LEGAL BRIEF

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Law and Technology: Legal Technology Model under the Authority of the Indonesian Notary Position in the Industrial Revolution Era 4.0

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Abstract

The era of the Industrial Revolution 4.0 has changed the old paradigm and standard values quickly. Likewise, the legal aspect cannot be separated from the demand to transform every concept, value and paradigm. On the public law side, each country is required to reform its legal rules to be adaptive and compatible with the development of the 4.0 era, while on the private law side it has an impact on trade transaction practices that have created new platforms, namely e-commerce and e-contracts. The position of a notary as a part of the legal system cannot avoid the disruption of the development of the industrial revolution. The preservation of the old paradigm of the position of a notary that requires it to be done traditionally should be reconstructed immediately so that the practice of office can develop and meet the demands of the times. This study uses a normative juridical research method through a conceptual approach, a statutory approach and a legal history approach which is elaborated with the concept of disruption technology and the theory of the economic analysis of law. Conclusion This journal describes that the fundamental obstacle to notary practice based on the Legality Principle which relies on Procedure, Authority & Substance should have been able to be transformed electronically based on the legal technology paradigm. With references from various organizational benchmarks and conventions mentioned above, they can be the philosophical, sociological and normative foundations in formulating notarial laws that are compatible, adaptive and adequate to the realities of the industrial revolution era 4.0. Recommendations for the need for legal reform, namely changes to legislation concerning the position of a notary through the establishment of an e-notary PP that integrates in a rigid manner the procedure, substance and authority in applying the authority of a notary in certifying electronic transactions.

Keywords: law and technology, legal technology, notary position

A Introduction

This article discusses the relationship between law and technology in the development of the Industrial Revolution 4.0 era. The era of the industrial revolution 4.0 with the development of advances in digital technology has transformed various sectors of life, both economic, political, and legal, from conventional to digital models (Barton, 2011). The economic sector is one of the sectors that has the greatest impact. One of the business models in the era of the industrial revolution 4.0 is e-commerce, namely the pattern of transactions using technological means, namely the internet. In Indonesia, the value of e-commerce increased by 63.36 percent during the first

semester of 2020 with total transactions reaching Rp. 186.75 trillion and an increase of 48.4 percent or Rp. 385 trillion in 2021. Globally, even at the end of 2021, the development of e-commerce increased by 54% or reached 3.56 billion dollars or an increase of 22% from 2020. The key to the success of e-commerce is disrupting conventional business because it utilizes artificial-based sharing and connectivity methods intelligent, big data and without managing large organizations and resources (Lin & Chen, 2021).

The increasing global economic activity in adapting to the situation of the era or the era of the industrial revolution 4.0 has encouraged the government to adopt information technology policies to facilitate national economic growth and development. The Jokowi regime's strategic program in facing the era of the industrial revolution 4.0 is to optimize the Ease of Doing Business (EoDB) or the ease of doing business index. The ease of doing business index is an important aspect for investment because the higher the Ease of Doing Business (EoDB) rating of a country indicates that the country has a better level of ease of doing business (Cutler et al.,2015).

In the era of the industrial revolution 4.0, the practice of the position of a notary is experiencing disruption (Decker & Yarrow, 2010). The discourse to adopt technology techniques and facilities in the practice of office is getting stronger and even international organizations and conventions such as The International Union of Latin Notaries (UINL), Organization of Economic Co-operation and Development (OECD), United Nations Commission on International Trade Law (UNCITRAL) are getting stronger (Mitcham, 1985). Hague Conference on Private International Law Conference De La Haye De Droit. International Prive (HCCH) has made a legal breakthrough to adopt the electronic system into notary practice (de Fontenay, 2016). However, due to the unpreparedness of Indonesian notary law in responding to technological developments, it has implications for creating legal uncertainty, namely deviations in roles and functions or even dysfunctional authority.

On the one hand, the government is very responsive in reforming regulations that are more effective and efficient by carrying out various disruptive regulations and bureaucracy but on the other hand, it has the effect of relegating authentic deed products into electronic evidence (aligned with ordinary letters) which has the potential to be flawed in the publication system (Ohoitimur, 2018). The implementation of electronic disruption has actually eliminated the function of public officials who are under the organization of public service implementing officials (OP4) so that the responsibility shifts to public officials, namely Notaries. The state no longer guarantees the ownership rights of its citizens as has been reflected in the implementation of the registration/publication system, which was initially guaranteed in the form of a deed or irrefutable evidence (if it cannot be proven otherwise) to be just electronic evidence (Dirking & Kodali, 2008)

Through the current legal regime, which is serious about "cutting down" the rule of law and bureaucracy through digitalization programs and electronic disruption to support the ease of doing business, it is actually a productive contract for the position of a notary (Hazard et al.,1983). Instead of notaries being given the authority to certify electronic transactions to strengthen the central and strategic position of notaries, notaries have even been “castrated” and their scope of authority has begun to be narrowed (Wurst, 2016). Practical and economic issues that form the basis for

government political policy making, in fact, override the fundamental component, namely the order/harmonization of law. This condition in the end became a boomerang for law enforcers such as the Notary Office. On this basis, an in-depth study of the relationship between law and technology is needed in the development of notarial law in Indonesia.

B Method

This research uses descriptive analysis research using qualitative methods. Researchers also want to examine a phenomenon that discusses Law and Technology: Legal Technology Model under the authority of the Indonesian Notary Position in the Industrial Revolution Era 4.0, qualitative research is aimed at a very detailed and detailed study where the results of the research are studied in depth and then interpreted clearly. There are two sources of data used in this study, where the data includes primary data and also secondary data, then the facts of the findings are described in a very easy form of discussion so that researchers can find a complex and structured understanding in a directed manner.

C Result and Discussion

Automation, operational efficiency and effectiveness characterized by Cyber-Physical System (CPS), the internet of Thing (IoT), the Internet of Services (IoS), Robotics, Big Data, Cloud Manufacturing and Augmented Reality are the axiologies of the new paradigm that is developing in the world industrial revolution 4.0 era (Nagy et al.,2018; Kasali, 2017). Development of smarter manufacturing processes, which include machine tools, production modules and products that can independently exchange information, trigger actions and control each other thereby enabling the creation of an intelligent environmental organization (Ellul, 1964).

The phrases Disruption, disruptive innovation, disruptive technology, disruptive mindset are very popular among scholars and the general public. Technology "disruption" is recognized as having pervaded all aspects of life, whether business, investment, politics, government, socio-cultural and legal (Liyue, 2012; Ling, 2010). Even further, the influence of today's technological disruption has reached in human affairs and views concerning culture, truth and justice. It appears that the reality of modern society is increasingly inseparable from technological developments (Chen et al.,2019; Drucker, 2010). Technology is not only an inseparable part in the joints of life but also has an effect on changing the patterns (patterns) of the order of interaction and relations of human life (Prescott, 2010; Hongdao et al.,2019; Achmad, 2021).

Describing the magnitude of the influence of technological disruption, Francis Fukuyama in his work The Great Disruption: Human Nature and the Reconstitution of Social Order (1999) wrote that in the context of the times in the era of information technology began to experience rapid, rapid and radical development of patterns of relationships or communication that without the barriers of space and time and create a third world or what is known as a global village. Fukuyama views that disruptive technology is a disturbance to the social order of society. The complexity of these problems cumulatively becomes a great disruption for social life. Even though on the

other hand, disruptive technology provides advantages and benefits that in situations of great information power the values of democracy, freedom, and equality, awareness of human rights and concern for the environment are high. The public becomes sensitive to social and humanitarian issues through information obtained from various technology platforms.

In contrast to Fukuyama, Sako (2010) understands that disruption is a profitable innovation, especially in different perspectives, namely in industry, business and finance. According to him, technological innovations can be adopted in an effort to maintain product quality and market demand. Based on the belief that the market is clear and the profits are predictable, the relationship with consumers (the market) must be strictly maintained. Even though technological innovations are often ignored, denied, or underestimated by incumbent companies or organizations due to strict decision-making processes and resource stewardship, they often reject disruptive technological novelties (Forell & McDonald, 2015).

Once the role of technology in the reality of contemporary people's life, even Rhenald Kasali or known as the father of change stated that disruption occurs intertwined in many areas of life, be it government, politics, the world of entertainment, and social. For example, the bad fate of conventional taxis since the emergence of online taxis that utilize technological innovations to create new products and markets. The failure of the incumbent is immediately apparent, namely that they are unable to maintain their market, not because they do not innovate, but because they only focus on innovation to produce better products for their consumers and ignore disruption (Schultz, 2009; Hongdao et al.,2019). They do what Christensen calls "sustaining innovation", but not "disruptive innovation". Disruptive innovation always starts from observation, research, and ideas. Then proceed with the development of a new business model with the help of available information technology. When successful, the business will start from the lowest point which is usually ignored and underestimated by established companies. From there slowly but surely they move up and enter a market that is already dominated by the incumbent company (Haris, 2014).

In the era of the industrial revolution 4.0, information technology has become a core variable in every aspect of life. Information technology becomes a rational "part of life" needed in every field of human activity. As according to Jacques Ellul in his book La Technique which discusses technology, he gives the following definition:

" In our technological society, technique is the totality of methods rationally arrived at and having absolute efficiency (for a given stage of development) in every field of human activity"...." and if science is a method or the description, creation and understanding of human experience, technology may be defined as human activity directed toward the satisfaction of human needs (real of imagined) by the more effective use of man's environment".

In a technological society, to meet the satisfaction and needs of his life, he always tries to use techniques or methods that are characterized by absolute efficiency. Efficiency is a concept that shows the best comparison between a work and the result. Judging from the result factor, an activity is efficient if a certain work gives the greatest results, while from the work factor, an activity is efficient if a certain result can be achieved with the smallest work.

According to Herbet Marcuse in his phenomenal book entitled "One Dimensional Man", states that in modern society the measure of human rationality is technological rationality. Modern society thinks and acts in one dimension, namely a society in which all aspects of life are directed to a single goal. According to Marcuse, modern society has 3 (three) characteristics, namely first, society is under the rule of the principle of technology, the power of technology has covered all areas of life, not only economics but also politics, education and culture. Second, society becomes irrational as a whole, because there is a unity between productivity and destruction. Modern industrial society exhibits the nature of being "rational in detail, but irrational in whole." Third, the society is one-dimensional.

Herbet Marcuse's thesis is actually his critical form in describing human development in the era of technology, but instead of creating critical awareness of the phenomenon of "one dimensional man", humans cannot be separated from the increasingly dominant influence and role of technology. Determination of Technology is further explained very clearly by Carl Mitcham in his paper entitled "Types of Technology" suggesting 4 (four) characteristics of technology, namely:

1) Technology as object, the object includes tools, equipment, and machinery
2) Technology as a process, the process includes manufacture, use, creation and design
3) Technology as knowledge, knowledge is in the form of skills, rules, and theories.
4) Technology as volition, the desire is in the form of a desire for power, survival, freedom, inner drive, or need.

In the broad scope of the characteristics of technology above, it must be understood comprehensively that technology is a system consisting of main elements that are connected to each other in an orderly manner so that a systematic picture is realized. As a system, technology is a conception of the set of skills, knowledge, methods rationally, orderly step by step, to solve the problems encountered and achieve the goals and desired results in life and avoid failure in certain circumstances. fickle. The ability of technology to carry out creation which is based on the principle of efficiency, on that basis, the main functions and tasks of technology in society are towards practical human life (the expansion of the realm of practical human possibility).

Moving on from Carl Mitcham's thesis, it can be concluded that technology is not only a set of tools that support human activities but is a rationality or paradigm that has a system structure, methods that rely on ontologies that are used as worldviews and guides to achieve goals and solve every problem faced. .

Underlying the phenomenon of disruptive technology is a necessity that occurs from time to time and reaches all socio-cultural conditions of society. The importance of awareness in responding to technological developments must be optimized as early as possible to obtain better living conditions. The application of e-contract, e-government, e-App brings rationality and a new paradigm of legal technology regarding digital solutions to provide legal services which is an important element among competing legal stakeholders. Legal services based on the concept of disruptive technology are superior to traditional corporate patterns. The legal industry is experiencing shifts in business models and delivery techniques which in turn lead to

changes that disrupt the conventional legal market. People prefer legal services that are fast and valuable, marked by ease of access, cost efficiency, and affordability.

The influence of technology in the development of law cannot be separated from the encouragement of the economic sub-system that has high energy. Richard Posner through The Economic Analysis of Law Theory is defined as an economic analysis of law or an economic analysis of law, saying that every legal problem must still be constellated (compiled, built, and linked) with basic economic concepts, reasons and economic considerations. with the aim of being able to position the nature of legal benefits.

The Economic Analysis of Law theory is built from the utilitarian philosophy of Jeremy Bentham with basic concepts, namely the concept of rational choice, the concept of value, the concept of efficiency, and the concept of utility called felicific calculus. Felicific calculus is used to measure the results of legislation with variables called circumstances, namely purity, extent, duration, intensity, certainty, fecundity, familiarity. believed to be able to achieve the greatest happiness of the greatest number.

Based on the economic theory of law mentioned above, creating legal technology market segmentation with the approach and concept of "cost-benefit analysis" to estimate the benefits and costs of technology-based legal practice. The process of technology disruption in the legal field starts from a bespoke model to a commodification model and cost structure in the legal services market. As presented in the following Figure:

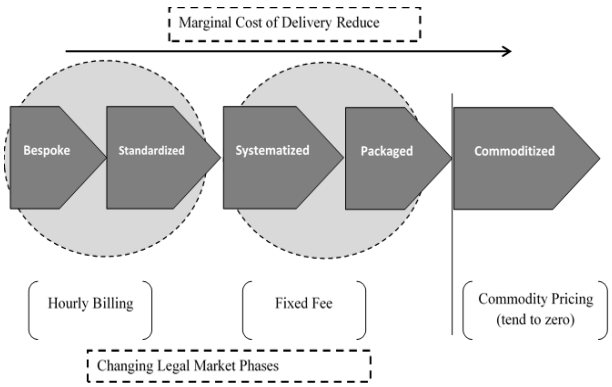

Figure 1. Evolutionary path Richard Susskind

Online and in person, legal services are moving from bespoke to standardization, systematization and externalization (packaging). Online technology allows legal service providers (lawyers or notaries) to package and offer their services and services to clients in a more efficient and effective manner. The entire process from bespoke to packaging is referred to as the commoditization of legal services. Commodity is the process by which providers charge for access to their online services and offer clients a much lower fee. The main drivers in legal services are three dimensions, namely clients who cannot afford legal services, individual consumers who are starting to demand fast legal services at low costs, movements that serve as catalysts to bring change into legal work.

According to Tom Wilson said that "the legal technology market includes companies (mostly startups) leveraging technology to build products that solve problems faced by both the industry and legal services clients". He further added that

the maturity of the legal technology ecosystem, automation, increased transparency, innovation, and generational shifts have given impetus to legal tech startups.

According to Zoe, legal technology startups serve a wide range of regions and jurisdictions, have diverse practices and areas of operation, and offer legal technology solutions to a wide range of end users in each category. The legal technology market segmentation based on client needs has been developed in 5 (five) points, including:

a) The first segment of legal technology startups provides self-service through commodity law solutions and improves access to justice in the legal industry by meeting client's cost-effectiveness needs. Within this category, most legal tech startups target individuals, small businesses, and corporations, for example, for online legal document services (i.e., companies like Great Way Great Win, Rocket Lawyer, and Legal Zoom), smart law, and smart contract drafting. (companies like ShakeLaw, smartlaw.de, and synergist.io).
b) The second segment works on manifold business models, including electronic legal markets, networks, and multisided platforms for L2C, L2B, and L2L services. Other legal technology activities within this group include legal advice and content portals, online counter auction platforms, recruitment platforms, legal database insourcing platforms, and legal process outsourcing.
c) The third category of legal technology startups operates on a big scale and includes a variety of high-tech instruments for specialized legal workflows, processes, and duties. Document review, electronic discovery, intellectual property asset management, automated document assembly, legal contract management, legal research analysis, and legal practice management are all included in this area. Kcura, Epiq, Recommind, Zapproved, and CS Disco are e-discovery companies; Anaqua, Lecorpio, AcclaimIP, and Trademarknow are intellectual property asset management companies; lexalgo.com, knowledgetools.de, and normfall.de are legal contract management companies; CaseText, Judicata, RavelLaw, and LexMachina are legal research analytics companies; and RAMICRO, AnNoText, Renostar All of these businesses fall under the umbrella category of legal technology startups.
d) The fourth segment of legal startups offers a platform for online dispute resolution (ODR). Modria, a legal technology business based in the United States, provides ODR for minor consumer claims and settles 90 percent of eBay's 60 million yearly disputes without involving the courts. Michigan built the first virtual court in the United States in 2001. Susskind expects that online dispute resolution will become the dominant method of resolving disputes; the disruptive and socially beneficial features of ODR technology will also displace traditional litigators and jurors.
e) The fifth segment of the legal technology startup business model is working on the most advanced legal technology solutions, namely, legal artificial intelligence systems. For example, in the laboratory of the Denton NextLaw innovation program, University of Toronto students developed ROSS, an artificially intelligent attorney solution based on IBM Watson cognitive computer technology. In response to simple legal questions, ROSS conducts legal research for relevant legal source material by aggregating legal document content from its database through advanced pattern recognition software instead of using keyword-based searches like many legal research or document review tools.

The segmentation of the legal technology market discussed previously is then studied using the approach and idea of "cost-benefit analysis" to determine the benefits and costs of alternative solutions. When a customer purchases a product or service, they consider a variety of costs, including monetary, time, energy, social, physical, and psychological. Similarly, the client compares value (is it a collection of benefits resulting from a product or service?) for many alternative offerings, including image, value offered, value delivery system (which includes value selection, provision, and communication), value persons, and innovation.

Clients select the product or service that provides the greatest benefit at the lowest cost and, most importantly, best meets their needs. Cost-benefit analysis demonstrates that modern legal services provide clients with more benefits at a lower cost than conventional legal services. Similarly, they are simple to establish from the standpoint of modern notaries because they involve minimal investment, low overhead, and cheap labor and consumable costs. Notaries in the modern day offer flexible work hours, highly innovative solutions, a more client-oriented approach, many cooperation prospects, a high degree of distinction, and multiple points of sale via an online portal, and easy delivery of legal services. Additionally, modern notaries generate better profits through a market penetration strategy that lets them to provide services at a reasonable cost to a sizable middle and lower class market rather than a tiny elite market.

Electronic disruption is regulated in the practice of a notary public in Indonesia under Article 15 paragraph 3 of Law No. 2 of 2014 on Amendments to Law No. 30 of 2004 on the Position of Notary in conjunction with Law No. 30 of 2014 on government administration, which regulates the registration system and its civil aspects. Whereas another notary authority, namely the cyber notary authority, or the authority to certify transactions electronically, has been controlled. However, due to legal disharmony, namely the incompleteness of the law and the inaccuracy of the legal formulation that regulates the authority to certify transactions electronically, the application of technology cannot be applied to carry out the authority of the notary office..

In terms of the procedure for the issuance of HT-Electronics based on the Ministerial Regulation of ATR No. 9/2019 that what is sent is simply a scan of the minutes of the APHT deed. The hard copy of APHT is not submitted to the office but is kept by the PPAT or Notary. When the copy of the deed is scanned and the digital signature is attached, its position changes to electronic evidence. This procedure not only downgrades the authentic deed to become private but also contradicts Article 13 of Law no. 4 of 1996 concerning Mortgage Rights which stipulates that "PPAT is obliged to send the Deed of Granting Mortgage and other necessary documents to the land office".

Achieving the goal of disruption through the registration mechanism for individual rights and property rights so that it is not only effective (making it easier for the community) but also efficient (becoming very cheap) but has the effect of reducing the quality (legal) of the registration output, because it was originally in the form of a certificate (land rights, HT, Intellectual Property Rights and Fiduciary) have the status of "Authentic Deed" which is facilitated through Electronic Certificates to become "Electronic Evidence" only. The responsibility for the guarantee of the protection of the ownership rights of its citizens is changed, and shifted from being in the Registration

System to being a legal action mechanism between fellow members of the community or in the civil sector.

The implementation of Government functions is always based on the "Legality Principle", which is based on Procedure, Authority & Substance. One of the Public Services in the field of "Administration" is related to Government Services in the field of Private Law on Property Rights and Individual Rights, which are the Notary Authority-PPAT-PPAIW & Auction Officials who are recognized in advance by the laws and regulations as Public Officials. Therefore, public officials need to be aware of their functions as TUN Officials or Administrative Officers, before carrying out their positions as Notary-PPAT-PPAIW & Auction Officers.

The problem of the principle of legality which in the end becomes a legal obstacle has not yet been implemented by legal technology in the practice of notary positions in Indonesia. As benchmarks for implementing legal technology practices are The International Union of Latin Notaries (UINL), Organization of Economic Co-operation and Development (OECD), United Nations Commission on International Trade Law (UNCITRAL), Hague Conference on Private International Law Conference De La Hey De Droit. International Private (HCCH). An international notary organization called The International Union of Latin Notaries (UINL) was formed by countries that agreed to make universal rules in a convention.

The results of the resolution of the Convention are principally a cyber notary socialization where every notary must be trained to be able to utilize digital technology as a technical tool to carry out his duties and functions. In addition, it is also important to apply an electronic notary deed to reach international/global circulation so that policy guidelines are needed regarding the rules and principles of electronic certificates, digital signatures in member countries.

Digital technology is an important tool for communication between citizens and public authorities, and electronic commerce. Thus, to prevent conflicts in legal relations, the role of a notary as a public official is very important in order to provide added value to the security and trust requirements required by modern society. Of course, while still maintaining the requirements attached to the notary deed, namely the presence of the parties before a notary, the signatures of the parties, the notarization and filing of the notary deed by a notary both in electronic and paper documents so as to ensure the strength of the trial and its implementation in the best interest of the community.

In the 29th UINL Congress held in Jakarta on 27-30 November 2019, which was the first congress held in Asia that resulted in the validity of notary principles in the 21st century covering globalization, digitalization and data protection. Notaries must accept new challenges related to social changes and the legal framework in which legal institutions should adapt, be imported, be globalized.

The OECD has developed Codes of Conduct on remote selling in its member countries and seeks to identify the necessary transnational elements for international transactions in order to establish a set of principles that can be applied to all areas of remote selling transactions. The guidelines by the OECD are manifested in several principles, including:

a) General Principles, which consist of:
   1) Transparent and effective protection.

2) Fair business, Advertising and marketing pratices.
3) Online discolsures. (Information about the business, information about the goods or services, infortion about the transaction)
4) Confirmation Process.
5) Payment.
6) Dispute resolution and redress (international complain handling, alternative dispute resolution, redress).
7) Privacy and security.
8) Education, awareness and digital competence.

b) Implementation Principles consist of:
1) Improving evidence in e-commerce through: complaints from users, surveys, and other data that has been collected, through empirical research.
2) Test and if necessary, improve, adopt and adjust legal rules that can protect consumers in e-commerce by taking into account the principles of technology;
3) Establish and operate a consumer protection enforcement authority that has the authority to investigate and take action to protect consumers against fraudulent, misleading or unfair commercial practices.
4) Enable the consumer protection enforcement authority to take action against businesses (both domestic and foreign) involved in fraud and fraudulent practices against consumers.
5) Encourage further arrangements on effective co-regulation and self-regulation to increase public confidence in e-commerce.
6) Encourage the continued development of technology as a tool to protect and empower consumers.
7) Facilitate consumer's ability to access consumer education and advice and file complaints related to e-commerce.

c) Principles of Global Cooperation consisting of:
1) Facilitate communication, cooperation and, where appropriate, the development and enforcement of joint initiatives at the international level between governments and stakeholders;
2) Enhance the ability of consumer protection enforcement authorities and other relevant authorities, as appropriate, to cooperate and coordinate their investigations and enforcement activities, through notification, information sharing, investigative assistance and joint action. In particular, governments should:
   a. Calls on businesses to provide available information about themselves sufficient to enable, at a minimum, the location of the business and its principals for law enforcement, regulatory oversight and compliance enforcement purposes, including in cross-border contexts;
   b. Seek to enhance the ability of consumer protection enforcement authorities to share information that is subject to appropriate protection for confidential business information or personal data, and
   c. Simplify assistance and cooperation, avoid duplication of efforts, and make every effort to resolve disputes regarding cooperation that may arise, recognizing that cooperation in certain cases or investigations remains within

the competence of consumer protection enforcement authorities. asked to cooperate.

3) Utilize existing international networks and enter into bilateral and/or multilateral agreements or other appropriate arrangements, to achieve such cooperation;
4) Continue to build consensus, both at national and international levels, on core consumer protection to advance the goals of promoting consumer welfare and enhancing consumer confidence, ensuring predictability for businesses, and protecting consumers;
5) Cooperate and work towards developing agreements or other arrangements for mutual recognition and enforcement of decisions resulting from disputes between consumers and businesses, and judgments resulting from enforcement actions taken to combat fraudulent, misleading or unfair commercial conduct.

In addition, the United Nations Commission on International Trade Law (UNCITRAL 2001). UNCITRAL has completed its work on a model law that is expected to support international commercial contracts through electronic media. This model law outlines the rules for ratifying and recognizing contracts made through electronic media, establishes rules regarding breach of contract, formation and execution of electronic contracts, establishes the characteristics of legal electronic writing, original documents, electronic signatures that can be accepted, and supports the receipt of computer evidence in court or arbitration proceedings.

The UNCITRAL Model Law on Electronic Commerce was accepted by UNCITRAL in 1996 as a follow-up to its mandate to create harmonization and unification of international trade law that can remove barriers to international trade. The Model Law was prepared in response to the major changes taking place in the way of communication between the parties using computers and other modern techniques of conducting business. The model law is intended to be an example for countries to evaluate and modernize certain aspects of their law and practice in the field of commercial relations using computer communication techniques or other modern means, and to make relevant laws and regulations that they currently do not have. .

The UNCITRAL Model Law on Electronic Commerce has been issued together with a Guide to Enactment which functions as an explanation of the law. In preparing and finally accepting the Model Law, UNCITRAL realized that this Model law would be an effective means for countries to modernize their laws and regulations and provide explanations for parties to understand and use this Model law. The compilers of Model Law seem to recognize that legal requirements in traditional paper-based documents are a major obstacle to the development of modern modes of communication. The meaning of writing, signature, original (original) must be developed for the benefit of computer techniques.

The model law rests on an approach called the Functional Equivalent Approach, which is based on an analysis of the objectives and functions of traditional paper document requirements. Its purpose is to determine how these objectives and functions can be achieved through E-Commerce techniques. For example, the functions that paper documents want to achieve are: ensuring that they are legible by everyone; that the document will not change with the passage of time; allow reproduction so that the parties to the agreement have copies of the same data; allows authentication of data

through signatures, guaranteeing that documents can be accepted by official officials or by courts. In relation to the functions of these documents, it is believed that electronic records can provide the same security guarantees as paper documents, even in many cases being able to provide a higher level of trust and certainty, especially in terms of identifying the source and content of data, provided that a number of technical requirements are met. and the law is fulfilled.

Even after the enactment of Presidential Regulation No. 2 of 2021 concerning the Ratification of the Convention Abolishing The Requirement of Legalization For Foreign Public Documents, Indonesia has enacted a new concept of legalization called Apostille. Apostille is a method to certify the validity of documents and eliminates the need for dual certification which is often difficult and inadequate in the era of globalization and electronics. The government is serious about improving the quality of public services by simplifying the legalization process for public documents in order to create an investment climate, trade traffic and good international cooperative relations.

As in Article 1 letter (c) of the Convention, a Notary deed is one of the public documents included in the Convention. The public function of a notary deed is inherent because it is a legal product or document issued by an official appointed or appointed by law to make a deed in their respective jurisdictions as according to Article 1868 of the Civil Code in conjunction with Law no. 2 of 2014 concerning Amendments to Law No. 30 of 2004 concerning the Notary Position. To fulfill the authenticity of a notarial deed, the legalization requirements must be made using conventional manufacturing procedures with physical presence so that the document can be signed and read to the parties. This series of conventional procedures is maintained on the basis of maintaining the quality of perfect proof as an authentic deed to become evidence that guarantees legal certainty for the parties in the event of a dispute.

Thus, based on the legal benchmarks from various organizations and conventions above, the legal technology paradigm should be implemented in the practice of notary positions in Indonesia and the cyber notary authority as a new approach and method in transforming the procedure for issuing a notary deed both in writing and electronically so that it is in accordance with needs in the era of globalization and electronics.

D Conclusion

The fundamental obstacle to notary practice is the maintenance of conventional practices based on the Legality Principle which is based on Procedure, Authority & Substance, which should have been able to be transformed electronically based on the legal technology paradigm. The demands of the era and the needs of the community with references from various organizational benchmarks and conventions mentioned above can be a philosophical, sociological and normative basis in formulating notarial laws that are compatible, adaptive and adequate to the reality of the era of the industrial revolution 4.0. Recommendations for the need for legal reform are changes to legislation concerning the position of a notary through the establishment of a PP e-notary that integrates in a rigid manner the procedure, substance and authority in applying the authority of a notary in certifying electronic transactions.

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