kelas.com web application which also prioritizes tutoring and teaching technical skills for the various skills it offers ranging from skills in photography to writing film scripts, cooking, personal make-up, music. skills, sports, etc. how to develop talent, passion and hobbies. In this class.com, there is more emphasis on art or artistic skills in various fields which are directly guided by well-known experienced mentors or famous people in their fields, including celebrities who have abilities and special skills, in addition to this, this learning chapter offers variations. Participants who wish to learn online through this application or the web can pay an amount of IDR 250,000 per class for the chosen area of expertise[23].

This type of learning system on Kelas.com places more emphasis on directing or delivering messages that are done directly by the mentor through video tutorials that directly record the experienced mentor in delivering learning materials. learning, all of which vary. There are mentors who only provide 18 videos of teaching materials, then others who provide up to 30 videos of teaching materials. Not all mentors provide the same amount of video material. So that through this Kelas.com, of course, participants cannot interact directly with the mentor in question and only provide educational materials and also legal certificates online. This obviously hinders the process of two-way interaction between the mentor and the participants who follow him for the application so that it becomes a teaching tool for the participants who follow him effectively but does not provide enough information. direct interaction with tutors.

This form of one-way delivery is always transmitted via a computer, so the message form provided in this video tutorial is also exclusive and the material taught corresponds to the amount of material provided and can only be viewed through the application in question, the efforts to understand them are also made by the participants. a practical understanding of the proper skill really should be given. When examined in metamorphosis theory, the coevolution that occurs in informal educational learning has changed into the face-to-face learning process in online learning, in which course participants learn simply through their gadgets and learn through device applications that are connected online and can be reached anywhere in access[24]. 24 hours. In addition to this, it also makes it easier and more convenient for the participants, besides, it is also efficient from the utilization of study time to the cost efficiency incurred by the participants for the course. Usually, course participants spend a lot of time and money for face-to-face meetings because the operational costs of the course are also high, but with this e-learning, the course costs are cheaper by a point. operational view. In addition, it is not difficult for the users of the installation to use the
applications used. This form of convergence in informal educational learning is an integration of unifying multimedia devices that combine written text, video (visual) and audio for the learning process in applications. Thus, it makes it easier for course participants to visualize various visual variations and text combinations to facilitate understanding for participants from inexperienced to experienced participants[25]. This visualization obviously requires a qualified Internet infrastructure to be able to react to multimedia devices. Likewise, in the interactions, appropriate multimedia devices are also necessary to interact with the tutors, such as the use of devices such as webcams or cameras that are adequate and compatible with the devices used. So it is the convergence of media that experiences adequate learning transformation and it does not reduce the learning rules as it should and there is only a change in the interaction model.

The complexity that occurs in the interaction between the user (user) and the mentor or interaction in the learning process. Here too there was a mapping of participants belonging to passive or mixed people or only talking but not active, there were also participants belonging to tourists or simply observing the learning process and some are active in the interaction with their mentors. The complexity of the existing system in the informal educational process also depends more on the reliability of the device, so the form of communication is limited, especially in the one-way educational process[26], [27]. In this case, the rules for learning monitoring and validity of the learning process also apply. In this type of learning process aimed at millennials, it is entirely possible to accelerate the process of achieving Citizen 4.0. As they have grown with the development of the Internet, they have become accustomed to accessing information from various sources and other areas. Millennials tend to wake up quicker to pay attention to their surroundings, especially with the growing number of community leaders engaging in positive activities in the news.

4. Conclusion

Based on the results of the study, it can be concluded as follows:
1. Metamorphosis in the learning process of online informal education prioritizes learning efficiency and effectiveness through a learning process that does not directly use the learning process. facing learning, but prioritizing computer-based learning encounters. Regarding the co-evolution of e-learning through web-based applications that connect through the Internet and can be used through gadgets such as smartphones, tablets, laptops and computers. So that in this case it is easier for each registered participant to connect for 24 hours of access and the teaching aids can be used at any time. Additionally, it does not require participants to meet mentors in person or travel to the course venue as it is facilitated by digital devices. The complexity also occurs in the interaction as well as the audience belonging to the tourists or only the participants who are limited in listening, the participants who are not limited.

2. The convergence that occurs in informal education is also the integration of multimedia devices through interactive tutorial videos for students, as well as tutoring through audio structures and text presentations that can be accompanied by sound. This therefore requires suitable digital devices. This communication module is provided by fully equipped digital devices with an Internet connection whose required bandwidth is also high. This type of integration allows a change of interaction model that makes it very easy for everyone and only requires very cheap course funding because it is not too burdened with running costs.
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References


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