Digital Justice in Switzerland and the Use of AI at the Swiss Federal Supreme Court

Justice Prof. Dr. Christoph Hurni

(Slide 1: Title) Good afternoon, dear Masahisa, esteemed colleagues, ladies and gentlemen. It is a profound pleasure for me to be here in wonderful Kyoto. I would like to express my sincere gratitude to Masahisa for the very kind invitation and for organizing this beautiful workshop. It is a great privilege to exchange ideas with such a distinguished group of legal scholars and practitioners.

Today, I would like to speak to you about the digital transformation of the Swiss judiciary. When we talk about "transformation," we often think of technology first. But in my view, this is primarily a story about **access to justice** and **judicial independence** in the 21st century. It is a journey that involves both

building a new nationwide infrastructure—the "hardware" of justice, so to speak—and implementing advanced tools like Artificial Intelligence—the new "software" of our daily work.

Agenda

I. Digital Justice in Switzerland («Justitia 4.0»)

II. Use of AI at the Swiss Federal Supreme Court

(Slide 2: Agenda) To guide you through this journey, I have divided my presentation into two distinct parts: **First**, I will introduce 'Justitia 4.0'. This is our current mega-project to digitize the entire Swiss justice system from the ground up. I will explain how we are overcoming the hurdles of federalism to build a unified digital court system. **Second**, I will take you behind the scenes of the Federal Supreme Court. I want to show you specifically how we are using Artificial Intelligence not just as a gadget, but as a strategic tool to manage our caseload, and why we have decided to build our own sovereign AI models.

Justice today

(Slide 3: Justice Today – Statue with Paper) I would like to begin by introducing you to 'Justitia 4.0'. This is currently the most significant modernization project within the Swiss judiciary in over a century. It is not merely an IT project; it is a fundamental transformation of our procedural reality. Our goal is simple yet ambitious: a secure, digital justice system where access to justice no longer requires navigating mountains of paper.

This image illustrates our starting point—and frankly, the reality in many courts even today. The figure of Justice is burdened by heavy stacks of paper files. For decades, the Swiss judiciary has relied on physical files. To give you an idea of the scale: Every day, tons of paper are driven by postal trucks

across the Swiss Alps, from lawyers to first-instance courts, from there to the high courts, and finally to us in Lausanne. While this system has tradition, it is reaching its limits in a modern, digital society. It is slow, it is ecologically unsustainable, and it creates unnecessary friction. In an era where banking and healthcare are digital, the judiciary cannot remain an analog island. We are here to change that.

The Justitia 4.0 project aims to digitally transform the justice system

Central objective: Digital transformation of the Swiss justice system

- Replacing the paper file with an electronic file
- Replacing postal dispatches with electronic communication
- Electronic access to case files

(Slide 4: Central Objectives) The central objective of Justitia 4.0 is the complete digital transformation of the Swiss justice system. We are moving away from physical evidence and postal delivery towards a fully digital workflow. This is particularly challenging in Switzerland because of our federal structure. This project involves all roughly 300 Swiss courts, all public prosecution offices, and the corrections system across 26 sovereign Cantons and the Federal level. Getting 26 different legal cultures to agree on one digital standard was perhaps harder than the technical development itself.

What does this transformation look like in practice? We are focusing on three main pillars:

- **The eFile:** Replacing the paper file with a legally binding electronic file. The "original" is no longer the paper in the basement, but the data on the server.
- **Electronic Communication:** Replacing postal dispatches with secure digital data exchange.
- **eAccess:** Granting parties and lawyers electronic access to case files at any time. This is a question of "Equality of Arms"—ensuring all parties have the same information at the same time.

Benefits of Digitalisation

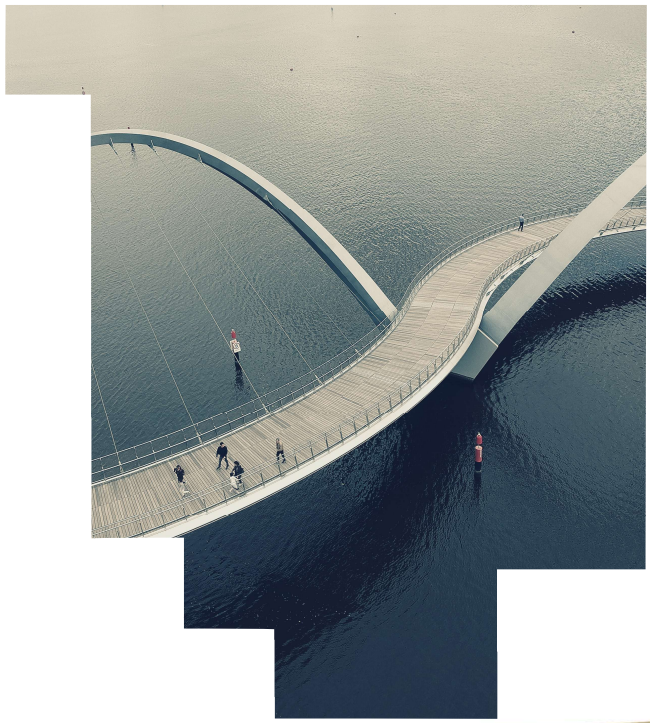
- **Location- and time-independent work**: documents are available to everyone at any time and therefore simultaneously. The *eFile* can always be accessed.
- **Same level of information for everyone**: delays caused by postal exchange disappear.
- **More substantive work, less administration**: focus on substantive issues and legal decision-making.
- **Reduced effort – new tasks**: physical passing on of files disappears; new tasks arise as part of the digital transformation.

(Slide 5: Benefits) This shift allows for location-independent work. Consider the difference: In the old world, if a panel of three judges wanted to study a case, they had to pass the physical binder from office to office. If one judge had the file, the others had to wait. In the new world, a judge in Lausanne, a clerk working from home in Bern, and a second judge in Zurich can access and annotate the same file simultaneously. This drastically reduces idle time. It allows us to focus more on substantive legal issues and less on administrative logistics.

We are committed to delivering concrete benefits. It's not about digitalization for the sake of technology, but for efficiency. By eliminating physical file transfers, we reduce the duration of proceedings.

By standardizing data exchange, we increase security. Ultimately, this leads to a more accessible and responsive justice system for our citizens.

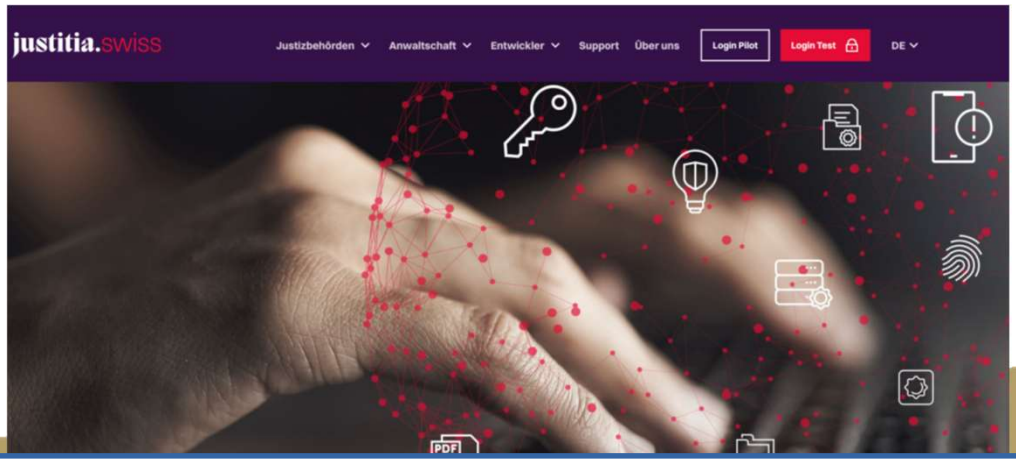
Platform



(Slide 6/7: Platform Justitia.Swiss) The technical heart of our new system is the platform 'Justitia.Swiss'. Think of it as a secure digital bridge. It connects the fragmented landscape of judicial authorities with professional users, such as lawyers, and eventually the public. It is the central hub for all electronic legal communication.

Platform “Justitia.Swiss”

- **Electronic communication** between the judicial authorities themselves and between professional users (lawyers) and the authorities.
- **Electronic access** to case files



Here is where we stand today, in March 2026. The platform 'Justitia.Swiss' has been in operation since April 2024. It meets very high security standards, which is non-negotiable for judicial data. It can be used easily via a web browser or integrated directly into law firm software via API. We are already handling proceedings entirely via this platform, covering functions like e-filing, digital receipts, and accessing authority directories. It is no longer a concept; it is a working reality.

Case File Application

(Slide 8/9: JAA – Case File Application) However, a platform is just for exchange. Judges also need a tool to actually *work* with the files—to read, highlight, and comment. For this judicial application, we decided not to reinvent the wheel. We looked across our borders and adopted a proven solution from our neighbors in Austria, where a digital judicial workplace has been successfully used since 2014.

JAA: Working with digital case files

- Work with digital case files in a user-friendly and efficient way
- Data protection, security and auditability ensured
- Integration of JAA, specialist applications and the justitia.swiss platform
- Proven solution from the judiciary for the judiciary: successfully used in Austria since 2014, adapted to the needs of the Swiss justice system (three official languages: German, French, Italian)
- On-time introduction from early 2027 – pilots from autumn 2025
- Independent judicial solution: full control over future developments

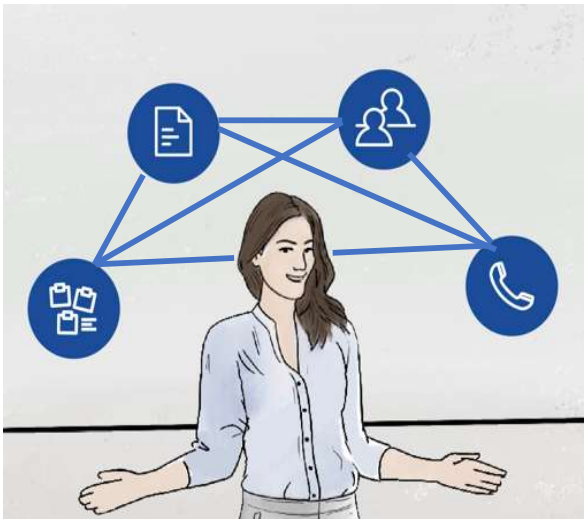
We adapted this solution to Swiss needs—specifically our multilingual requirements. We call it the **JAA**. It allows for user-friendly management of files, ensuring data protection and auditability. We started pilot phases in autumn 2025, and we are on track for a broad rollout starting in early 2027. This is also a political statement: It shows that European judiciaries can collaborate on "Public Code" to remain independent of commercial software giants.

Transformation

(Slide 10/11: Transformation) Technology is one thing; culture is another. Introducing these tools requires a massive cultural change—a true transformation.

Overall objective of the transformation

- Prepare leaders and governing bodies for the upcoming changes
- Provide tools and methods to raise awareness of the changes



As you can imagine, shifting from centuries of paper tradition to a digital workflow creates 'traffic' in our minds and processes. We see resistance. Some experienced judges feel that reading on a screen affects their "deep reading" capability. Others worry about the speed of digital work. We need to manage this change carefully, acknowledging these fears rather than dismissing them.

Our transformation objectives therefore focus on the people. We need to prepare court presidents and governing bodies for their new leadership roles in a digital environment. We provide them with tools and methods to raise awareness and guide their teams through these changes. Without leadership buy-in, the best software will fail. We treat this not as an IT

rollout, but as organizational development.

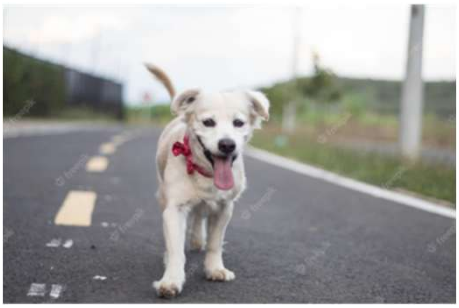
Public-law corporation justitia.swiss

- “Federal Act on Platforms for Electronic Communication in the Judiciary” as legal basis
- The justitia.swiss corporation replaces the Justitia 4.0 project
- The corporation as the supporting organisation for the platform
- The Confederation together with the cantons
- The agreement enters into force once the Confederation and at least 18 cantons have approved it
- The corporation can offer additional services and technical means suitable for electronic communication in judicial proceedings

(Slide 12: Organisation & Legal Basis) Finally, a few words on the legal and organizational framework. To ensure long-term stability, we are replacing the temporary project organization with a permanent 'Public-law corporation' (*öffentlich-rechtliche Körperschaft*), also named 'Justitia.Swiss'. The legal basis for this, the Federal Act on Platforms for Electronic Communication in the Judiciary (BEKJ), has been approved. This corporation is owned effectively by the Confederation and the Cantons. This ownership structure is crucial: It ensures that the digital backbone of our justice system remains under state control and democratic oversight, preventing any private entity from gaining leverage over judicial

infrastructure.

Artificial Intelligence in Switzerland
Ethics and Culture



(Slide 16: Transition to AI) Let's move to the second part: The use of Artificial Intelligence specifically at the Swiss Federal Supreme Court. While 'Justitia 4.0' is about infrastructure—building the digital highway—this part is about *intelligence*—building the engine to navigate the data. Once the files are digital, we face a new problem: Information Overload. This is where AI comes in.

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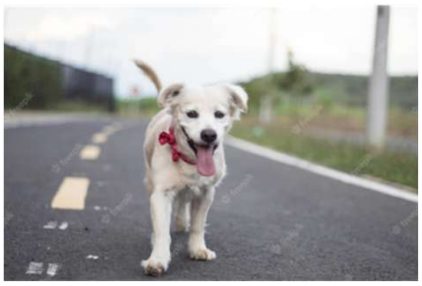
Artificial Intelligence in Switzerland
Ethics and Culture



(Slide 13-15: The Dog Dilemma / Culture) But before I explain *how* we use AI, I must address *what* AI actually is in a legal context. This brings me to a crucial point: **AI is never neutral.** We often think of algorithms as purely mathematical and objective. But in reality, every AI system is determined by the ethics and the culture of the people who created it. Technology does not exist in a vacuum. It reflects the value system of its origin. To illustrate what I mean, let me give you a concrete example—the "Autonomous Car Dilemma".

Imagine an autonomous car driving down a street. Suddenly, a dog runs onto the road. The AI has to make a split-second decision.

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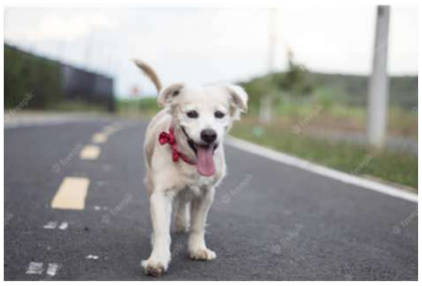
- **Scenario A:** The car slams on the brakes. It prioritizes the life of the animal, even if it means a risk of a rear-end collision or scaring the passengers.

Artificial Intelligence in Switzerland
Ethics and Culture



- **Scenario B:** The car decides *not* to brake. The algorithm has been programmed with a hierarchy of values where the dog has a 'lower status' than the smooth flow of traffic or the absolute safety of the passengers. It calculates that braking is 'unnecessary' or disproportionate.

The machine does not 'feel' compassion. It simply executes a value judgment that was coded into it by engineers, likely thousands of miles away. What the car does depends entirely on the cultural and ethical setting in which it was programmed. In a society that places a high moral value on animal welfare, Scenario B might be illegal. In a strictly utilitarian society, Scenario A might be considered a 'bug'.

Why does this matter for us as judges? Because the same logic applies to **'Legal AI'**. If we use AI to analyze judgments, summarize briefs, or suggest sentences, we must ask: **Whose ethics are inside the black box?** We cannot simply import AI models trained on foreign legal cultures. We must ensure that the algorithms we use reflect *our* fundamental rights, *our* concept of proportionality, and *our* values.

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Artificial Intelligence in Switzerland
What values should these systems reflect?

- ✓ **The data used to train these systems reflects a worldview**
  - **Social values differ from country to country and from population to population**
  - **The values learned by these models are associated with their creators**
- ✓ **As sources of information, these systems will influence our view of the world when we interact with them**
- ✓ **If we want to be able to study, monitor and reliably operate these systems in line with the expectations of Swiss society, we have to create them ourselves in Switzerland**

(Slide 16: Data is not neutral) This brings us to a fundamental realization: **Data is not neutral. Data reflects a worldview.** When we use AI models, we are not accessing an objective truth. We are accessing the sum of the data used to train them. And the values learned by these models are inextricably linked to their creators.

Let me be specific. Social values and legal concepts differ massively from country to country. A model trained primarily on US case law (which dominates the internet) will inherently reflect US legal norms. It might prioritize "freedom of speech" over "privacy" in a way that contradicts European law. Or, it might suggest "plea bargaining" strategies—a concept central to the US system but foreign to the Swiss

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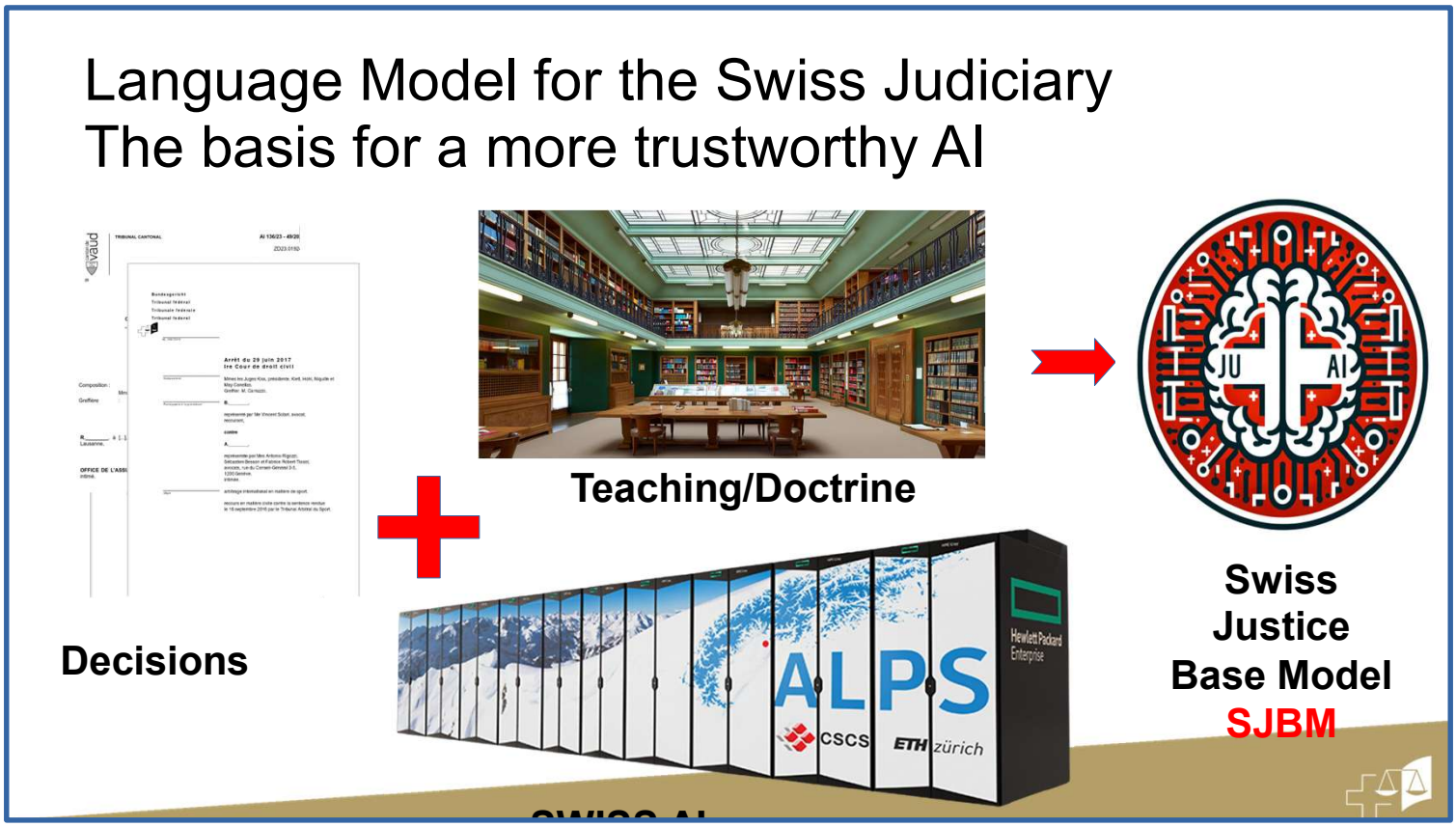
inquisitorial tradition. If a model trained on Chinese internet data were used, it might prioritize collective security over individual rights in ways that do not match our constitutional understanding.

The risk is subtle but real: As we use these systems as sources of information, they begin to influence *our* view of the world. termed **"Soft Legal Imperialism"**. If a judge constantly interacts with an AI that 'thinks' like an American lawyer, it may eventually shape their own legal reasoning without them even noticing.

The conclusion for us is clear: We cannot simply import these 'black boxes'. If we want to study, monitor, and reliably operate these systems in line with the expectations of Swiss society, we cannot rely solely on foreign tech giants. We have to create—or at least strictly control and fine-tune—these systems ourselves, right here in Switzerland. This is what we call **Digital Sovereignty**.



(Slide 17: Swiss Justice Base Model) So, what is the practical solution to the problem I just described? We decided to build our own **Swiss Justice Base Model**. Instead of relying on generic models like GPT-4, which are trained on the entire internet—mostly in English and heavily influenced by US law—we are building a specialized foundation model tailored to our needs.

The key difference lies in the training data. We are feeding this model exclusively with **curated Swiss legal data**:

- All published decisions of the Federal Supreme Court and Cantonal Courts.
- The entire systematic collection of Swiss legislation.

- Selected academic legal literature ("Doctrine"). We are teaching the AI to 'think' like a Swiss lawyer, not like a Reddit user or a US attorney. This model must also master our specific linguistic reality. It is trained to understand the subtle correlations between the German, French, and Italian versions of our laws. It knows that 'Treu und Glauben' in German corresponds to 'bonne foi' in French, and treats them as the same legal concept. A generic model often fails at this precise tri-lingual dogmatic mapping.

This Base Model serves as the secure foundation—the engine—for all our specific applications. Whether we build a tool for anonymization, for summarization, or for legal research, they will all run on this Swiss-certified engine. By doing this, we ensure that the 'cultural bias' in the machine is actually the one we want: The bias of the Swiss Rule of Law.

Swiss Justice Base Model
Advantages for Switzerland


Swiss justice


Digital sovereignty

Cost saving


Swiss culture


Ecology

(Slide 18/19: Digital Sovereignty) Why do we go to the trouble of training our own model? It is expensive and complex. Why not just use the models from Silicon Valley? The answer lies in two words: **Digital and Intellectual Sovereignty**.

First, **Digital Sovereignty**. If we build our justice system on top of a commercial API from a foreign tech giant, we make ourselves dependent. If they change their algorithm, change their pricing, or change their privacy policy, the Swiss courts would be at their mercy. By building our own model, hosted on our own infrastructure, we ensure that the Swiss judiciary remains independent. We control the 'off' switch. We own the system that processes our citizens' data.

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Swiss Justice Base Model
Advantages for Switzerland

Digital
+
Intellectual sovereignty

Second—and perhaps even more importantly—**Intellectual Sovereignty**. Legal concepts are not universal. As I mentioned with the example of plea bargaining: If our judges constantly interact with an AI that suggests foreign legal concepts, we risk a subtle erosion of our own legal culture. A Swiss model, trained exclusively on Swiss federal and cantonal law, protects our intellectual heritage. It ensures that the digital assistant understands the nuances of *our* civil code and *our* federalism.

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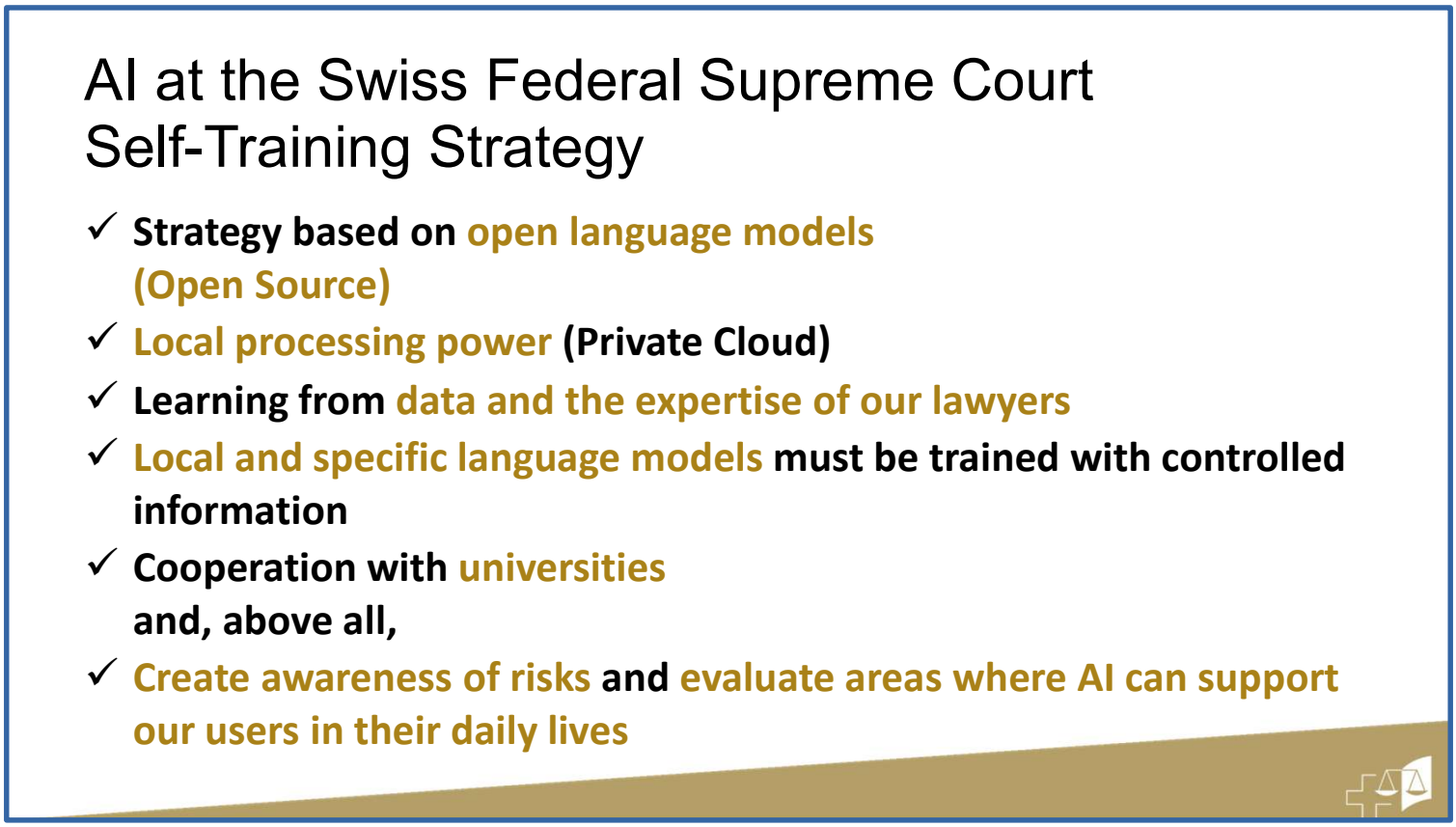


(Slide 20: Self-Training Strategy) How do we implement this vision of a sovereign AI? We have defined a clear **Self-Training Strategy**. We have deliberately decided against buying a ready-made 'black box' solution. Instead, we rely on **Open Source Language Models**.

Why Open Source? Because it gives us control and transparency. We can look under the hood. And crucially, we run these models on our own **Local Processing Power**—in a Private Cloud within the Swiss judiciary's secure network. This ensures that no confidential data ever leaves our physical control.

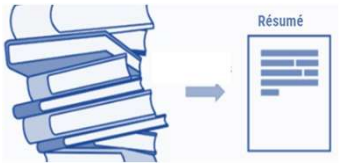
But hardware is not enough. We need to teach the machine. We use a strategy of 'Learning from

expertise'. We don't just dump data into the model; we use the specific knowledge of our court clerks and judges to fine-tune it. We also reject the idea of **"Predictive Justice"**—AI that predicts the outcome of a case. We focus on **"Generative Assistance"**—AI that helps draft the text. We want the AI to help us write, not to help us judge.

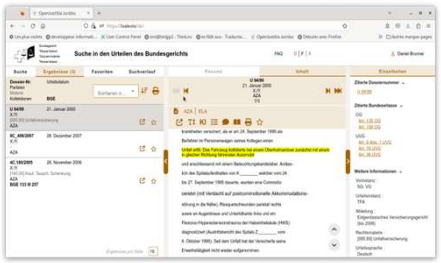
Of course, we are a court, not a tech company. That is why we rely on strong **Cooperation with Universities**. We collaborate with leading Swiss research institutes to ensure our technical approach is state-of-the-art.

But above all, this strategy is about the users. Our ultimate goal is to **create awareness of risks**. We want our staff to identify exactly where AI creates value in their daily lives—for example in translation or summarization—and where it is dangerous. We are building a culture where the judge uses the tool with confidence, but also with caution.

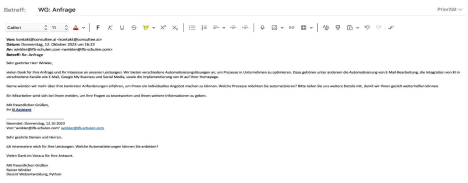
AI at the Swiss Federal Supreme Court Use Cases



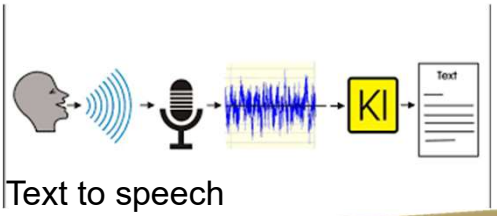
Summary



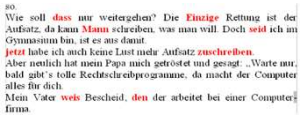
Semantic search



Generate text (e.g. answer an email)

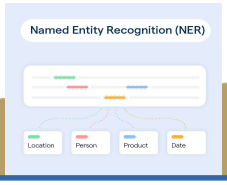


Text to speech



Wie soll dass nur weitergehen? Die Einzige Rettung ist der Aufsatz, da kann Mann schreiben, was man will. Doch seid ich im Gymnasium bin, ist es aus damit.
jetzt habe ich auch keine Lust mehr Aufsatz zuschreiben.
Aber neulich hat mein Papa mich getröstet und gesagt: „Warte nur, bald gibt's tolle Rechtschreibprogramme, da macht der Computer alles für dich.
Mein Vater weis Bescheid, den der arbeitet bei einer Computerfirma.

Check spelling, reformulate



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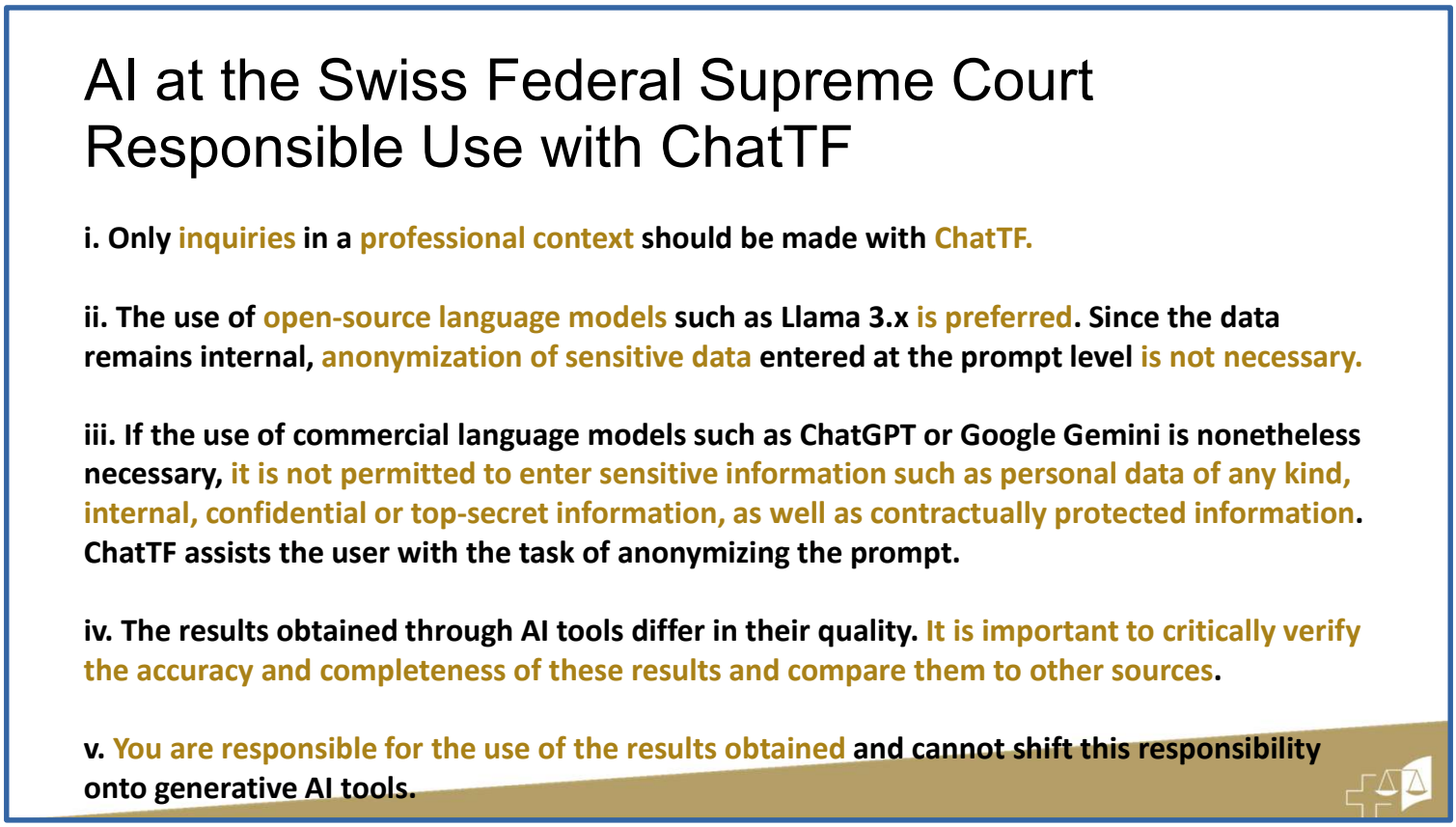
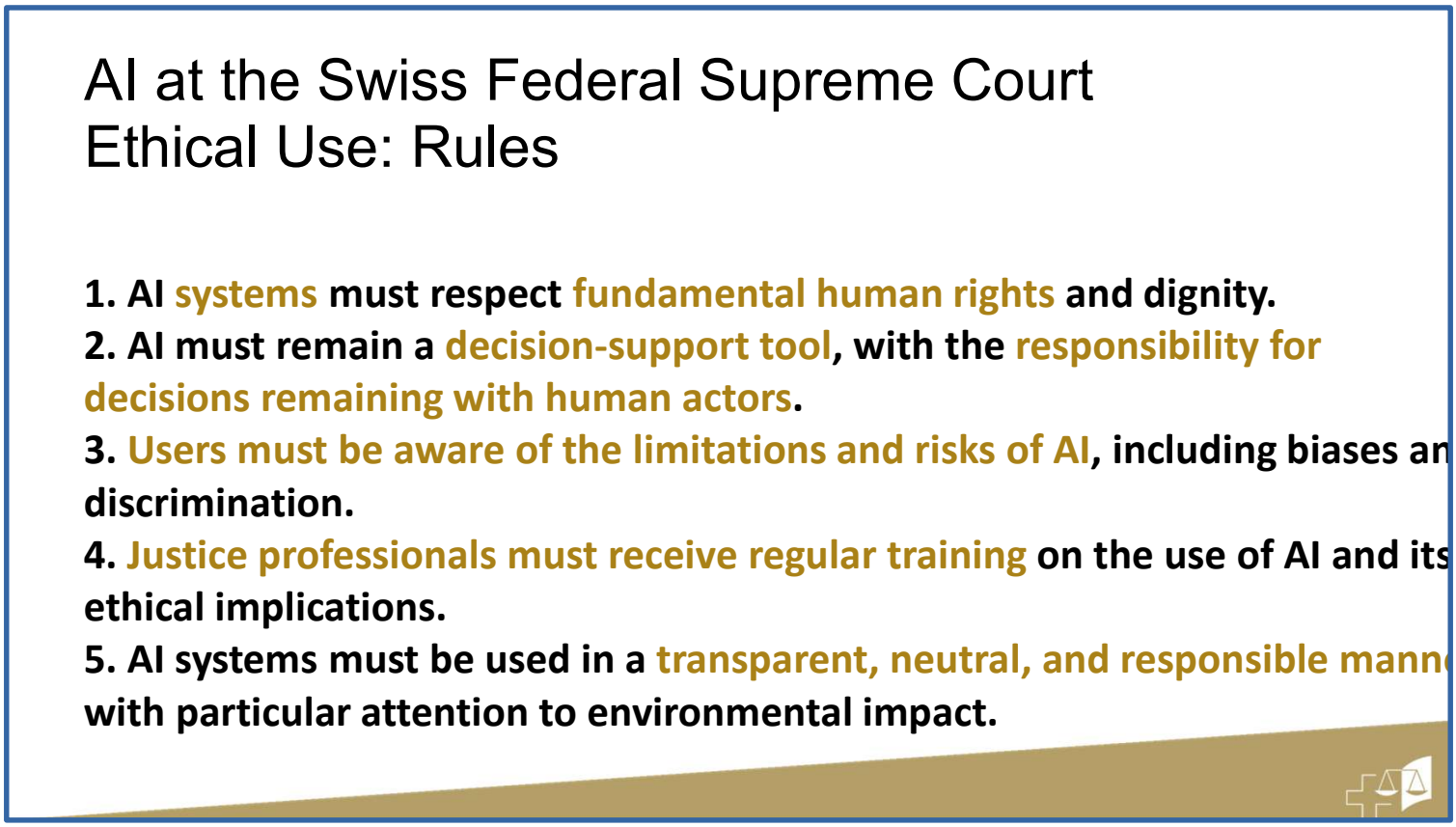


(Slide 22: ChatTF Rules) Technology is useless without rules. To ensure our internal tool 'ChatTF' is used correctly, we established five clear principles for our staff.

- **Professional Use Only:** This is a tool for work. It is strictly for professional inquiries, not for private entertainment.
- **The Preferred Mode (Open Source):** We configure the tool to prefer Open Source models like Llama 3. Why? Because we run these models on our own infrastructure. The data remains internal. This offers a huge advantage for the judge: You do not need to anonymize the prompt. You can paste a paragraph from a confidential draft judgment, and it is safe, because it never

leaves our servers.

- **The Exception (Commercial Models):** We acknowledge that sometimes, commercial models like ChatGPT or Google Gemini are simply more powerful. If a user switches to these external models, the rule is strict: **Zero Tolerance for sensitive data.** No names, no case numbers, no secrets. To help the user, our interface actually assists in anonymizing the prompt *before* it is sent to the external provider.
- **Quality Control:** AI is a statistical engine, not a truth machine. The quality varies. We instruct our staff to treat AI output like a draft from a very eager but inexperienced intern. You must critically verify every citation and every fact.
- **Ultimate Responsibility:** Finally, the most important legal principle: **You are responsible.** If an error ends up in a judgment, it is the judge's error. You cannot shift the blame to the algorithm. 'The AI told me so' is not a valid legal defense at the Federal Supreme Court.



(Slide 23: Ethical Rules) While the previous rules were about *how* to use the tools, this slide covers the *principles* behind them. We have codified five fundamental ethical rules that apply to any AI system at the Federal Supreme Court.

- **Fundamental Rights:** Code never overrides the Constitution. No AI system is allowed to violate human dignity or non-discrimination laws. If a system shows bias against a specific demographic, we do not use it. Period.
- **Human Sovereignty:** This is our 'Iron Law'. The AI is a tool, not a judge. It can draft, summarize, and translate, but the final signature—and the final responsibility—is always human.
- **Risk Awareness:** We require our judges to be

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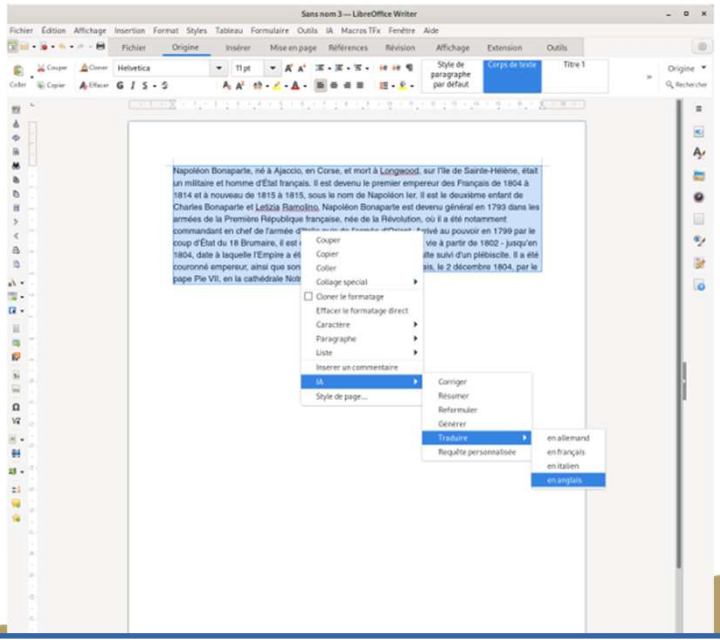
skeptical. They must understand that AI can hallucinate and that it carries the biases of its training data. Blind trust in the machine is a dereliction of duty.

- **Mandatory Training:** You cannot use a tool you don't understand. We provide regular training not just on the software, but on the ethical implications. 'I didn't know how it works' is not an excuse.
- **Transparency & Environment:** We must be transparent with the public about our use of technology. And interestingly, we also included an environmental clause. Training and running large models consumes massive amounts of energy. Responsible use means we don't use a sledgehammer to crack a nut—we use AI only where it truly adds value.

AI at the Swiss Federal Supreme Court
Libreoffice Copilot



Integration of an OSS langage model for performing standard tasks

(Slide 24/25: Copilot & Speech) Now, let me show you how these principles translate into the actual tools on our screens. We are currently piloting a **'Copilot' integration in LibreOffice**. This integrates our secure Open Source Language Model directly into our word processor. It allows us to perform standard tasks—like summarizing a selected paragraph or proposing a translation—without leaving the document we are working on. This is efficiency in practice: secure, local, and seamless.

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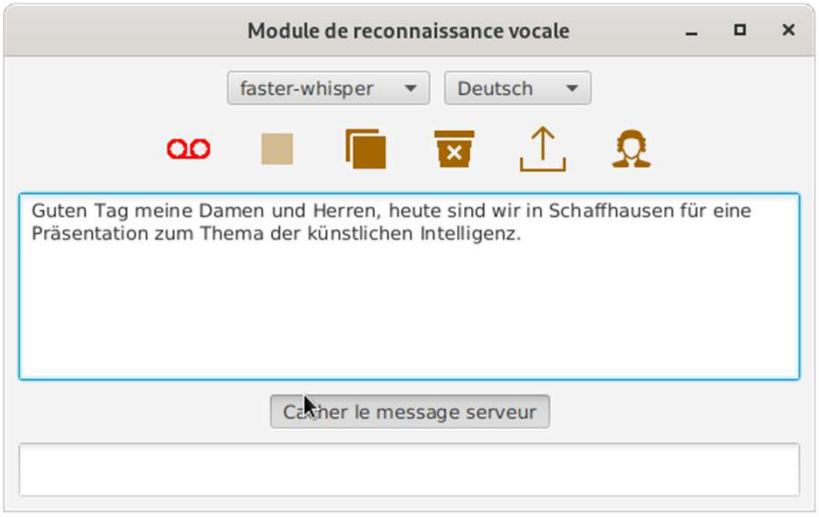
AI at the Swiss Federal Supreme Court
Speech Recognition



Speak in German or Swiss German,

text is automatically translated into the target language

And finally, we are addressing a very specific Swiss challenge: **Speech Recognition**. As you may know, we speak 'Swiss German' dialects in our daily lives, but we write in Standard High German. This diglossia has always been a hurdle for dictation software. We are now testing AI models that automatically transcribe and translate our spoken Swiss dialect directly into written Standard German. For those judges who prefer dictation, this is a massive time-saver and a prime example of how AI can serve local cultural needs.

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Questions?

(Slide 26: Conclusion) To conclude: Digital Justice in Switzerland is advancing on two tracks. First, with 'Justitia 4.0', we are building the digital highway for data exchange. Second, with AI, we are building the engine to navigate this data efficiently.

But throughout this transformation, one thing remains constant: The steering wheel remains firmly in human hands. We use technology to support the judge, never to replace the judge. We believe that by controlling the infrastructure and the intelligence, we are preserving the core of our profession for the future.

Thank you very much for your attention. I look forward to our discussion.

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