

The Use of Electronic Media as an Innovation in Law by the Notary in Handling Agreement and Contracts: The Role of Electronic Information and Transactions (ITE) Law in Indonesia's E-Commerce

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Abstract - As technology disrupts all sectors, the legal field is facing a similar challenge, implying law enforcers can no longer do things the old way. Electronic media has set-in causing disruption in how contracts have been handled over these years more so in the developing world, such as Indonesia. There is need to adapt to new changes, where technology has become the norm of the day, influencing transactions. People are now buying more things online, via internet, via mobile ups etc. However, the challenges are they are having one sided Agreement/Contract, which favor the seller than the buyer. The law needs to come in as the regulating tool of such transactions. The purpose of this is therefore to examine the function of the Electronic Information and Transactions Law in ensuring there is fair transactions between the buyers and sellers within Indonesia. The study uses review approach of the varying information about the implementation of the ITE Law. Regulating electronic media contracts is very important today as the world shifts to more of online markets than the physical ones. This has been hurried because of the covid 19 pandemic which has helped to popularize electronic media transactions.

Index Terms - Electronic Media, Electronic Information and Transactions, Artificial Intelligence, Law and regulations.

INTRODUCTION

No matter how qualified and experienced they are, human beings are fallible, especially when it comes to providing legally binding information like agreements and contracts. Therefore, many types of transactions include disclaimers like "Errors and Omissions Expected (E&OE)", and many other disclaimer statements that attempt to alleviate legal liability for potentially incorrect or incomplete legally binding information supplied. The relevance of ICT and electronic media are crucial in tackling such human errors.

ICT and electronic media are now relevant in many aspects of life thanks to the processing capacity of digital computer systems, the widespread use of the internet, and the cognitive capabilities of artificial intelligence. The speed at which technology has advanced may be the most striking feature of the computer era [1]. However, the legal sector, particularly in developing nations like Indonesia, is hesitant to incorporate cutting-edge ICT into their operations. This is also a problem in many nations throughout the world [2].

Due to the widespread application of ICT systems in the legal practice of in developed nations, the tendency has shifted recently. Of course, the focus of this discussion is not the creation of legal documents using word processing software, but rather the use of cutting-edge ICT tools, particularly those known as "Artificial Intelligence (AI)" technologies. The definition of artificial intelligence (AI) is the use of computers to automate tasks that typically require human intelligence [3].

It has also been described as placing a focus on technology that automates particular tasks that are regarded to need intelligence when carried out by people [4]. Thus, AI goes beyond simply utilizing computers to accomplish jobs and instead takes things a step further by allowing computers to analyze data in ways that are cognitive in nature to carry out activities that would typically need human intellect. Recently, a new area of study known as "AI and Law" has emerged, concentrating on the use of AI in the legal system. A more thorough definition of AI and law is provided by Surden [5], who describes it as "the application of computer and mathematical approaches to make law more comprehensible, managed, useful, accessible, or predictable." In a nutshell, AI and Law is concerned with computer-based legal research and information processing techniques. There are several similar techniques; in fact, over 30 such legal techniques have been found [6], [7].

Legal document automation, or the use of AI to create legal documents, is one of these techniques [8]. This essay provides a theoretical examination of a straightforward software commissioned by the authors to create simple land sale contracts that adhere to Indonesia's legal standards. More to that this study may technically sound more like a scientific investigation than a legal analysis, it is in fact a legal analysis of a developing area of AI and law. The article will make use of the principles of legal document automation while analyzing the potential technological, moral, and legal ramifications of the creation and application of this AI technique.

Prior to defending the program's conformity with these basics, the article will also look at the components of a land sale Agreement or Contract. It will also look at how the program resolves the technical, moral, and legal challenges that have previously been raised before drawing a conclusion about the program's and other comparable programs' prospects in Indonesian legal practice. In order to clarify the program's operation, technical aspects will also be given.

AUTOMATION OF LEGAL DOCUMENTATION

The automation of Legal documentation is an example of approaches that combine AI and Law, that involves the use of AI to create competent legal documents, as was previously mentioned. One of the early approaches to AI and law, in a study, Rissland et al. [9] outline the history of legal document automation, in particular the development of

contract drafting software. Legal document automation may have begun in the later decades of the twentieth century with the advent of word processing programs that included basic computer file management systems, automated numbering tools, fundamental "master documents," macros, and document "merge" features [10]. Using word processing software made producing legal papers easier, more affordable, structured, and productive because it took less time to create comparable documents [11].

AI and law go beyond just using computers to process data; in order to be considered an AI approach, the data processing must also incorporate intelligence, as was previously stressed in the introductory section. Therefore, it may be claimed that using word processing software during the late twentieth century did not meet the criteria for an AI or law technique. However, the creation of "expert drafting systems" in the late 1990s, which construct documents using "logic trees" from a sequence of inputs, meets the need for intelligence and marks the beginning of the automation of legal documents [12].

However, these professional drafting systems came under fire for having content that was rigidly hard-coded, prohibiting the user from making modifications after the document was produced. "Document assembling systems" soon adopted after drafting systems, and the latter let drafted templates to be modified and combined with other texts [13]. Although this gave greater freedom, it also eliminates the efficiency and simplicity provided by professional drafting applications.

These programs have improved thanks to machine learning [14], however this study does not specifically discuss machine learning. Usage of the applications has given rise to various technological, moral, and legal concerns that will be further investigated.

Issues in Technology, Ethics, and Law resulting from Legal Document Automation

Although the problems caused by the use of legal document automation may be divided into three categories—technical, ethical, and legal—there are three of them. Since both these problems and the underlying technology are still relatively new, they will all be discussed under one category. Some of these problems might not fit neatly into just one of these categories; they might appear in two or even all of them.

Rigidity of Automation of legal documents and that constrains creativity

Legal document automation, as previously mentioned, necessitates coding language, which the underlying algorithms combine with "limited universe of queries and answers" [15]. Because of this, the software is quite rigid and predictable, in contrast to legal papers, which can be altered in terms of style, diction, organization, and even format. The majority of attorneys and occasionally legal firms have a style they utilize, and it's not unusual for

lawyers to change prior drafts of papers. As a result, this issue might not be as significant.

Computer program intellectual property and patenting

It often takes a lot of time and effort to create software or computer programs, especially when the program is intended to function intelligently. Unfortunately, it is possible to write a line of code very differently and yet have the same or very similar effects. This makes it simple to copy the work put into computer programs. This is made worse by the fact that there are numerous programming languages available to use [16], as a skilled programmer proficient in two different languages may copy the idea and structure of a functional program and duplicate it in another program, making it challenging to relate the programs other than by the end result. Changes in the wordings and styles of the duplicated program may end up with a considerably altered outcome from the original program, which is much worse because legal document automation, as previously described, often uses hard coded language to achieve its result.

Computer programs or software are only expressly protected by copyright under Indonesian law [17]. However, due to the nature of copyright protection [18], software infringement could be difficult to detect, and furthermore, it could be impossible to show the piracy.

Since patents have stricter requirements for protecting them as copyrights do, patent protection of software may be more suitable [19]. Additionally, patents have more limited protection than copyright, and even if an infringement occurs, it cannot result in the creation of a new copyright, unlike what is possible with copyright [20]. However, it should be recognized that copyright offers better protection compared to patenting [21].

This study makes points out that as more complex computer programs are created, in many other computing fields in addition to AI and law, protections provided by copyrighting may not be sufficient to provide enough protection. The patent protection duration may not be long enough. Therefore, this study, puts out a call for a unique system that can adequately safeguard computer programs.

Liability for Document Errors, Omissions and Mistakes

Typically, if a lawyer makes a mistake or error when creating a document, the lawyer is responsible for any loss that results to the client. Any loss or injury a client sustains as a result of an inaccuracy or mistake in a legal document may subject the lawyer to negligence liability. The lawyer is still obligated to uphold the fiduciary relationship and will still be subject to disciplinary action, even in the unusual event that the loss does not cause court action.

The use of automated legal documents brings up the problem of liability. Ideally this technology's expectation lies in its ability to create legal documents with limited or no significant input by legal personnel. Even better if by design, clients are able to obtain legal documentation in a

process completely devoid of interaction with lawyers. For instance, clients could create contracts by simply entering the necessary information into the application, choose their lawyer and generate their documents in an automated process skipping physical interaction with legal practitioners. One may argue that since a computer program, not a lawyer, most likely wrote the program, the lawyer should not be held responsible for the error.

This study makes the case that the problem should be tackled in two different ways. The first is legal responsibility for breaching his fiduciary obligation to the customer by using a computer software that is prone to mistakes in his profession. The second, however, will be a lawsuit for the computer program's carelessness in creating the software, which made the lawyer accountable in a fiduciary capacity to his client.

ETHICAL INTERPRETATIONS OF OWNING COMPUTER PROGRAM

According to the regulations governing legal Practice, a lawyer is not allowed to: 1) assist an unlicensed non-legal practitioner in carrying out unlicensed practice of law; 2) allow the use of her name or professional services to facilitate the unlicensed practice of law by anyone who is not qualified or barred from doing so; 3) Split legal costs with a non-attorney.

Since it will take less time to generate papers that look repetitious, legal automation will undoubtedly boost a lawyer's productivity.

However, since computer programs, not attorneys, create these automation programs, it is possible that programmers, not lawyers, are the rightful proprietors of these programs. Before the latter may create an effective software that will be used in legal practice, it makes sense for a software to have received instructions of legal principles; ownership may still belong to the programmers.

The Copyright Law and the common law concepts of a simple contract apply to ownership of computer programs in Indonesia. The Copyright Law grants ownership of any copyright work to the creator (subject to transfer, licensing, and conditions of use). This implies that any program created belongs to the program, excluding any agreements between a lawyer and a computer program that was commissioned.

Additionally, the contract's provisions may provide that the parties will split any money that results from the usage of the software because the latter may be reluctant to accept a specified payment, particularly if it is innovative or groundbreaking. In the aforementioned situations, owning software that automatically generates legal documents might conflict with the aforementioned rules that make up the professional conduct for legal Practice because licensed lawyers are obligated to give instructions and explanation of the format for legal documents to a program developer so that the developer is able create a suitable program for it.

Additionally, a fixed-time payment may not be sufficient to cover the cost of creating a program, particularly if consumers will be charged regularly for using it.

The employment of computer programs in legal practice may raise ethical concerns, according to Betts and Jaep's [7] argument. They contend that a program can become unnecessary if the legislation changes. Such programs will need to be periodically recoded, which will probably call for a computer program with technical know-how. This might force a lawyer who has been accustomed to creating legal papers automatically to revert to the old ordinary methods of manually creating the documents, making the process inconveniencing, difficult and annoying and could lead to "substantial inefficiencies" [22].

COULD SOME ASPECTS OF LEGAL PRACTICE BE RENDERED OBSOLETE BY THE AI-LAW COMBINATION

The simplicity and speed of these programs make them an appealing instrument for writing legal papers that take lawyers many hours to create in a few minutes. Additionally, software is increasingly being developed to learn from experience and enhance its level of efficiency; this process is known as machine learning [23]. Additionally, clients are constantly seeking for methods to save money on legal services [24]. Despite the possibility that the documents would be invalid, many Indonesians turn to touts, "business centers," and paralegals to assist them arrange inexpensive legal paperwork.

The trend with legal document automation might get worse since programs that were previously created for lawyers may opt to enhance the software and make it available for purchase by the general public. Since the price of such a commercial product will be far lower than what a capable attorney would charge and since these programs guarantee quality, some customers may decide without hiring attorneys to draft their legal documents. According to Triantis, the worldwide recession has caused clients to search for more affordable yet superior legal services [2]. The existence of inadequately regulated transactions in legal practice could lead to more unauthorized legal activity that will eventually collapse if attorneys just attempt to compete on price [25].

The problem poses a conundrum because automating legal documentation generation through machine learning could make some legal services more readily available, quick, and of higher quality. Alternately, this will result in a dependence on computer programs to create these agreements, rendering the art of creating such documents obsolete and ultimately costing attorneys their income.

BASICS OF AN AGREEMENT/CONTRACT IN INDONESIA

The first author's software, which uses a few key information that may be entered by a client or a lawyer to automatically construct a property sale agreement or contract, is the major focus of this work. Before delving into

the specifics and capabilities of the software, it is important to look at the requirements that an agreement or contract must meet in order to be considered a fundamental land sale agreement or contract.

The common law in Indonesia governs the majority of straightforward transactions. This essentially implies that the agreement must include the following elements: offering, accepting, considerations, intent to engage a legal dealing, and the competence to be party to contract [26]. Such aspects might not be immediately obvious from the contract's surface, but there might be hints that can be used to infer some of these truths. However, there are certain additional particular standards that relate with how the Agreement/Contract is structured.

The statutes of fraud require that every contract for the sale of real estate or any other transfer of an interest in real estate be made in writing and the parties or their authorized representatives who sign it can be held responsible [27].

However, some laws make no mention of the format in which the Agreement or Contract must be written. What is seen as crucial, though, is:

- the parties' identification by name or a thorough description of the parties.
- A thorough explanation of the contract's subject matter.
- the evaluation of purported contracts, and
- Parties or their authorized agents to be billed must appear on the document.

According to the statute on fraud and other related laws, the necessity of an Agreement/Contract for the sale of land is interpreted in a clear and concise manner. It should be noted, however, that the majority of attorneys use a format that includes the parties' names and addresses, a detailed information about the property/properties, the price of the property, the signatures of all those party to the agreement/contract, and at least two witnesses to the contract.

• **In cases when one party is illiterate:** Legal safeguards are provided for people with minimal or no literacy but are parties in or witnesses to an agreement/contract, that require ensuring that such individuals are aware of the ramifications of the agreement or contract they are engaging into and to guard against potential fraud [28]. Any document signed by an illiterate must now include this safeguard [29]. In order to prove that the illiterate understood the document's substance before execution, the jurat must include the legal identity of the interpreter.

• **A Notaris must draft any agreements or contracts.**

According to the legal practitioners' regulations and the state laws governing the preparation of land instruments, every agreement or contract for real property transactions must be drafted, executed, and notarized through a Notary (locally known as Notaris).

For property transfer or sale documents created using AI, this presents a challenge. A document created by AI may

not meet this condition because it was not created by a lawyer.

However, if a legal professional utilized or approved the automation of a legal document, the lawyer is taken as having endorsed the document, particularly when signed by the said lawyer.

• Additional common auxiliary phrases:

Even though these clauses have no direct bearing on the agreement's legality or structure, it has been customary in contract writing to include the following as suggested by Triantis [30]:

- Recitals that serve as an explanation of the parties' intentions rather than as a functional component of the agreement or contract.
- A provision that protects the buyer(s) against any third-party claims made against the property.
- A condition allowing for the payment of an optional deposit, which is subject to forfeiture if the buyer fails.
- A provision requiring the vendor(s) to sign any paperwork necessary to complete the buyer's assignment of the property's rights (s).

REVIEWING THE AGREEMENT/CONTRACT SOFTWARE

The Python coding language, especially version 3.9, was used to create the entire software. The software was implemented using both internal and external components. The execution date of an Agreement or Contract was specified using the date function of the datetime internal module. The random module's choice function was also utilized to add some flexibility to the program.

Because Python has no method that can modify Word files, "pip installer" was used to install an external library. The installed external library is python-docx, a tool for generating and editing Microsoft Word/.docx files.

The application heavily relied on the functions in MS-docx component available in python-docx lib to produce word document files, while aligning, paragraphing, and line spacing were controlled via docx-dot-enum-dot-text. The text created by the program was styled and organized using the fonts and styles from docx-dot-enum-dot-style. For the print task, the docx-dot-shared component was handy.

Essential logic functions, looping, and conditioned commands were used to teach the program how to manipulate input results, resulting in a software that may be considered intelligent. In order to make the program clearly intelligible for further open-source would try to enhance it, the initial author was meticulous in identifying the variables used in the program. The application can only create papers between natural individuals.

The program was created without the use of specific classes since it required a variety of inputs in order to work, but it

made heavy use of functions to fill in the gaps left by different Python internal modules, methods, and functions.

The Program's Characteristics

• Flexibility in the date function to suit date selected to execute the agreement/contract: The program was designed to automate the setting of contracts execution as the day the document was prepared. This is done via the date/time component, so the date/time settings can be specified, more specific characterization can be added by coding.

• Infinite parties: In developing the software setting were made to multiple parties, on both sides of the contract. The application is furthermore designed to link all the parties to their respective address, along with the names and any other information about them. Additionally, the software effectively represents these specifics where they are needed in the Agreement/Contract.

• The Text of the Agreement/Contract is grammatically correct:

It was intended for the computer to be clever enough to know which grammar to apply, particularly in the major paragraphs in the contract. The software uses for loops with conditional logic to assist it decide how many parties are participating in the transaction and what text to show.

• Conforms to fundamentals of contract: The software created document mostly complies with the fundamental criteria of a land sale Agreement or Contract that have been previously analyzed. The program generates a document that includes the identification details and particulars of all parties and those who witnessed the transaction, as well as other terms like any deposited payments, schedule of balance payments, conditions of defaulting, title perfection, and laws that apply to the execution of the agreement.

Moreover, the software automatically adds the particulars of the legal practitioner to executing the contract, and for any parties who require literacy assistance, the interpreter's particulars are added.

• Relevant for family property transactions: The program is also designed to be able to generate agreements and contracts involving family property with the relevant clauses and provisions. The first merchant is automatically chosen by the computer to be the family head, and the rest are the other main family members.

Drawbacks of the Program

The program being a trail, it does not offer a pleasant user interface, in addition, it is only applicable on PCs with integrated python support for Word. Running the program could be challenging for someone who is unfamiliar with the Python programming language. The application cannot be executed remotely since it was not written to be accessible on a server, nor can it be run on a server. A better visualization will be possible as well as all of the aforementioned issues if the application is rewritten for user friendliness. An option to delivering the software for usage on a webpage is to create a user-friendly interface and

launched as an independent application in addition to running as a plug-in on another website, so the software will be exposed to a webpage's dynamic nature.

Only transactions between normal individuals, not those involving corporations, are permitted under the program. This is because business entities' implementation of contracts is complicated. The document will be produced by the computer once the user has responded to a series of questions. For a corporate Person, correctly executing an Agreement/Contract will prove difficult and time-consuming [31]. However, if the program is created to operate with a webpage that offers visualization, it will be simple for a corporate person to execute utilizing alternative types of input methods instead of the program's present queries and answers.

The application is not customizable since the user is unable to alter the primary text, grammar, or language used because it is, at most, a backend program. The software will always give comparable results if there isn't a front-end program to alter the text generated by the backend, with the exception of when the main program is changed. This limitation can be overcome by utilizing the application in conjunction with the above-mentioned web development framework. The program's last constraint is its learning ability, crucial to increasing its productivity on its own [32]. As a result, the program can be able to automatically update its code to increase efficiency [33]. Despite the aforementioned drawbacks, the documentation created by the application supersedes the prerequisites of a property sale agreement or contract [34]. It should be mentioned that software problems are common, thus it is conceivable that a syntactical error could appear but can be fixed after comprehensive testing.

CONCLUSION

Much as the disruption of computing and AI has not spared the legal fraternity in their professional practice, legal practice is very far from being obsolete because of artificial intelligence. The program under examination illustrates the potential adaption of AI in legal practice, such technologies might enhance legal services. Lawyers and legal scholars shouldn't only be bystanders or users of AI if its inclusion is near. The right to these programs is subject to the law of contracts and intellectual property, as was previously stated, and is more likely to be held by computer programs than by attorneys. Thus, if the trend does not reverse and attorneys and legal scholars take on the duties of building programs for use in the practice of law, it is very likely that in the future the right to the majority of legal services will be controlled by computer programs. This software shades light on the possibilities of making legal practice tasks simpler, easier, cheaper and accurate. This could save time and money, as well as reducing or even eradicating human errors that could save legal practitioners the embarrassment and liabilities resulting from simple errors in documentation. Legal practitioners in Indonesia ought to

consider pushing for legislation and frameworks that can enable them work with tech experts in developing AI applications for legal practice.

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