

Critical Evaluation Of Digital Economy Transformation As Disruption In Indonesia

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Abstract. The 21st century hints at an acceleration of the economy in all sectors, this is a definite implication of the technological changes that have occurred. The transformation of the digital economy took control of the economy at the beginning of its emergence. New Entrant entered the market mechanism and jointly addressed the main problem of consumers to do things. This research method uses Critical Discourse Analysis (CDA) which critically analyzes the transformation of the digital economy through semiotic critical analysis. Nokia, Yellow Pages, and Kodak companies are passive incumbents who put the convenience of their products first, assuming they are market winners and won't get bogged down easily. This article suggests that public policymakers are more open to change as recommended by Christensen, namely that disruptions that have high innovation will always have an impact and win over the structure of market mechanisms.

Keywords: Critical Evaluation; Digital Economy; Disruption

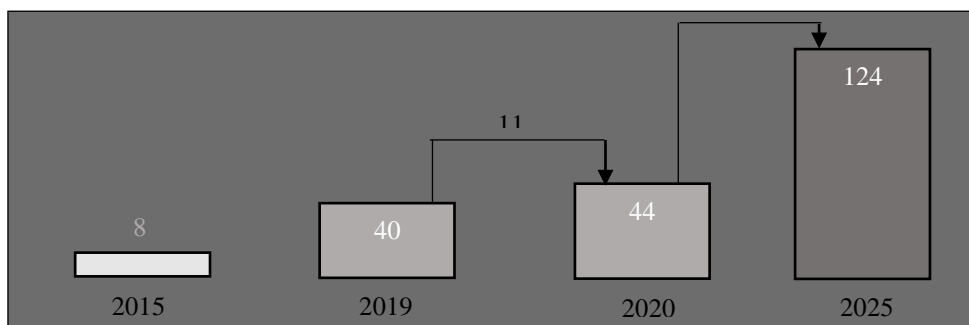
1 Introduction

The 21st century hints at an acceleration of the economy in all sectors, this is a definite implication of technological changes taking place. The contradictions that occur are always debated about the modernity of a technological change. [1] citing Christensen's great thought that fills in the concept of disruption seems to be a major issue in technological change. Some of them cause turmoil in Indonesian society, as well as trade-offs between maintaining the old way or changing the latest pattern. Often people are still hesitant to adapt considering that there is no certainty of the success of these changes. However, all economic thinkers always remind that technological change is the determining variable for the progress of economic civilization.

The transformation of the digital economy in all sectors took control of the economy at the beginning of its emergence. There is a concept described by [2] as a sudden shift in the economy. The digital economy creates new opportunities emerging along with a wealth of information from complex customers. The service products offered are varied and complementary, so that the ease of access and willingness of goods is better. Those as consumers who take advantage of such access will receive the most ideal benefits for their choice. However, for producers who do not participate in the group of social change, they will be left behind and further slumped. The two digital economic paradigms associated with disruption are the owning economy and the sharing economy.

Owning economy explains the concept that private property applied by incumbents is not able to adapt well to the digital economy situation. This is not just a paradigm, more than that the concept is included in the economic system as the main foundation. The fundamental difference between a self-owning economy and a sharing economy is the ownership of the means of production, the status of labor, and the distribution of profits. Empirical evidence of the incumbent's impervable fall is the glory of Nokia and the stagnation of innovation by the company. [3] further analyzes the failure of nokia mobile phone companies that are unable to adapt to major changes.

Empirical data on the growth of the digital economy shows positive results in Indonesia, this if not balanced with creative destruction will cause the conclusion of [4] is an impossibility. Furthermore, the following data on the growth of the digital economy will be presented:



Source: [5]

Figure 1. Internet e-Conomy Gross Merchandise Volume Indonesia

Based on Figure 1, it is explained that the beginning of the Covid-19 pandemic in 2019 in Indonesia experienced an increase in sales of digital economy platforms by 40 billion USD and an increase of 44 billion USD in 2020. The Covid-19 pandemic has caused the growth of the digital economy in Indonesia to be more explosive. The problem is how the Indonesian people respond to these changes so that the phenomenon of Nokia's fall does not occur in Indonesian society. This anticipation is important to be applied in policy implementation so that the adverse impact of digital economy externalities can be minimized in Indonesia.

Another phenomenon of the emergence of the sharing economy is airBnB and Grab which quickly and surely tear down the legs of successful incumbents. The new entrants are included in the market mechanism and jointly overcome the main problems of consumers to do various things. Research [6] shows that the sharing economy carried out in the rental of unused rooms causes the costs that must be incurred to be very minimal. Everyone can register their vacant rooms for rent in the application, and tenants feel a high affinity with the homeowner. This is because the house is not like a hotel in general, but rather a stay at the uncle's house. This kind of concept will certainly occur massively not only in the lodging sector, but in online transportation carried out by two big competitors in Indonesia, namely Grab and Gojek.

Even though at the beginning of its appearance, Grab refused to be used as an online transportation because they did not actually have a fleet, name tag, meter, and base like conventional transportation. Grab argued that it was an application service provider such as AirBnb until in its implementation that Grab had to compete with the legality of new legislation in Indonesia.

This research uses two major grand theories, namely digital economy theory and disruption theory. The digital economy transformation at least hints at several important points [7] namely: 1) Administratively, labor relations are increasingly complex; 2) Increase the use of part-time and shift work; 3) Contractually through the individualization of labor relations; 4) Spatial through smaller and more isolated work units. The digital economy theory tool is used as an analytical knife in analyzing phenomena that occur in Indonesia. Some empirical problems that have never been written about by other scholars are social changes that occur in society due to the digital economy.

Likewise [8] forwards Christensen's idea of the highest impact of the digital economy which is referred to as disruption. This conclusion agrees that a digital economy will always go hand in hand with disruption. The best response to disruption is that a country can transform faster and of course its output is explosive economic growth. The use of disruption theory in this study as an anti-thesis of the old paradigm that can explain how the collapse of large companies with the existence of new entrant that has high innovation. Furthermore, this theory serves as an analytical tool to answer what the Indonesian people should do at a time of high interruption from the existence of a digital economy.

2 Literature Review

Previous research was used as a reference basis to be able to show research contributions so as to clearly show the location of the state of the art of this paper. The previous research cited in this paper is based on the search applications Vosviewer and Harzing Publish or Perish, these two applications are used to clarify the use of previous research as well as the contribution of this article. Based on the results of the two applications, previous research was obtained that discussed the same theme as follows:

The research [9] explains that technological changes lead to rapid information, planning, ordering, networking, socializing, flowing, transacting and assessing. This is one that is paid through concessions in the form of consumer data that determines the selling power of products/services and to predict and manipulate consumer choices. This research focuses more on changing the transformation of the digital economy in the field of tourism. This study is the only study published in Scopus that addresses all three of the same themes as this article. The similarity of these themes is based on the use of Vosviewer data analysis. The state of the art of this research is on different focuses and locus, more detailed locus Indonesia which is one of the developing countries.

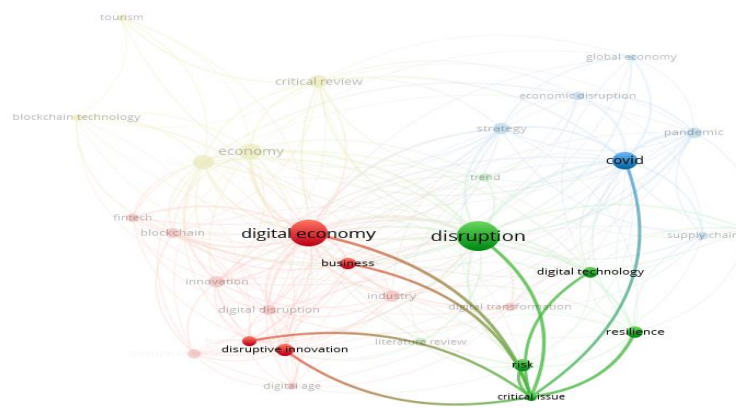
Research [10] tests the concept of digital economy on the gap in exploring how the momentum of digital economy innovation generates risks and limits the scope of democratic decision-making to create a better democracy. Some of the risks that arise are based on the dynamics of digital economy innovation, namely the reshaping of interpersonal shared life and solitary life; increase the threat of Artificial Intelligence to intensify unemployment and inequality and the environmental impact of an active and enhancing digital communication

ecosystem. We can understand that a digital economic transformation brings diverse impacts in each locus set out in a study.

The research [11] discusses the changes in digital transformation associated with global value chains in Asia. The conclusion of this study is that the digital economy in Asia requires revamping business processes through technological innovation, government policies and digital entrepreneurship. Comparative analysis between the digital economy and community indices as a basis as well as consideration of data analytics and AI, economic platforms, digital trade, innovation, and social and economic sustainability. Further the difference in the state of the art of this study is that the study does not address very basic on philosophical debates and rather assumes on empirical data. In terms of methods, the research uses a critical paradigm that was not used in this previous research.

Research [12] shows more detailed transition results about digital transformation. The main challenge raised in the digital economy is not new business strategies and models, but an effective transition of each organization to the desired future. When the path and destination have been built more neatly, then the resulting output can be more directed. The corona pandemic has forced many organizations to switch to digital, which is calculatedly significantly deterministically significant to digital transformation. Future research that can be developed is to develop theories, guide the practice of digital transportation and maximize impact. Furthermore, this article will contribute to future research as described by [12]. The contribution of the article will actually maximize the positive impact of the digital economy in Indonesia.

Furthermore, this article will present empirical data based on analysis using Vosviewer and Harzing Publish or Perish as follows:



Source: Vosviewer (2022)

Figure 2. Hasil Olah Data Vosviewer

Based on Figure 2, it can be explained that the use of critical paradigms on the theme of digital economy and disruption has not been written much. Research contributions based on the Scopus index show there is only one article that addresses the same theme as this article. Novelty this article develops the literature of dirusption and the digital economy. The use of such vosviewers actively avoids the presence of cherry-picking in the determination of literature reviews.

3 Research Method

This article is a qualitative research with a paradigm approach [13] on Critical Discourse Analysis (CDA) that critically analyzes the transformation of the digital economy through semiotic critical analysis. Particular attention to certain signs and symptoms in the digital transformation of the economy is discovered and analyzed in a complex manner using critical devices. The level of analysis of this research is at the level of manuscripts and interviews conducted by researchers in obtaining data saturation in accordance with qualitative rules. This saturation of data is important to be able to describe the reason why a phenomenon can occur.

The technique of determining informants in this study uses snowball sampling where there are several main informants who are then developed according to the needs of data in the field. Some of the key informants in the study were as follows:

Table 1. Research Key Informants

No	Informan Name	Position
1	Gus Fandi Akhmad Yani	Bupati Gresik
2	Gus Mudhlor	Bupati Sidoarjo
3	Nyai Mundjidah Wahab	Bupati Jombang
4	H. Subandi	Wakil Bupati Sidoarjo
5	H. Armuji	Wakil Walikota Surabaya
6	Faris Widiyatmoko	Tenaga Ahli Komisi XI DPR RI
7	Candra Hidayat	Tenaga Ahli Wakil Ketua DPRD Jatim
8	Fauzan	Staff Ahli Komisi D DPRD Kota Surabaya
10	Muhammad Lutfi	Ketua HIPMI Kota Surabaya

Source: Data processed by the Author (2022)

The key informants specified in the table are informants who are considered to be able to represent the aspirations and arguments of the required data saturation. This is because some of the research informants are public policy holders who can actively implement policies in the community.

The data analysis technique of this article is data triangulation based on documents, interviews, and observations made by the author so as to obtain good data accuracy and validity. Triangulation is one of the common analytical techniques used in qualitative research.

The locus of this research is Indonesia due to the empirical phenomenon of research that does not allow it to be studied with an even narrower locus. Considering that this research raises the phenomenon of global problems, so the locus of research refers more to Indonesia.

4 Result And Discussion

4.1. How Is the Digital Economy Disrupting Indonesia?

The digital economy was introduced by Don Tapscott in 1997 through his article that was popular in European civilization. The emergence of the digital economy implies very explosive technological changes not only in the micro context but refers to macroeconomics [14]. Several other researchers explained that in terms of data use, it gave rise to a new concept, namely the use of real-time data [15]. The insufficiency of the time series data these days used to analyze data makes the digital economy disrupt the use of the data. Countries that are left behind are at least those that are slow to evaluate the problems that occur, more complex not only the delay but in terms of the use of time series data, which is not possible to use it to analyze.

One example is the use of data time series 2015-2020 in analyzing decision making. If only referring to 2015-2020, we will only get the right decision in 2015-2020. The problems in 2021 and 2022 are already different, and the problems are also increasingly complex, the analogy that can be used is that we used a doctor's prescription two years ago to overcome the diseases that occur today. This inaccuracy of data measurement causes decision making to be slower.

Other researchers are trying to present an alternative view from other sectors, such as [16] stated that the automation of jobs resulting from the digital economy poses a weakness in the economic structure, namely expanding inequalities about access to use a more complex digital economy. Of course, individuals who do not have enough funds to enjoy advanced technology will be slower in receiving information, compared to some people who can achieve faster access to information technology. In Indonesia, the efficiency of using the digital economy at least presents a dilemma of its use not only in the economic structure, but also in legality. Empirically it can be witnessed that there is excessive panic due to the unpreparedness of legality, there will always be leaks of funds that occur when the legality of the law is not ready. Important issues in Indonesia are about online transportation, e-commerce taxes, the mechanism of fixed establishment companies (BUT), and online promotion.

In Indonesia, decision making often still uses time series data, arguing that there is indeed no container that can be used to use real-time data. The interview with Bupati Gresik is as follows:

“Juridically, there is no platform provided by the government to be able to use real-time data for decision making, but several sectors already exist. The point is that it is still in the development stage, in the future we will continue to develop and optimize this digital economy”.

Based on the results of the interview, it was found that not all sectors of the economy can use real-time data, the Indonesian government is actively trying to be able to integrate the conventional economy with the digital economy. Although some problems become obstacles such as enthusiasm from the community to support the acceleration of transformation, modernity, and sustainable innovation.

The context of online transportation in Indonesia is an example of delays in legality to interpret the digital economy [17]. The contradiction of transportation problems caused a commotion at the beginning of its emergence, this was due to the fact that the legality of the law was not yet clear in applying the rules. The gaps in the void are exploited by some people to be able to carry out economic activities without clear rules, and when the number of workers absorbed by the government only realizes this. Of course, this delay has logical consequences for other transportation rules, conventional transportation for example feels unfair because they set prices not comparable to online transportation [18].

Based on the results of an indepth interview with the Deputy Mayor of Surabaya, Mr. Armudji explained about online transportation as follows:

“We also do not close our eyes that the presence of online transportation is very helpful. Apart from the different market segmentation, the ease of accessing services is important. Although there is an external impact on other mass transportation. Legally, we are still weak for online transportation arrangements”.

The interview, which was held at Mr. Armudji's residence, indicated that the transformation of the digital economy has a positive effect on society, although legally the law is still less responsive. Normatively, the government should make preventive efforts in interpreting an economic change. This phenomenon makes Indonesia not optimal in taking advantage of the momentum of economic change, the inexperience has an impact on the economic structure that overlaps policies. This will always correlate with a declining level of stability and people's well-being.

4.2. Critical Review of Disruption

Disruption is an interesting debate of the 21st century by presenting economic transformation in it. A disruption will only appear when there is a shifting that occurs in the economic mechanism. Sooner or later the disruption process depends on the policy holders in an area, the more inhibited the disruption process, the worse the negative impact on society will be. Of course, disruption in this case is innovative and solutive, so the resulting benefits are very good for economic sustainability.

Normatively [19], [20] interprets disruption as follows:

“It is a theory of competitive response. If we introduce continuous innovation, then incumbents will generally put up barriers to entry and try to dispel the pace of disruption. But if those innovations disrupt the economy, they will ignore us or flee from resisting”.

The statement indicates that if an innovation comes to the fore, it will always be confronted by incumbents who apply barriers to entry. Meanwhile, when an innovation is disruptive, the incumbents tend to ignore and be indifferent, as if the innovation will only last for a while. When the transformation arrived and disrupted the entire sector, there was an explosive problem and the incumbents panicked to overcome the disruption. The conclusion [21] that consumers are considering optimizing their booking strategies over troubling old cases. Consumers have realized that ease of access is the main key in a disruption, ease of access is always accompanied by the concept of innovation.

The debate in the concept of disruption is about the new entrant camp and the incumbent camp. [22] explains that incumbents are old players who maintain their comfort and existence so they tend to resist change. While new entrant is a young workforce that has continuous innovation is disruptive, even in the concept of disruption some new entrants can break the legs of the incumbents by degrading and minimizing the market structure so that the level of efficiency and effectiveness becomes better. The glory of Nokia, the Yellow Pages, Kodak, and several other incumbent companies that were unable to survive amid the onslaught of new entrant is a testament to the strengths that the concept of disruption has.

Furthermore the incumbents are also divided into passive and active incumbents. Passive incumbents prioritize the comfort of their performance so far, while active incumbents are trying their best to be able to transform to adapt to the times. Of course, in this concept, the companies Nokia, Yellow Pages, and Kodak are passive incumbents who prioritize the comfort of their products, the assumption is that they are market winners and will not fall easily. This is a factor supporting the new entrant to play a more role and disrupt further in the market mechanism.

4 Conclusion

The concept of the digital economy will coexist with disruption while testing the existence of incumbents who win market share. Furthermore, the new entrants consistently produce updates as well as continuous innovations that are very disruptive. They run their business invisible, but rather on the principles of a more efficient and effective economy. The consequence of the change in the structure of the economy is efficient and effective, so the new entrants strive to be as much as possible to be able to tear down the incumbents.

This article suggests that public policyholders should be more open to change as recommended by Christensen, namely that disruptions that have high innovation will always have an impact and win the structure of market mechanisms. The more the disruption is inhibited, the greater the negative impact that occurs, so it is only a matter of waiting for the momentum of the incumbents' downfall. This study found the phenomenon of the incumbent's fall critically so that it was hoped that the actors involved did not experience the same thing.

This article is limited to the context of the analysis of the new entrant and incumbent, further research is expected to contribute to the debate over the peruvian of the economic system underlying the existence of the disruption. Furthermore, this research is limited to qualitative methods indepth interviews so that the results of the research are argumentative, further research can develop the same theme as alternative methods so as to make the research more accurate.

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