

The Reason of Internet Neutrality Abolition in United States: A New Form of Restriction on Technology Accessibility

Yohanes William Santoso

Department of International Relations Universitas Airlangga

Keywords: internet neutrality, technology accessibility, and neoliberalism

Abstract: The existence of the idea of internet neutrality has been a long-standing debate. Internet neutrality debate generally focuses on the implications raised for service providers, content providers, and users in general. In the United States, the idea was enforced in 2015. But then, by the end of 2017, the Federal Communications Commission (FCC) decided to repeal the internet neutrality rules that once maintained equality of access on the network. This phenomenon then allows internet service providers to impose different rates for each service used by consumers and content providers. This paper attempts to answer questions as to whether the abolition of internet neutrality can be said as a new form of technology accessibility restrictions. In this study, the authors found that there are similar patterns between technological access restrictions through intellectual property rights and access restrictions due to the abolition of internet neutrality. This finding is based on the reason for the abolition of internet neutrality in the United States. In addition, the authors also argue that the phenomenon of the abolition of internet neutrality can be one form of influence neoliberalism in the era of information globalization.

1 INTRODUCING

Neutrality has led to debate in the international world. It is proved by various debates related to its application and its implications for the economy and social welfare (Hanh and Wallersten 2006). In the United States, internet neutrality has been debated since the 1990s in the Federal Communications Commission (FCC), as the regulator of information and communication services providers. By 2015, internet neutrality is officially implemented in the United States during the era of Obama's administration and when the FCC is led by the Democrats. Internet neutrality becomes a rule that prohibits internet service providers to slow or block access to certain sites or services. However, by the end of 2017, the FCC voted to revoke the rules of internet neutrality. This action is intended to liberate companies such as AT&T and Verizon to legally decelerate the access speed, block applications, and charge more price toward content providers and users for priority access (Fung 2018). The results of the voting formally decide that the rules of internet neutrality will be abolished.

The FCC's decision to remove internet neutrality then goes against some of the globalization theses

which view that the globalization leads to technological development also leads to an expansion of access to the technology. The FCC's reason for removing internet neutrality is interesting to discuss. Furthermore, the author will describe the cause of the abolition of internet neutrality in the United States by focusing on economic and social reasons. Then the author will describe the theoretical framework related to the thesis of globalization that leads to the expansion of access to information and the thesis of globalization which views that technological progress is also faced with the limitations of accessibility of these technologies. The author will analyze the phenomenon of the abolition of internet neutrality in the United States. Broadly speaking, the author argue that the abolition of internet neutrality became an example of restrictions on technology accessibility in the era of globalization. Although technology and information are constantly evolving, there is a price to pay for innovation and investment to offset increasing access.

2 DEFINITION OF INTERNET NEUTRALITY AND ITS APPLICATION IN THE UNITED STATES

There are various reasons for the abolition of internet neutrality in the United States, but in this paper, the author will focus on social and economic aspects. Before explaining about the reasons, the author will explain about the definition of internet neutrality, followed by the application of Internet neutrality in the Obama administration and its implications. There are various definitions related to internet neutrality, and there are no certain definitions are mutually agreed upon. Hahn and Wallsten (2006) state that there is no particular definition that can be widely accepted, but in general, internet neutrality means that internet service providers only charge once to consumers. Internet service providers are prohibited to side with a particular content provider and are prohibited from charging content providers for sending information over the internet to users. While Njoroge et al. (2010) defines internet neutrality as a policy that mandates Internet service providers to provide open access, preventing them from any form of discrimination against content providers. In his writings, Krämer et al. (2013) views that internet neutrality prohibits internet service providers to speed up, slow down, or block Internet traffic based on its source, ownership, and purpose. Gilroy (2015) considers that in general, internet neutrality includes the general principles that network owners who compose and provide Internet access should not control how consumers use the network. In addition, internet service providers should not discriminate content provider access to the network. In general, the author argue that internet neutrality can be defined as the principle that Internet service providers should treat all data on the internet fairly and not discriminate against network users and content providers.

The implementation of internet neutrality in the Obama administration was officially agreed on February 26, 2015 when the FCC decided to support a strong internet neutrality rule to keep the internet open and free (Obama 2015). Formerly, the attempts to implement internet neutrality in the United States have emerged in 2007 when Obama declared his support for a free and open Internet. Implementation of internet neutrality, according to Obama (2014) can support the creation of an ecosystem that allows investment and innovation. This is based on the belief that with the existence of internet neutrality, new innovators in the field of technology and information

will have equal opportunity in providing digital access with existing large companies. Obama (2014) also considers that the FCC should create a new set of rules that protect internet neutrality and ensure that no company is capable of acting as a gatekeeper that limits what can be accessed within the network. There are four things that are regulated by internet neutrality in the United States (Obama 2014). First, internet service providers are prohibited from blocking consumer demand for accessing sites or services with legal content. Secondly, internet service providers are prohibited to intentionally decelerate or accelerate access for some content. Third, the implementation of transparency authority in overseeing internet service providers. Last is paid prioritization, means no service may be placed on a slow lane because it does not pay a certain fee.

3 REASONS FOR THE ABOLITION OF INTERNET NEUTRALITY IN THE UNITED STATES

The debate about internet neutrality is in fact related to various aspects, particularly on social, political, and economic aspects. The debate leads to a decision either to impose or remove internet neutrality in the United States. Referring to the writings of Hanh and Wallsten (2006), internet neutrality will lead to a decline of economic prosperity. Internet neutrality is seen would lower the incentives for Internet access providers and can prevent the development of new services. The application of internet neutrality is also seen as a threat towards the consumers because of the consequences of such regulations that lead to a decrease in investment and innovation for internet service providers. But on the other hand, content providers can gain benefit from internet neutrality because of the two-sided market theory, Internet neutrality practices can subsidize the creation of new content and drive innovation while avoiding Internet fragmentation (Lee and Wu 2009). Nevertheless, there is an argument that the absence of internet neutrality can lead to social welfare. Cheng et al. (2011) from a policy perspective explains that service providers are the beneficiaries in the absence of internet neutrality. This is due to the privileged access fees paid by content providers. Meanwhile, the absence of internet neutrality improves social welfare in cases when a content provider pays for preferential treatment. Musacchio et al. (2009) also explained that conditions without internet neutrality lead to social

welfare when the ratio between ad level parameters and user price sensitivity is low or high. As for the author, social welfare is still a relative implication and depends on certain conditions.

In general, the implementation of internet neutrality in the United States is considered to bring harm to internet service providers because it lowers the level of investment and innovation in the provision of internet services. Referring to the Consumer Communication Services (Stratecast 2010) model of analysis, the existence of internet neutrality lowers the investment level of Internet service providers due to increased risk. However, according to Hooton (2017), existing empirical data show that internet neutrality does not lead to economic threats in the form of a decrease in investment. Hooton (2017) noticed that there was no causal impact from FCC policies on the investment of internet service provider companies. Despite these facts, economic factors can be considered as a major reason for the FCC to abolish internet neutrality. In addition, these economic factors lead to the drive in doing innovation that also decreases. The author sees that technological innovation can not run fast if not offset by the advantages of existing technology. Given the neutrality of the internet, service providers can not take much advantage because there is no price differentiation in accessing technology. Therefore, innovation would be hampered.

4 GLOBALIZATION: INFORMATION TECHNOLOGY AND ACCESSIBILITY

The phenomenon of the removal of internet neutrality can be related to Manuel Castells' thesis of the information society and the limitations on technology accessibility. The era of globalization has brought progress and development in various aspects of life, especially in terms of information. Globalization characterized by global events worldwide has proven that globalization is influenced by the revolution of communications and information technology (Held 2000). Globalization can also be said as the beginning of an information age that emphasizes the importance of the role of information in contemporary society (Webster 2002). Such change is proved by the fact that society has undergone a transition from industrial society to the information society that began in the 1970s (Castells 2010). The main characteristic of the information society can be seen in its structure

consisting of networks and not individual actors. In addition, the information society also works through a constant flow of information in technology (Castells 2010). According to Castells (2010), the existing and emerging networks are the main features that define the information age. In Castells's thesis of the information age, there is the emergence of a network society that can be associated with users, service providers, and content providers on the internet.

Furthermore, Castells (2010) sees a structural change in the global economy occurring within the span of the 1970s to the 1990s. Castells describes the new economy based on a model of the development of informationalism, with the network as an important attribute in it. In the new informational economy described by Castells (2010), there are new indicators in looking at the company's competitive level of knowledge related to technology, information, and access to the network. The author then saw that in the era of information globalization, access to the network becomes an important factor that determines the flow of such information. But then, there is the fact that the network used in the information age is also included in technological innovation. As a form of innovation, there is the view that innovation in the globalization era should be appreciated by enforcing intellectual property rights which would limit the people's access to the technology.

Entering the era of globalization, technological developments are accelerating and bringing new agendas and questions, particularly in relation to the accessibility of these technologies. The existence of intellectual property rights is a proof that despite the advances in technology and new discoveries, not all individuals is able to access the technology without paying the price. Referring to the writings of Dharos and Braithwaite (2002), the progress and development of technology, followed by the recognition of intellectual property rights granted to the owners of the work. The right allows the work owner to obtain royalties from any access made to his work. The existence of such appreciation for the work is seen can improve future innovation, the competitive level among innovators, to lead to economic growth (Dharos and Braithwaite 2002). But then, it creates new problems, especially if the implementation is over-done and includes technology that should be public goods. Dharos and Braithwaite (2002) also see that over-implementation can lead to human rights abuses. A common case is that limits on access due to the application of intellectual property rights result in the difficulty for developing countries in accessing technology. One of the most crucial areas of technology but has access restrictions is

health, because of patents on drugs or methods of making these drugs. For example, AIDS drug patents make African countries have difficulty in accessing, even though there are life-threatening AIDS sufferers (Dharos and Braithwaite 2002).

Meanwhile, Maskus (2000) considers that intellectual property rights can play an important role in fostering economic development. Intellectual property rights can have a positive role when talking about how to grow new business, rationalize industry inefficiency, and influence technology acquisition and creation. However, intellectual property rights pose a threat to economic development when there is an increase in certain fines for a product of imitation and permit monopolistic conduct by the owner of intellectual property rights. Maskus (2000) also describes empirical evidence on related issues that support the view that product innovation is considered sensitive to the presence of intellectual property rights in third world countries, when FDI and technology transfer are increasing but patent rights policies are strengthened. Overall there is a positive impact of growth, but this impact depends on the competitive conditions of the economy. The author sees that intellectual property rights are one example of limits to technological accessibility in the era of globalization. Using the same principle, the author argues that the abolition of internet neutrality in the United States can be the beginning for accessibility restrictions on information.

5 ABOLITION OF INTERNET NEUTRALITY: NEW FORM OF RESTRICTION ON ACCESSIBILITY OF TECHNOLOGY

In this part, the author will present an analysis of the FCC's decision to remove internet neutrality in the United States by the end of 2017. The author's analysis will focus on proving that the abolition of internet neutrality can be said to be a new form of access restrictions on technology. The analysis will begin by looking at the reason for the abolition of internet neutrality. Referring to the existing reasons, the author will try to see the similarity of the pattern with efforts to limit the accessibility of existing technologies. In addition, the phenomenon also shows that neoliberalization in the era of globalization has led to the capitalization of information. The phenomenon of the abolition of internet neutrality then also dismisses the view that

globalization has led to free and open access to available information.

Referring to the reasons why FCC removes internet neutrality that the author has exposed earlier, it can be seen that there are two main reasons which are interconnected, namely economic factors as well as investment and innovation. On the economic aspect, the existence of internet neutrality requires every service provider to treat users and content providers equally. This also means that users and content providers can access all of the available services without any additional rate. It can be seen that the accessibility level of internet neutrality scenario is at a high level. The condition is indeed beneficial to users and content providers, but internet service providers are disadvantaged as there is no additional profit gained through service tariff differentiation. This is supported by the opinion of Hanh and Wallsten (2006) who see that internet neutrality can decrease incentives for service providers. The condition of decreasing incentives then leads to a decline in the ability of service providers to develop and innovate in providing networks. Therefore, internet neutrality can be viewed as a factor that slows down technological development even though economically beneficial to network society.

Both of these reasons actually have the same pattern with the reason of technology restrictions in the era of globalization which is then applied in a new form. The pattern that the author sees refers to the explanation of Dharos and Braithwaite (2002) as follows. First, there are technological innovations in the era of globalization, in the case of internet neutrality, the Internet network is the innovation. Secondly, as a result of these innovations, there is a dilemma between opening high accessibility or getting high profits in order to support further innovation developments. Third, a step is taken to enforce access restrictions on the grounds to appreciate the work and encourage the level of competition among innovators so that it can lead to economic growth. But the third pattern has an oddity because there is ambiguity in seeing the innovator. The author considers that the content provider can also be regarded as an innovator, for example a startup company engaged in digital content. But with the abolition of internet neutrality and the possibility of imposing tariffs on content providers, it can be seen that the only innovator is the internet services providers.

Furthermore, the author also considers that the abolition of internet neutrality become a form of capitalization of information in the era of

globalization. This is supported by the fact that without internet neutrality, service providers can charge more to access certain services on the internet. The capitalization of such information can be said as a form of neoliberalism influence in shaping the economy of network society era. Neoliberalism is closely related to globalization because globalization is often described by the widespread trade, economic integration, to capitalism. Neoliberalism views that the global economy should be an open and free market (Scholte 2005). There are three pillars of neoliberalism presented by Scholte that is privatization, liberalization, and deregulation. Privatization means the transfer of ownership of production assets from the public sector to the private sector. Liberalization means the formal abolition of the movement of goods, services and capital between countries. While deregulation does not mean the abolition of the rules as a whole, but only intended in regulations that inhibit the dynamics of market movements.

Referring to the three pillars, it can be analyzed that, internet service providers which generally dominated the private sector has made internet services as a commodity in the era of the informational economy. With the abolition of internet neutrality, deregulation took place which ultimately aimed at creating a more favorable market flow. Furthermore, this phenomenon also proves that the general view on globalization that opens new systems as referring to Giddens (2013) and Castells (2010) related to information society that allows access to information is not always true. In addition to being proven by the limitations that will arise due to the abolition of internet neutrality, the author also considers that neoliberalism is also influential in making access to information as a commodity. Other than that, the abolition of internet neutrality can be a new form of restrictions on access to technologies that were once restricted by intellectual property rights.

6 CONCLUSION

Based on those explanation, the authors can conclude that FCC's decision to remove internet neutrality is caused by the encouragement of some internet service providers. The main reason is that existence of internet neutrality prohibits service providers to collect tarriff from certain services and require the accessibility of all services. It can be said to be detrimental to service providers because the income earned becomes less diverse and opportunities for development and innovation become smaller. The

decision became one of the new forms of technology access restrictions. Referring to the principles and patterns that exist on access restrictions through intellectual property rights, the author can see the similarity of repeated patterns in this case. Although later, there is still ambiguity with regard to those who are perceived as innovators who should receive incentives, between service providers or content providers. Then, the author also emphasizes the influence of neoliberalism in the FCC decision. Neoliberalism in this case means making internet services as a commodity to achieve profit or capital accumulation for Internet service providers through the implementation of tariffs in accordance with the services used. But there are contradictions with neoliberalization, especially in the use of deregulation which has been equivalent to internet neutrality. Therefore, deregulation in this study is better understood as deregulation of existing rules that inhibits the accumulation of capital, such as internet neutrality.

The author believes that there are still some gaps in this study. Some of them lie in the existence of some conflicting principles and patterns but still can be used to explain the case. Such is the ambiguity of the innovator who receives incentives in a pattern of constraints on technology access between intellectual property rights and internet neutrality. The abolition of internet neutrality can allow service providers to get incentives for different services or quick access points, but there are content providers who should also be included in the innovator's side as they provide content to the information society. As in the case of the abolition of internet neutrality, content providers can potentially be billed more capable of quick access in delivering content to users. This is in contrast to incentives in intellectual property rights that provide incentives to innovators and encourage innovators to develop new things. Scenarios on networks without internet neutrality can lead to a decline in the number of content provider innovators, but it does provide a boost for internet service providers to innovate developing the best technologies. However, there is no guarantee that with internet neutrality, content providers will race to create innovation and take advantage of existing freedom of access. Similar to conditions without internet neutrality, it is uncertain whether service providers will compete for innovation because of more resource-rich outcomes.

REFERENCES

Book and book chapters

- Castells, M., 2010. *The rise of the network society* (Vol. 12). John Wiley & Sons.
- Drahoš, Peter dan J. Braithwaite. 2002. "Resisting the New Inequality", in *Information Feudalism: Who Owns the Knowledge Economy*, New York: New Press, pp. 198-209.
- Giddens, A., 2013. *The consequences of modernity*. John Wiley & Sons.
- Maskus, Keith. E. 2000. "Intellectual Property Rights and Economic Development: Patents, Growth, and Growing Pains", In *Intellectual Property Rights in the Global Economy*, Washington DC: Institute for International Economics, pp. 143-170.
- Webster, F., 2002. *Theories of the information society*. Routledge.

Scientific Journal

- Cheng, H.K., Bandyopadhyay, S. and Guo, H., 2011. The debate on net neutrality: A policy perspective. *Information systems research*, 22(1), pp.60-82.
- Hahn, R.W. and Wallsten, S., 2006. The economics of net neutrality. *The Economists' Voice*, 3(6).
- Held, David. 2000. *Regulating Globalization? The Reinvention of Politics*, International Sociology, Vol. 15, No. 2, pp. 394-408
- Krämer, J., Wiewiorra, L. and Weinhardt, C., 2013. Net neutrality: A progress report. *Telecommunications Policy*, 37(9), pp.794-813.
- Lee, R.S. and Wu, T., 2009. Subsidizing creativity through network design: Zero-pricing and net neutrality. *Journal of Economic Perspectives*, 23(3), pp.61-76.
- Musacchio, J., Schwartz, G. and Walrand, J., 2009. A two-sided market analysis of provider investment incentives with an application to the net-neutrality issue. *Review of Network Economics*, 8(1).
- Njoroge, P., Ozdaglar, A., Stier-Moses, N.E. and Weintraub, G.Y., 2013. Investment in two-sided markets and the net neutrality debate. *Review of Network Economics*, 12(4), pp.355-402.
- Stratecast. 2010. Net Neutrality: Impact on the Consumer and Economic Growth. *Consumer Communication Services*. Vol. 4 No 13.
- Schoelte, Jan Aart, 2005. "The Sources of Neoliberal Globalization," dalam UNRISD Program Paper, 8: 1-30.

Online and others

- Fung, Brian. 2018. The FCC's vote repealing its net neutrality rules is finally official. Here's what happens now. [Online] Available at https://www.washingtonpost.com/news/the-switch/wp/2018/02/22/the-fccs-net-neutrality-rules-will-die-on-april-23-heres-what-happens-now/?noredirect=on&utm_term=.18c2ed2bc241 [Accessed on June 3, 2018]

- Gilroy, A.A., 2009, June. Access to broadband networks: The net neutrality debate. Congressional Research Service, Library of Congress.
- Hooton, C., 2017. An Empirical Investigation of the Impacts of Net Neutrality.
- Obama, B. 2014. November 2014: The President's message on net neutrality. [Online] Available at <https://obamawhitehouse.archives.gov/node/323681> [Accessed on June 3, 2018]