

Keynote Tim Walree – AI in the notarial profession

First, I'd like to thank the organization for inviting me on this conference on Artificial Intelligence & Digital Transformation.

Like this conference, I operate at the intersection of law and technology during my work as a researcher and advisor. Within that intersection, of course, I also deal with AI and all relevant developments. As you will understand, keeping up with all AI-related developments is a full-time job. An awful lot has happened in the field of AI in recent years, such as the emergence of generative AI such as ChatGPT and the worrisome rise of deepfakes. And there was much attention on the efforts of European legislators to regulate the use and development of AI. Those efforts led very recently to an agreement on the AI Act.

For some time now, the Dutch notarial profession has been considering ways to deploy AI. Also the Royal Dutch Association of Civil-law Notaries – in Dutch: the Koninklijke Notariële Beroepsorganisatie (KNB) - has been engaged in various initiatives to explore the possibilities of AI. As part of that exploration, the KNB asked me and my colleagues (dr. Minke Reijneveld, dr. Pieter Wolters and prof. Sebastiaan Roes) at Radboud University to write a report exploring the possibilities and risks of deploying and developing AI in the notarial profession.

This keynote provides a great opportunity to tell you something about that report on AI. With regard to these possibilities of AI, we were asked in particular to investigate what exactly is the legal framework in which AI can be developed and applied in the notarial profession. In other words, what rules should notaries keep in mind if they want to do all kinds of exciting and useful things with AI?

And I can tell you already: one of the conclusions of our report was that the development and deployment of AI potentially involves a plethora of rules. A complete exposition of all the potential rules would be a bit much for a 30-minute keynote. In fact, I doubt I would have enough for a series of ten lectures.

You can relax: I'm not going to make it that difficult and boring for you this afternoon. What I am going to do, instead, is present to you the most important findings and messages of the report.

Based on the (i) opportunities; (ii) risks and (iii) applicable rules we identified in our investigation; we have formulated five essential messages for the notarial profession.

These messages are:

1. AI does not replace the notary but supports him/her
2. The notary should be aware of the most important risks of AI

3. Be aware of the legal framework when developing and using AI, to minimize risks.
4. AI can not only impair core notarial values, but it can also strengthen them.
5. Consider the role that the national association may play in the deployment and development of AI in the notarial profession.

What is AI?

Before I go through all the recommendations and messages, first, very briefly: what exactly is AI?

Most modern systems characterized as AI are based on machine learning. Machine learning also includes the use of Large Language Models, which are the basis of generative AI, such as ChatGPT.

Two important forms of machine learning are supervised and unsupervised machine learning. In supervised machine learning, based on algorithms and large amounts of sample data, a computer is trained to learn and perform a particular task. In unsupervised machine learning computers have the ability to learn without being explicitly programmed. These self-learning systems are usually used for pattern recognition. Both forms of machine learning are constantly fed with new training data to improve the algorithm.

However, Artificial Intelligence is not a single technique but is an umbrella term for various methods and techniques. Therefore, AI is best understood based on the classification of four case types. They are based on the added value of the AI application in question.

The first category of AI consists of the "automation of routine tasks" of the notary. Think of the automated drafting of letters or standard deeds. Also, an AI application can check whether a person meets necessary legal requirements.

The second group consists of AI that can serve as "supporting intelligence," enabling the notary to perform certain tasks faster or better. For example, an AI application can look for signs of fraud or assist the notary as to whether the client fully understands the scope and consequences of the legal act in question.

The third category is "extended intelligence"; AI that complements human intelligence by, for example, recognizing patterns in large data sets. This form of AI enables the notary to do things that would not be possible without AI, or not without very great effort. It can help the notary by, for example, seeing patterns in large data sets. Consider, for example, analyses of case law. This allows the notary to gain more knowledge. AI can also support the notary by organizing or structuring information. In this way, documents, for example, protocols or files, can become easier to search.

The fourth category is autonomous AI that makes decisions without human intervention. An example is the automated rejection of clients or job applicants. Or that an emotion recognition system evaluates whether the client has understood the information without any consideration by the notary.

First message: AI does not replace the notary but supports him/her

Let me take you through the first message when it comes to AI in the notary profession.

AI brings many benefits to the notary.

Because the AI application can take tasks off the notary's hands, it creates more **efficiency** in the notary's task performance. For example, an AI application can organize and index information, or create information (such as a deed) automatically. This **time saving** can also provide a quality improvement of services. After all, the notary has more time to focus on more complex tasks. The AI application can also 'intelligently' support the notary in more complex tasks. This allows the notary to pick up signals that he or she otherwise would not have seen. Moreover, AI can be used to **enhance** the notary's **skills and expertise**. In addition, AI can play an important role in **accessing information** and interpreting legal sources, such as legislation and case law. Finally, AI can ensure that information is gathered more quickly and easily about the client or the relevant legal situation.

AI can thus improve, complement, and simplify the notary's work. Moreover, AI can be used to create new, additional services. This means that a notary can expand his/her services and clientele.

Thus: AI does not replace the notary

Although AI applications can take certain tasks off the notary's hands or support the notary in certain tasks, they are not (yet) capable of replacing the entire notarial process. In plainer terms: human interaction between the notary and the client remains necessary. Moreover, a complete replacement of the notary by an algorithm is also not legally permissible, as I will tell you later.

Second message: The notary should be aware of the risks of AI

Of course, as you can imagine, using AI also brings risks, for both the notary and the client. It is essential for the notarial profession to be aware of these risks at an early stage so that these can be considered (i) when developing AI and/or (ii) when deciding whether to use AI in day-to-day practice.

The risks can be divided into three interrelated categories.

i. opacity and complexity of algorithms

First, algorithms often have the feature of being opaque and complex. This is particularly true of 'black box' AI.

In black box AI, there is little or no insight into how the algorithm works. In this case, the AI application itself produces insights based on the information entered, but the user of the AI application or the subject of the decision does not know exactly how it came about. The opacity and complexity entail the risk that the notary cannot explain how the algorithm works. The result of the algorithm may thus become unpredictable and unexplainable, and therefore difficult to check by the notary and – of course – the client. If errors are not (or cannot be) detected, this could potentially affect fundamental rights of the client, such as his/her right to equal treatment and his/her right to the protection of his personal data.

ii. biases and assumptions in algorithms

The second category of risk is related to the fact that algorithms may contain biases or assumptions.

There can be a bias in the training data needed to develop an algorithm, but bias can also arise in a self-learning algorithm. Moreover, a self-learning algorithm will reproduce biased data. This is due to the feedback loop that is often built into AI. Biases can cause discrimination, with serious consequences for the client. Due to the possible opacity and complexity of the algorithm, bias may not be noticed by the notary.

iii. dependency and apathy towards algorithms

The risk that a notary will not notice bias is further amplified by the 'automation bias', an over-reliance on the presumed objectivity of AI.

Furthermore, a notary could become dependent on AI, in the sense that he/she can no longer perform his/her tasks without this technology or is unable to notice and correct errors made by AI. These developments could then cause the notary to become reluctant to question the operation and outcome of AI, thus losing control over the notarial process. Again, the opacity and complexity of algorithms further increase these risks.

Third message: Be aware of the legal framework when developing and using AI, to minimize risks

I mentioned earlier that there are many rules that may need to be followed when developing and deploying AI. That plethora of rules does not necessarily mean that little is possible with AI. Those rules are designed to minimize risks to the notary and the client. It is essential to identify the relevant rules at an early stage so that the notary and their IT-suppliers can take them into account when developing AI applications.

AI Act

The rules that almost everyone will think of is the new AI Act. The official publication of the AI Act is expected in May. That means most of the rules will apply in about two years.

This AI Act imposes obligations on parties who want to develop and use AI. In general, the AI Act prescribes obligations in relation to risk management, data governance, record keeping, transparency, human oversight, and accuracy.

The AI Act divides all AI applications by risk. Systems with "unacceptable risk," such as social scoring and real-time facial recognition, will be prohibited. High-risk AI systems are allowed under the AI Act, but are regulated. For example, these systems will be subject to mandatory conformity assessment, training data must meet certain quality requirements, and decisions made by the AI must be explainable. Transparency rules also apply to specific AI systems, regardless of their risk, such as deepfakes or chatbots.

In the AI Act, the "regulatory emphasis" is on the provider of AI systems. In most cases, this will be the developer of the AI system. In other words, most regulations apply to the provider, who must ensure that its AI system complies with the law. In our opinion it is still unclear to what extent the notary profession will be affected by the rules of the AI Act. This is because of the following.

Most of the AI Act rules apply to high-risk systems. The AI Act specifies that something is a high-risk system if the system is a safety component for a product. Such AI systems or products are unlikely to be used or developed by the notary. However, the AI Act also stipulates that an AI system qualifies as a high-risk system if the system is used within a particular industry. Annex III of the AI Act lists those sectors. Legal services - such as notarial services - are not yet explicitly listed there. It is therefore uncertain to what extent these rules will apply to the use of AI in the notarial profession. However, the European Commission has the power to amend that list and put the legal services sector on the list of sectors that should be considered high-risk. It is therefore important to continue to monitor such developments.

GDPR

Most of the regulations we have highlighted stem from already existing legislation.

As AI often uses and generates personal data, the GDPR is an important regulatory source. Transparency, purpose limitation, privacy-by-design, security, and the general prohibition of automated decision-making, provide important principles safeguards for the careful processing of personal data. It is recommended that notaries consider these safeguards when designing and training AI systems. When procuring an AI system from a supplier, notaries should investigate whether it offers the necessary safeguards and make clear contractual arrangements with the developers to ensure compliance.

A major challenge for notaries will be to ensure that personal data used as input to an AI application or used to train an algorithm, is accurate. The notary will also need to verify the output of the application. To ensure the accuracy of data, we recommend that AI applications developed specifically for the notarial profession involve people from the notarial practice. In this way, the notary also retains more control over the notarial process.

Non-discrimination law

Also non-discrimination law provides important safeguards in the development and use of AI. The AI application must not discriminate based on a prohibited ground, such as gender, nationality, or religion. Also, the outcome an AI application should not be that a particular group is particularly disadvantaged.

Copyright

We did not specifically address this in the report, but a growing number of academics are warning about potential copyright violations from the use of AI. For the development of AI systems, training data is needed. These may be copyrighted. Thus, AI's training and output may constitute copyright infringement if it involves data from other parties. This could potentially lead to liability issues. This is also something to consider.

Fourth message: AI can not only impair core notarial values, but it can also strengthen them

We have arrived at our fourth message.

The use of AI should have the same safeguards as the traditional notarial practice. This means that AI should not compromise the core notarial values: independence, impartiality, and diligence.

Firstly, independence can be compromised if the civil-law notary becomes too dependent on AI. For example, a civil-law notary may become dependent if he can no

longer reach a decision on his/her own or if he excessively relies on AI that he does not sufficiently understand and thus cannot control. Notary independence may therefore imply that notaries should play a meaningful role in decision-making and remain in control of the technological tools they use in their practice. Human supervision of a decision is also required under non-notarial regulations, such as the GDPR and the upcoming AI Act. For this reason, we also recommend against the use of fully autonomous AI, that comes down to automated decision-making without meaningful human supervision. The deployment of AI should therefore only support the notary's work and should **not** replace the notary's work in its entirety.

Secondly, AI can be a risk to the impartiality of the notary. If the notary makes his/her decision largely dependent on the outcome of the AI application, there is a risk of that he or she bases his/her judgment on a biased decision of the AI application. If, as a result, one group in particular is disadvantaged in many cases, this could lead to discrimination.

Thirdly, the use of AI could potentially compromise the notary's diligence. A risk of using AI is that it encourages convenience. Using AI allows the notary for "ticking-the-box" within the notarial process. If the notary simply conforms to the decision of the AI application, there is less autonomy and discretion on his part. This can reduce the quality of the notary's services. Moreover, it may also lead to less attention to the individual interests of the client and the specifics of the case. Again, the notary should stay in charge and not lean excessively on AI.

AI can also strengthen the core values of the notarial profession.

AI can do some things better (and faster) than the notary. For example, AI can search through large amounts of information at great speed and automate standard work or processes, easing the workload of the notary. This allows the notary to devote more attention and time to complex work and/or processes. The resulting time savings can allow notaries to perform their key tasks more diligently. AI can also be instrumental to the notary's impartiality. For example, AI in the form of 'confusion detection' can support the notary in determining whether the client really understands what is in the deed and what the legal consequences are for him. If the notary is aware of this, he can provide more information to the client to make the knowledge between parties more symmetrical. Furthermore, although AI may contain biases, it can also be a useful tool to correct biases that the notary may have.

Fifth message: Consider the role that the national association may play in the deployment and development of AI in the notarial profession

Our fifth message concerns the role of national associations.

I'm not going to tell you that your national association must play a guiding or facilitating role in your respective country with regard to AI. But I do want to invite you to think about role your national association could play with regard to the use and development of AI.

There are many ways in which professional organizations can play a role. Think, for example, about drawing up practical protocols, or providing trainings regarding the use of AI in the notarial practice in such a way that they can understand the outcome of AI.

You can also think about modernizing legislation, and creating legal bases for the use of AI or other technology in the notarial profession. In this line you can also consider, for example, tailoring notarial core values to the increasingly digitizing practice, such as the use of AI. Notaries may well benefit from a more modern interpretation of the classic safeguards of notarial practice.

Finally, you can think about facilitating test environments for AI. This may particularly benefit small or medium-sized notary offices. After all, they have fewer financial resources and technical expertise than larger firms. Through these test environments, they can find out whether their AI application complies with the law, and possibly to what extent the system can be improved from a technical standpoint. In this way, smaller offices can better keep up with the further digitization of the notarial profession. This is good for competition.

Round up

So, to conclude: although AI applications can take certain tasks off the notary's hands or support the notary in certain tasks, they are not (yet) capable of replacing the entire notarial process. Human interaction between the notary and the client remains necessary regardless. Moreover, a complete replacement of the notary by an algorithm is also not legally permissible. The requirement remains that the notary remains in control of the notarial process.

I hope that these messages encourage further reflection on the deployment and development of AI.

I would like to thank the KNB for the opportunity to share a little about our report here.

I thank you for your attention.