

# Technological Developments that have an Impact on the Conduction of Electronic Trials in the Era of Digitalization

Bayu Sasongko

{sasongkobayu06@gmail.com}

Doctor of Law, Borobudur University, Jakarta

**Abstract.** In the current era of digitalization, information technology has experienced significant development. One thing that is very visible from the current progress of digitalization is the implementation of electronic trials, where electronic trials or commonly known as e-litigation is a platform where legal processes can be carried out electronically using technology, information, and communication. The era of digitalization has changed the way of communication, work, and daily activities. One aspect that has been affected is the justice system by adopting technology to increase efficiency and accessibility in the trial process. So this study aims to analyze the impact of technological developments on the implementation of electronic trials in the era of digitalization. The research method to be used is a legal research method that will analyze literature and cases to understand how technology has influenced and made it easy to conduct electronic trials. The results show that the growth of technology has some significant advantages for conducting trials electronically. With speed, efficiency, and accessibility, highly profitable results can be obtained by using these technologies and conducting electronic hearings. However, the study found that there are some potential challenges or barriers such as data security and accessibility for someone who does not have access to technology but is seeking justice to attend trials. This research will identify the challenges and risks that will arise in conducting electronic trials, the impact of technological developments in conducting electronic trials, and offer recommendations to address challenges that may arise.

**Keywords:** Trial, E-Litigation, Digitalization.

## 1 Introduction

Man now lives in a modern civilization that demands speed, effectiveness and efficiency in everything. The word modern seems to be an identity that must be attached to all devices of human life today. Anything other than the word modern is considered old-fashioned, traditional, and outdated. Influenced by the rapid changes of the times along with the development of science and technology, we have entered the digital era with all its sophisticated trinkets, including the loss of temporal and spatial barriers between countries. The digital age is constantly evolving. Many technologies are constantly evolving for the better or becoming automated. As a result, developments in the digital era occur in all sectors. Some sectors that have experienced developments in the digital era include:

## 1. Field of Communication

Speaking of the digital age, the field of communication is certainly one of the fastest-growing fields. In the past, the only way to connect with other people in different places from you was to use a cell phone and use inter-sim communication. However, developments in communication that occur in today's digital era are smartphones, which are equipped with various kinds of advanced features. One important part of smartphones today is the internet function that can be maximised and used to communicate and connect with others. In addition, the presence of this technology also makes it possible to communicate via video calls, which was previously impossible. In other words, the development of the digital era in the field of communication can already be felt today.

## 2. Application Presence in Business

Today's business world is also starting to touch the digital era. Different types of applications are present in the business world. These applications are very useful in making it easier for business people to reach their customers and a wider target market. The situation of the business world today is very different from the past. This is because, in the past, business people experienced difficulties in the marketing process and introducing their products to customers. Business people who fail to keep up with developments in the current digital era will usually experience a situation where they are unable to compete with other competitors who have begun to adjust their business to the digital era.

## 3. Financial Technology

The financial sector has also evolved in line with the digital era. This can be seen in recent years, when digital wallet systems began to emerge. The development of the digital era in this sector is also still related to the application-based business world. FinTech and financial technology markets will also rely on applications that can provide excellent service to users. Even today, to carry out various types of financial transactions, we do not need to leave the house and all transaction models can be done using only personal smartphones.

## 4. E-Commerce

The existence of e-commerce today is proof that the digital era is progressing very rapidly. E-commerce can also support the widening of the local economic circle. E-commerce is a service that offers products and goods online through one website or application.

In the past, if a person wanted to buy a product, he had to go out of the house and go to the place where the desired product was sold. Nowadays, with the existence of e-commerce, there is no need to leave the house to buy goods, because smartphones that have e-commerce applications installed make the entire process from shopping to payment very easy. Rapid developments in the world of technology continue to be felt in every business. Even freelancers can now attract clients from abroad. That is, developments in the digital era can help every individual to compete in the international arena. This Freelancer Media in the Digital Age book has a lot of interesting things that can be said about freelancing. Starting with mapping the nature of freelancers in the digital era, explaining the use of digital platforms by freelancers, and analyzing the impact of digital platforms on freelancers.

Cyberspace is the latest digital product that is able to penetrate the boundaries of time and space, including the location of countries that have been limited by territory. According to Howard Rheingold, cyberspace is an artificial, imaginary or virtual space where everyone does what is usually done in everyday social life in new ways.[1] Through cyberspace, everyone is connected to an international network (internet) and can interact with anyone, anytime, anywhere. The virtual world has transformed into a public space, as described by Hubermus. The Internet is a medium for open discussion about various things, open to all individuals without restrictions.

The virtual world also diverts human activities that originally took place in the real world. From email, weblogs, chats, and webcams to Facebook and Twitter, e-learning, e-commerce, and e-banking are new media for activities that are usually carried out in the real world. This is because the way technology works is always known to have a dual nature, on the one hand, it brings great benefits to human life, but on the other hand provides convenience and even increases crime globally. The development of technology always has an impact, both directly and indirectly, good or bad, and has a significant effect on all behaviours and mental attitudes of all members of society.[2] In the perspective of criminology, technology is a factor forming crime (crime generation), which is a factor that causes or facilitates someone to commit crimes.[3] An increasingly global life, not only concerns aspects of life, including national legal life, but also offers new options to enliven global life, and even spread localism everywhere.[4]

Business changes that occur in today's digital era make all business people have to change the way they run their business, for example by utilizing digital platforms. However, there are not many opportunities available to all business people in this era. This is because there are several challenges that must be faced by all business people to adjust their business processes. Some of the challenges that will be experienced by business people in today's digital era include:

- 1) Increase customer satisfaction

Currently, customers and potential buyers of products offered by business people always use their smartphones to carry out daily activities. Starting from searching for products, looking for the desired service, looking for information, to placing an order. Thanks to this convenience, customers can get what they want in a more realistic way. In addition, customers can also get a fairly fast response from business owners if they experience confusion.

- 2) Quite complex technology services

Not everyone understands technology that is specific to doing business. This challenge is one that is often felt not only by business owners but also by the staff who work with them. Therefore, every business person should start considering the right solution to use. For example, by using services that are easy to understand, such as applications that are rich in features and easy to use.

- 3) Manage a lot of information

The internet certainly makes it easy for anyone to get information about management. However, to promote products more effectively, it is advisable for business people to understand what their target market is looking for. Not only that, business people can also take advantage of digital technology to study customer trends. For example, by

knowing the sales data of various products sold, they can determine which types of products are most sought after by buyers.

4) Alignment with business goals

Developments that occur in this digital era often make business owners wonder if they should change the goals they want to obtain. However, adjusting to digital doesn't mean everything has to start all over again. Digital allows business people to innovate, especially from the way they manage their business. Whether it's products or services.

5) Security

Security is one of the reasons why business owners are hesitant to go digital. In addition, business people must also ensure the security of sensitive personal data. Therefore, business people must also be prepared to consider, among others, guaranteed technology security services.

6) Inadequate strategy

When digital transformation affects business, business people must also adjust their business strategies. This is because if the business strategy remains the same as before switching to the digital stage, then the strategy will affect the business being run. Changes in strategy can be made by assessing the problems seen in the business being run. And remember to start by identifying the cause of the problem and working together with the team. Ask for input from team members on strategies that need to change.

There are many types of challenges faced in the digital age. Starting from HR problems, how to run a business, to obstacles in terms of technology. However, if businesses can embrace digital transformation, businesses will become more efficient. Of course, previously manual business management process practices will be replaced by automated business management systems. The product marketing process in this digital era must also be adjusted by all business people. Traditional ways can be turned digital. Digital marketing can not only expand the target market, but can also be a support for businesses to achieve significant development.

Based on the statements in the introduction above, further issues arise that need to be discussed. Namely, the question of whether all legal infrastructure that has been built so far is ready to face problems in the real world. During this time, the legal infrastructure was built based on positivism, which has a formal nature, and physical actions, and has the power of reaching state jurisdiction based on territorial boundaries. From now on, legal metanarratives will be tested in the face of information technology developments.

## **2 Method**

The method used in this study applies qualitative research methods through a normative juridical approach. Based on the data sources used, this research is sourced from doctrinal and historical.

## **3 Result and Discussion**

### **3.1 Characteristics Of Modern Law**

The existence of modern law today is motivated by the past history of the relationship between law and society and the development of the modern state. This modern law has the following characteristics:

1. Has a written form;
2. The law applies to all areas within the country; and
3. Law is an instrument that is consciously used to realize the political decisions of its people.

Law, with its characteristics that must be written, is indeed a necessity for an increasingly complex and diverse modern state. However, written law makes law formal, rigid and inflexible, made by competent authorities, and has nothing to do with the quality of legal certainty or justice.[5] Second, the enforceability of law in the national territory represents modern law as national law based on the theory of state sovereignty over its territory. Lastly, law is not only an instrument of legitimacy but also a social engineering. As a social engineer, law is a means that aims to change the behaviour of citizens under predetermined goals. If law is the means chosen to achieve a particular end, then the process is more than simply choosing law as a means.

In addition to a good knowledge of the nature of the law, it is also necessary to know the limitations in the use of law as a means (to change or regulate the behaviour of citizens). Thus, it is expected that the law can meet the needs of modern society which is increasingly complex and diverse. However, law is not always closely related to the social and technological developments that accompany it. The law can be used as an instrument by change agents, and a pioneer of change is an individual or group who gains the trust of society as the leader of one or several social institutions. Desired or planned social change is always under the control and supervision of change pioneers.

The method of influencing society with a pre-arranged and pre-planned system is referred to as social engineering or social planning. Law has a direct or indirect influence in driving social change. For example, regulations that establish a particular education system for citizens have a very important indirect influence on social change.

### **3.2 The Powerlessness Of Modern Law**

As mentioned earlier, the laws in force today are based on history and social life in the past. This happens, for example, in areas of Europe where the positivist paradigm, which gave rise to the concept of the rule of law, is dominant. As a result, the law applies formally, procedurally and nationally, and the state has power in the reconstruction and application of the law. Positivism considers it necessary to strictly separate law and morality (between *das sein* and *das sollen*). In the view of positivism, there is no law other than the order of the ruler.

Even some sections of the positivist school of law, known as the Legism school, argue more firmly that law is law. Based on the philosophical concepts of positivism, the school of legal positivism formulates a number of premises and assumptions about law, resulting in the following basic views of the school of legal positivism:

- a. The legal system of a country is not based on social life or national psyche, nor natural law, but acquires its positive form from those in power.
- b. Law must be viewed only in terms of its formal form and therefore must be separated from its material form.
- c. The existence of legal content and legal material is recognized, but it is not legal science material because it can damage the scientific truth of legal science.

John Austin, through his work *Analytical Legal Positivism*, appears to be the main adherent of the school of legal positivism. Here, the law is a sovereign commandment. There are state powers that issue orders, and there are people who obey those orders. As a result, sanctions are imposed on violators. Since the purpose of legal positivism is the establishment of legal entities (rules and doctrines) applied as substantive law, law becomes a creation of the legal profession and state power. Legislation issued by the state becomes the only measure of legality of human order. Furthermore, Austin explained that superiors force others to comply. Another prominent member of the school of legal positivism is Hans Kelsen. According to him, the law must be swept away from non-legal elements such as sociological, political, historical, and even ethical elements. This idea is known as Kelsen's theory of pure law (*Reine Rechtslehre*). For Kelsen, law is a necessity that governs human behavior as a rational being. In this case, the question posed by the law is not 'how should the law be', but 'what is the law'.

Normative research looks at law as a rule and determines what can and cannot be done. Normative research is prescriptive and determines what is wrong and what is right. In other words, normative research examines law as a book. Normative research is *das sollen* (what should be). This situation continues to color the process of making and enforcing laws in Indonesia until now when we enter the digital era. Laws that are too formal, rigid and inflexible, and apply nationally, are difficult to adapt to the rapid development of information technology. Laws built on the principle of legality, the principle of territoriality, and the principle of behaviour are seen as limited to physical things. There are also a growing number of pragmatic laws that aim to address all the problems of society or contain the political and economic goals of the ruler, all of which are momentary and localized (local and sectoral).

For example, the existence of the Pornography Law, or the Electronic Information and Transactions Law (ITE Law), which aims to address the rise of pornography, pornographic practices, and various forms of cybercrime, in practice is invisible and counterproductive. Furthermore, the existence of laws related to natural resources (SDA) often does not represent justice for local communities, but instead represents justice for the political and economic interests of capitalists and foreign rulers. In other words, here the law is made solely by the interested parties. Modern law, with its character and doctrines, has become an accepted legal metanarrative,<sup>[6]</sup> but it is no longer powerless when dealing with the development of information technology. Jean-François Lyotard, in his book *La Condition Postmoderne (Rapport sur le savoir, 1979)*, states: "These meta-narratives (also called "grand narratives") are theories and philosophies about a large-scale and large-scale world: historical progress, the possibility of knowing all things through science, the possibility of absolute freedom. Lyotard argues that we have stopped believing that these kinds of narratives are sufficient to represent

and contain us all. We have become aware of the discrepancy between differences, diversity, aspirations, beliefs and desires, and it is for this reason that postmodernity is characterized by a flood of micro-narratives.

Cyberspace, also known as cyberspace or the Mayantara world, is characterized by the absence of borders, 24-hour online, interactivity, hyperlinks, no licenses, no censorship, and efficiency.[7] All these characteristics are problematic in a legal context, especially about various civil relations and when the crime occurs. The emergence of cyberspace with its cyber communities has driven various activities and, according to Satzipto Rahajo, technological developments have had a significant impact on the pattern of human relations in society.[8] In addition, Sudarto also explained that technological advances affect crime patterns.[9] Barda Nawawi Arif more emphatically stated that cybercrime is one of the dark sides of technological progress and has a very widespread negative impact in all areas of modern life today.[10] The three statements show that technology has also changed the pattern of public relations that have been carried out, including as a medium of crime. The typewriter was first invented in 1829 and was the most advanced tool of its time. However, in 2010, much more advanced iPad technology was introduced.

This rapid and very different change also changes human behaviour in socializing and interacting. In the past, sales transactions, contracts, agreements, and leases were carried out physically, with the exchange of money and behavior in the real and virtual worlds. The impact of technology on the behavior of commodity societies is evident here. However, in today's cyberspace, all buying and selling transactions and advertising publicity are carried out online and all administrative, tax, and civil law obligations regulated by the state are ignored. With e-commerce, complex transaction processes between regions and even between countries become simpler, faster and more efficient. Some people don't need to have a formal company, but it is enough to have a blog, including to buy and sell goods. The same problem also occurs in the protection of intellectual property rights (IPR). Everything can be copied, reproduced and pirated without the permission of the copyright holder. Books, songs, movies, and software are freely accessible between countries to reproduce, distribute, and trade.

In the field of decency, various forms of crime and violations of decency also often occur. Various forms of defamation, slander and immoral acts also often occur. The phenomenon of cyberpornography, cybersex and cyberprostitution has changed the legal construction that a person can also commit adultery and prostitution through cyberspace without having to have physical intercourse. The various impacts of the development of telematics technology above are challenges for the legal system in the digital era that knows no borders. How flexible modern law must continue to adapt to its rapid development. Laws are needed that can protect the rights of citizens in cyber activities, such as fraud in e-commerce, guarantee the protection of intellectual property rights and avoid all forms of misleading and pornographic content. This is because the internet not only connects people with people and people with countries, but also the entire planet. Since modern law cannot address the above problems, cyberspace is considered a world without law, Onno W. Purbo stated that the internet is viewed by most people, users and social observers as a world without borders, a world without rules and a world of freedom. As a result, various crimes and violations occur in cyberspace.[3]

In principle, the virtual world is inseparable from the reality of the real world. This is because the people and companies involved in it live in the real world. In other words, cyberspace is a medium and the cyber community is bound by law. According to Barda Nawawi Arief, 'destruction and pollution of information in Mayalantara' (may be referred to as 'cyber

damage' or 'cyber pollution') is part of environmental crimes that need to be prevented and overcome. [11]According to him, from the perspective of criminal policy, crime prevention efforts (including cybercrime and cyberpornography) must be based on an integrated approach (systemic), namely penal approach (criminal law), technological approach (technoprevention), cultural approach (cultural culture), moral approach (education) and global approach (international cooperation) must be used.

## 4 Conclusion

Modern law, with all its doctrines as a legal metanarrative that inherits the laws of the past, is no longer powerless when faced with the current of information technology that has created cyberspace. Breakthroughs, paradigm shifts, flexibility, universal jurisdiction, harmonization, and global cooperation are needed for national laws to be enforced in cyberspace.

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