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## Optimizing the Role of Notaries in Increasing Legal Certainty and Consumer Protection in Electronic Commerce Transactions

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**Abstract:** The rapid development of electronic commerce (e-commerce) demands more optimal legal protection for consumers, especially in terms of legal certainty, transaction validity, and dispute resolution. However, the role of notaries in protecting e-commerce consumers is still ineffective due to limited regulations and the less-than-optimal implementation of digital notaries (cyber notaries). The study aims to analyze the role of notaries in protecting consumers in electronic-based commerce using legal research methods that combine conceptual and comparative approaches, secondary data analysis, and focus group discussions with stakeholders. The study results reveal that notaries have four primary roles in the e-commerce ecosystem, namely providing legal education to consumers, facilitating the creation of legally valid electronic agreements, protecting consumer personal data, and acting as mediators in resolving digital transaction disputes. The research implies that strengthening the role of notaries in e-commerce can increase consumer trust in digital transactions and strengthen the position of notaries as public officials who play a role in ensuring legal certainty in the digital economy. Therefore, policy reforms are needed that support the empowerment of notaries in electronic commerce to produce a safer and more trusted e-commerce ecosystem.

**Keywords:** Notary, Consumer Protection, Electronic Commerce

### INTRODUCTION

Electronic commerce or e-commerce has experienced rapid development along with advances in digital technology (Ramli, 2020). Buying and selling transactions that were previously carried out conventionally can now be done easily through online platforms, providing convenience for consumers and business actors in making transactions. The main advantages of e-commerce are time efficiency, lower costs, and wider market access (Avriyanti, 2020). However, behind these benefits, there are various legal challenges that arise, especially related to consumer protection, the validity of electronic transactions, and the security of personal data.

Electronic transactions have been regulated in Law Number 19 of 2016 concerning amendments to Law Number 11 of 2008 concerning Information and Electronic Transactions (hereinafter referred to as the ITE Law). Article 1 number 2 of the ITE Law states that electronic transactions are legal acts carried out using computers, computer networks, and/or other electronic media (Bahri, 2019). Although there are regulations that govern it, there are still many problems such as online fraud, product mismatch with description, and weak legal protection for consumers in resolving disputes (Nasution, 2025). Therefore, a more effective mechanism is needed to ensure legal certainty in electronic transactions.

One step to improve legal protection in e-commerce is to optimize the role of notaries. Based on Law Number 2 of 2014 concerning amendments to Law Number 30 of 2004 concerning the Position of Notary (UUJN), Article 15 paragraph (1) states that notaries have the authority to make authentic deeds, provide certainty of the date of making the deed, and store and legalize legal documents (Abdullah, 2017). Apart from that, in paragraph (2) notaries are also authorized to validate signatures, legalize documents, and provide legal counseling (Wardhani, 2020). With this authority, notaries can play a role in ensuring the validity of electronic transactions, mitigating legal risks for consumers, and increasing legal certainty in e-commerce in Indonesia.

Consumer protection in electronic transactions still faces various challenges that reduce its effectiveness. One of the main problems is the limited ability of consumers to recognize the goods and services they buy online (Harun, 2019). Unlike conventional transactions that allow buyers to see, touch, or try products before buying, digital transactions only rely on descriptions and images provided by the seller (Fitriyono, 2023). This often causes a mismatch between consumer expectations and the goods received, which ultimately triggers dissatisfaction and disputes.

The unclear legal status of business actors in e-commerce is also an obstacle to consumer protection (Paryadi, 2018). Many business actors do not have official permits or operate without a clear legal entity, making it difficult for consumers to claim their rights if problems occur. Guarantees for transaction security are also still a problem, especially related to the risk of online fraud, personal data leaks, and misuse of financial information (Antoine, 2025). Although some e-commerce platforms have implemented buyer protection policies, in many cases, consumers still face difficulties to obtain compensation or refunds when they experience losses.

The lack of legal literacy among the public regarding rights and obligations in e-commerce has also worsened the situation (Yulianingsih, 2024). Many consumers do not understand the regulations related to e-commerce, such as the provisions in Law Number 8 of 1999 concerning Consumer Protection (hereinafter referred to as UUPK) and the ITE Law. As a result, they are often unaware of the rights they can claim when facing problems in online transactions. On the other hand, many business actors also do not fully understand their legal obligations in protecting consumer rights, which leads to less transparent trade practices and is detrimental to buyers (Permana, 2025).

Another significant challenge is the regulation of cross-border transactions. With more and more consumers transacting with overseas sellers through global platforms, legal protection is becoming increasingly complex. Each country has different trade and consumer protection regulations, making it difficult to enforce the law in disputes involving parties from various jurisdictions (Mufrihah, 2024). Differences in legal systems and dispute-resolution mechanisms often make it difficult for consumers to obtain justice when dealing with business actors from other countries (AK, 2023). Therefore, efforts are needed to strengthen policies of consumer protection that are not only applicable at the national level but can also accommodate cross-border transactions more effectively.

In the rapidly growing e-commerce ecosystem, notaries have an important role as public officials who are authorized to make authentic deeds and legal protection for parties in electronic transactions (Irawan, 2022). Based on the UUN, notaries authorized to make authentic deeds related to agreements or legal transactions carried out by individuals or business entities (Rosadi, 2020). In electronic commerce, the role of notaries can be expanded to ensure the validity of digital contracts, validate electronic documents, and guarantee legal certainty for parties transacting online. With the involvement of notaries, the risk of fraud, breach of agreement, and legal uncertainty in e-commerce can be minimized.

The potential of notaries to provide legal certainty for electronic transactions is very large, especially in terms of legal evidence and the validity of digital documents (Pelapu, 2024). Currently, many electronic transactions are carried out without strong authentication guarantees, making them vulnerable to forgery, disputes, or violations of consumer rights. With the authority they have, notaries can play a role in validating digital signatures, storing evidence of transactions in the form of notarial deeds, and providing certainty about the date and parties involved in electronic transactions (Riansyah, 2024). This not only increases consumer confidence in e-commerce but also provides more protection for business actors who have good intentions in running their businesses.

However, the role of notaries in digital transactions still faces clear regulatory limitations. Currently, there are no regulations that explicitly regulate the involvement of notaries in electronic commerce, especially regarding the authorization of digital documents and blockchain-based transactions. Therefore, stronger regulations are needed to clarify the duties and responsibilities of notaries in electronic transactions. These regulations can include the recognition of electronic deeds as valid evidence in court, a mechanism for recording digital transactions by notaries, and authentication procedures that can guarantee the security of online transactions. With the strengthening of this regulation, it is hoped that the role of notaries in e-commerce can be more optimal in protecting consumer rights and supporting the development of a safer and more reliable digital economy.

## **METHOD**

This study uses normative legal methods with conceptual and comparative approaches to analyze the role of notaries in consumer protection in e-commerce. The conceptual approach is used to examine the concept of legal protection in electronic transactions and the role of notaries based on applicable legal theories and principles. Meanwhile, the comparative approach is used to compare regulations related to the role of notaries in e-commerce in Indonesia with other countries that have implemented similar mechanisms. The data sources are secondary, obtained through documentation studies of laws and regulations such as the Electronic Information and Transactions Law (UU ITE) and the Notary Law, as well as related legal literature. In addition, a comparative analysis of regulations and legal practices in various countries was conducted to explore the optimal model of the role of notaries in electronic transactions. Discussions with legal experts are also part of the analysis method to obtain a deeper perspective on the challenges and opportunities for implementing the role of notaries in e-commerce in Indonesia.

## **RESULT AND DISCUSSION**

### **The Role of Notaries in Consumer Protection in Electronic Commerce**

Legal literacy in digital transactions is very important for consumers so that they understand their rights and obligations when shopping online. This lack of understanding often makes

consumers vulnerable to various legal problems, such as fraud, non-conforming products, or misuse of personal data. With the increasing use of e-commerce, consumers need to be equipped with knowledge about the regulations governing electronic transactions, including the validity of electronic documents as legal evidence in accordance with Law Number 1 of 2024 concerning Information and Electronic Transactions.

Notaries have a strategic role in providing education to the public regarding the legal aspects of e-commerce. As officials who have the authority to authenticate documents, notaries can help consumers understand the validity of digital transactions, including the importance of electronic contracts and digital signatures (Irianti, 2024). Notaries can also provide counseling on how consumers can protect their rights when disputes occur in online transactions, as well as explain the legal settlement mechanisms that can be taken if violations occur.

The role of notaries in legal counseling also includes education about digital evidence in electronic transactions. Based on Article 5 of Law Number 1 of 2024, electronic information and electronic documents are recognized as valid legal evidence as long as they use an electronic system that complies with applicable regulations (Pribadi, 2018). With this legal certainty, notaries can help increase consumer confidence in digital transactions and encourage the creation of a safer and more transparent e-commerce ecosystem.

Notaries have an important role in facilitating agreements through electronic media to provide legal certainty in digital transactions (Sugiarti, 2022). In practice, notaries can make authentic deeds in digital form to ensure that electronic transactions have the same legal force as conventional agreements. It is to Article 15 of Law Number 2 of 2014 concerning the Position of Notary, which gives notaries the authority to make authentic deeds regarding acts and agreements regulated by law (Jaya, 2017). With the involvement of notaries, electronic transactions become more protected from potential misuse, forgery, or violation of agreements.

The legality and validity of electronic documents facilitated by a notary are important aspects of online business transactions. Notaries can authenticate digital signatures, record private letters, and validate the conformity of photocopies with original documents, as stipulated in Article 15 paragraph (2) of Law Number 2 of 2014. With notary authentication, parties in digital transactions can have valid and reliable legal evidence. This is substantial in e-commerce contracts involving large transaction values or complex legal interests.

The mechanism for validating electronic agreements by notaries also helps reduce the potential for legal disputes in online transactions. With an authentic deed or recording of electronic documents by a notary, each party to the agreement has a strong legal basis if a dispute occurs. In addition, the involvement of notaries in providing legal counseling, as stated in Article 15 paragraph (2) letter e, can help business actors and consumers understand their rights and obligations in electronic agreements. Therefore, the role of notaries in digital transactions needs to be clarified and strengthened through more specific regulations so that they can adapt to technological developments.

Notaries have a strategic role in ensuring the security and confidentiality of personal data in electronic transactions. In the e-commerce ecosystem, consumers' data, such as identity, address, and financial information, are often the objects of processing by business actors. As a public official authorized to make authentic deeds, notaries can ensure that the data included in digital transactions is managed safely and is not misused by irresponsible parties. It is by the principle of Personal Data Protection as regulated in Article 1 Number 2 of Law Number 27 of 2022, which emphasizes the importance of protecting personal data to guarantee the constitutional rights of data owners. The relevance of the Personal Data Protection Law (UU PDP) in digital transactions lies

in the obligation of business actors to protect consumer information. Notaries can play a role in ensuring that digital agreements or contracts made by business actors contain provisions for protecting personal data, including the obligation not to misuse or disseminate consumer data without permission. Besides, the authority to validate electronic signatures and authenticate digital documents can guarantee that notaries only authorized parties have access to personal data used in online transactions. With the role of notaries in digital transactions, consumers can feel safer in providing their personal information when shopping or making transactions in cyberspace.

To further strengthen the protection of personal data, collaboration between notaries and cybersecurity institutions is an important step in ensuring data confidentiality in digital transactions. Notaries can work with the National Cyber and Crypto Agency (BSSN) or Certificate Authority (CA) in implementing better encryption technology and security systems to protect personal information in electronic documents. With this mechanism, every digital transaction involving a notary can have higher legal guarantees and data security. Therefore, strengthening regulations related to the role of notaries in protecting personal data should be considered to hold up with technological developments and meet legal needs in the digital era.

Notaries have great potential as mediators in resolving civil disputes that arise in electronic transactions. In many cases, disputes in e-commerce are often related to default, errors in product specifications, or digital transaction fraud. As officials who have expertise in civil law, notaries can play a role in facilitating mediation between consumers and business actors to reach a fair solution without having to go through a long and expensive litigation process. In addition, notaries can also ensure that the agreement reached in mediation has binding legal force by making an authentic deed or a valid written agreement document.

Compared to other dispute resolution mechanisms such as through courts or arbitration, the role of notaries in mediation is more efficient, flexible, and based on deliberation. The litigation process is often time-consuming and expensive, while mediation by a notary can provide a faster solution and maintain good relations between the parties. In addition, notaries can help provide legal education to the parties regarding their rights and obligations in electronic transactions, to prevent similar disputes in the future. Thus, strengthening the role of notaries as mediators in e-commerce civil disputes is urgent in strengthening legal protection for consumers and business actors in the digital era.

Notaries have important authority in validating digital signatures and electronic agreements, which play a role in increasing legal certainty in digital transactions. The validity of a transaction depends on the clarity of the identities of the parties and the validity of the documents used. Notaries can ensure that electronic agreements are made by applicable legal provisions and have the similar legality as physical documents. Thus, the presence of a notary in electronic transactions can provide greater protection for consumers and business actors, especially in ensuring that the agreements made have binding legal force.

The legal implications of electronic transaction certification by a notary are important in ensuring its validity and security. Based on the Electronic Information and Transactions (ITE) Law, electronic documents that have been certified and authenticated by authorities, such as a notary or Certificate Authority (CA), have valid legal status and can be used as valid evidence in resolving disputes. In addition, notaries can play a role in ensuring that information provided by business actors in electronic systems meets legal requirements related to transparency and completeness of information, as stipulated in Article 9 of the ITE Law.

The role of notaries in providing legal assurance for digital documents is becoming increasingly crucial in the era of digitalization. With the increase in cross-border transactions and

the complexity of laws in electronic commerce, clearer regulations are needed regarding the authority of notaries in authenticating digital transactions. Notaries can assist in verifying the legality of electronic documents, reducing the risk of fraud, and ensuring that digital contracts are legally enforceable. Therefore, strengthening regulations related to the involvement of notaries in electronic transactions is an urgent need to create a safe and trusted digital trading ecosystem.

Certificate Authority (CA) acts as a party that issues digital certificates, which are used to authenticate user identities in electronic transactions. This digital certificate ensures that the transacting parties are legitimate entities, thus preventing fraud and manipulation of electronic documents. Notaries can collaborate with CAs to verify the validity of the identities of parties applying for digital certificates, especially in business transactions that require a high level of security. With the involvement of notaries, the authenticity of documents and digital signatures authenticated by CAs becomes more trusted and has clearer legal force.

The involvement of notaries in the process of issuing digital certificates provides significant benefits in increasing trust in online transactions. Notaries can act as neutral parties who ensure that the identity of the certificate applicant has been legally verified and by statutory provisions. In addition, with the role of notaries, the possibility of misuse of digital certificates can be minimized, so that electronic transactions can take place more safely. This collaboration also supports consumer protection in e-commerce, where digital certificates issued with notary verification can be an additional guarantee for the validity of electronic agreements made online.

The authority of notaries in electronic transactions in Indonesia is supported by several legal bases, such as Law Number 2 of 2014 concerning the Position of Notaries and Law Number 11 of 2008 concerning Information and Electronic Transactions (ITE). In digital transactions, notaries have a role in validating electronic signatures, authenticating digital documents, and ensuring the validity of electronic agreements. However, the implementation of this authority is still limited because there are no more specific regulations regarding the procedures and limitations of notary authority in the digital realm. This results in legal uncertainty for people who want to use notary services in electronic transactions.

One of the main obstacles to implementing notary authority in e-commerce transactions is the limited regulations related to the notary's working mechanism in the digital environment. In addition, technological aspects such as standardization of the use of electronic signatures and document encryption are also challenges in ensuring that transactions remain safe and have legal force. Not all notaries in Indonesia have sufficient access to and understanding of digital technology, so there is still a gap in electronic document authentication. In addition, the absence of an integrated system that connects notaries with e-commerce platforms and regulators is also an obstacle to optimizing the role of notaries in electronic commerce.

To overcome these obstacles, policy reform is needed to clarify and strengthen the role of notaries in the electronic commerce ecosystem. One step that can be taken is to draft special regulations that regulate the authority and working procedures of notaries in digital transactions, including authentication mechanisms and personal data protection. In addition, strengthening cooperation between notaries, the government, and the Certificate Authority (CA) can help create a safer and more trusted electronic transaction ecosystem. This reform can contain technology training for notaries and the integration of digital systems that allow notaries to carry out their duties more effectively in electronic transactions.

## **Strengthening the Role of Notaries to Improve Consumer Protection in Electronic Commerce**

A cyber notary is a digital notary concept that has a role in validating electronic transactions, ensuring the validity of digital documents, and guaranteeing the security of electronic signatures. In the Indonesian legal system, the presence of cyber notaries is becoming increasingly relevant along with the development of digital transactions that require strong legal protection. Increasing the use of technology in the business and government sectors can ensure the role of notaries in the authentication of electronic documents is crucial to prevent forgery, fraud, and other violations of the law in the digital ecosystem.

The existence of cyber notaries has received support from various laws and regulations, such as Law Number 11 of 2008 concerning Information and Electronic Transactions (UU ITE), Law Number 30 of 2004 concerning the Position of Notaries which has been amended by Law Number 2 of 2014, and Law Number 27 of 2022 concerning Personal Data Protection. However, these regulations do not explicitly regulate the role of notaries digitally as a whole, so there is still a legal vacuum in the practice of authenticating electronic documents and validating digital signatures carried out by notaries.

Obstacles to implementing cyber notaries in Indonesia include several aspects, such as limited regulations that do not yet regulate digital notary procedures in detail, the absence of standardization of electronic systems used by notaries, and the still weak cybersecurity infrastructure in ensuring the validity of digital documents. In addition, the adaptation of technology in the notary profession still faces obstacles, both in terms of human resource readiness and system integration with government institutions and the private sector. Therefore, it is necessary to improve regulations and increase the technological capacity of notaries so that they can function optimally in the electronic transaction system.

To overcome these obstacles, policy reform needs to be directed at several aspects, such as the ratification of special regulations regarding digital notaries, the provision of more secure technological infrastructure, and the granting of clearer authority for notaries in validating electronic signatures and digital documents. In addition, collaboration with the Certificate Authority (CA) as an institution issuing digital certificates is needed so that the authentication of electronic transactions can be more guaranteed. With clearer regulations and adequate technological support, cyber notaries can be an important instrument in increasing legal certainty in electronic transactions in Indonesia.

Legal literacy for consumers in digital transactions is very important to protect them from potential violations of the law, fraud, and misuse of personal data. In the digital era, many consumers do not fully understand their rights and obligations when making online transactions, especially regarding the validity of electronic contracts, the security of personal data, and dispute resolution mechanisms. The lack of understanding often makes consumers vulnerable to unfair or even illegal business practices. Therefore, legal education is one of the main keys to improving consumer protection in the digital ecosystem.

As an official authorized to authenticate legal documents and agreements, notaries can play a role in providing legal education to consumers. Notaries affect the understanding of the validity of digital agreements, the legality of online transactions, and the legal protection available to consumers. This education can be done through various means, such as seminars, webinars, digital publications, and collaboration with consumer protection agencies and the government. With legal counseling involving notaries, the public can better understand the legal aspects inherent in every digital transaction they make.

Some legal aspects that need to be socialized to consumers include the validity of electronic contracts, which explains how a digital agreement can be considered legally valid. In addition, personal data protection is also a crucial issue that consumers must understand so that they can be more careful in providing personal information in online transactions. The dispute resolution mechanism is also an important aspect that must be understood, especially regarding the settlement options through mediation, arbitration, or complaints to consumer protection agencies.

To increase the effectiveness of legal education for consumers, innovative and easily accessible strategies are needed. One strategy that can be implemented is the use of digital platforms, such as websites or applications that provide easy-to-understand legal information. In addition, digital legal consultation services involving notaries can also help consumers get an explanation of their rights. Notaries can also collaborate with e-commerce platforms to provide information on the legal aspects of digital transactions so that consumers can be more aware of the legal protection available to them. With an effective education strategy, consumer legal awareness can increase, so that digital transactions can take place more safely and reliably.

Dispute resolution in e-commerce is a challenge in itself because the nature of digital transactions often involves parties from various regions with different legal systems. Some common problems that arise in digital transactions include fraud, default, and non-conformity of products or services with those promised. Besides, consumers' lack of understanding of their rights often causes them to not know how to seek justice in e-commerce disputes. Therefore, a dispute resolution mechanism is needed that is more efficient, faster, and does not burden consumers or business actors.

In the Indonesian legal system, notaries have the authority to ratify agreements and provide legal guarantees for transactions, making them a credible party in resolving civil disputes, including in digital transactions. Although the specific authority of a notary as a mediator has not been fully regulated in laws and regulations, a notary can still act as a neutral party in helping to resolve disputes through deliberation and consensus. The legal basis supporting this role can be found in the Notary Law (UUJN) and provisions regarding mediation in civil law, which allows parties to resolve their disputes outside the court with the assistance of an authorized third party.

Compared to settlement through litigation in court, mediation conducted by a notary has several advantages. The mediation process is faster and less complicated because it does not require long procedural stages as in the court process. In addition, mediation is also more cost-effective and flexible, because the parties can reach a mutually beneficial agreement without having to be bound by a decision that is mandatory as in litigation. With the role of a notary as a mediator, e-commerce disputes can be resolved more peacefully, fairly, and beneficially for both parties.

To increase the effectiveness of the notary's role in mediating e-commerce disputes, it is necessary to develop a digital-based mediation system. This model allows notaries to facilitate online mediation through a secure and trusted platform so that consumers and business actors can access mediation services without should fullfil in person. With this system, the dispute resolution process becomes more efficient, transparent, and easily accessible to all parties. Therefore, the integration of notaries in a digital mediation system can be an innovative solution to improve consumer protection and strengthen legal certainty in electronic transactions.

## **CONCLUSION**

The role of notaries in protecting e-commerce and electronic commerce consumers is increasingly important along with the increase in digital transactions that require legal certainty.



Notaries not only function in legal education for consumers, but can facilitate electronic agreements, ensuring the protection of personal data, and mediating civil disputes in digital transactions. In addition, the authority of notaries in certifying and authenticating electronic transactions, as well as their collaboration with the Certificate Authority (CA), is a strategic step in ensuring the validity and security of online transactions. However, there are challenges in implementing the role of notaries in electronic commerce, especially from the regulatory and technological aspects. Therefore, a clearer policy reform is needed that supports the integration of the role of notaries in the digital commerce ecosystem, so that it can improve consumer protection and create safe and reliable electronic transactions.

Optimizing the role of notaries in protecting e-commerce consumers requires a comprehensive approach, including strengthening regulations, legal education, and a role in dispute resolution. The development of cyber notaries is a solution to increasing legal certainty in digital transactions, although it still faces regulatory and system security challenges. In addition, increasing legal literacy for consumers through education by notaries is critical to providing a better understanding of their rights and obligations in e-commerce. In dispute resolution, the role of a notary as a mediator can be a faster, cheaper, and more flexible alternative than litigation, especially with the implementation of a digital-based mediation system. Therefore, policy reform and strengthening of the role of notaries are needed to ensure more effective legal protection for consumers in the e-commerce ecosystem.

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