



INSTRUCTIONS:

Please respond to all questions and complete the fields in grey. The final scientific report must present the achievements of the project and the status of the research activities in detail. The report must be sent to Innosuisse for evaluation no later than **1 month** after completion of the project. All project partners must participate in the consolidation of the final scientific report prior to submitting to Innosuisse.

Please fill in the final scientific report in the same language as the one used in the original funding application.

All project partners should be included in the communication with Innosuisse and agree with the content of the report. The report must be sent to the following address: innoprojects@innosuisse.ch

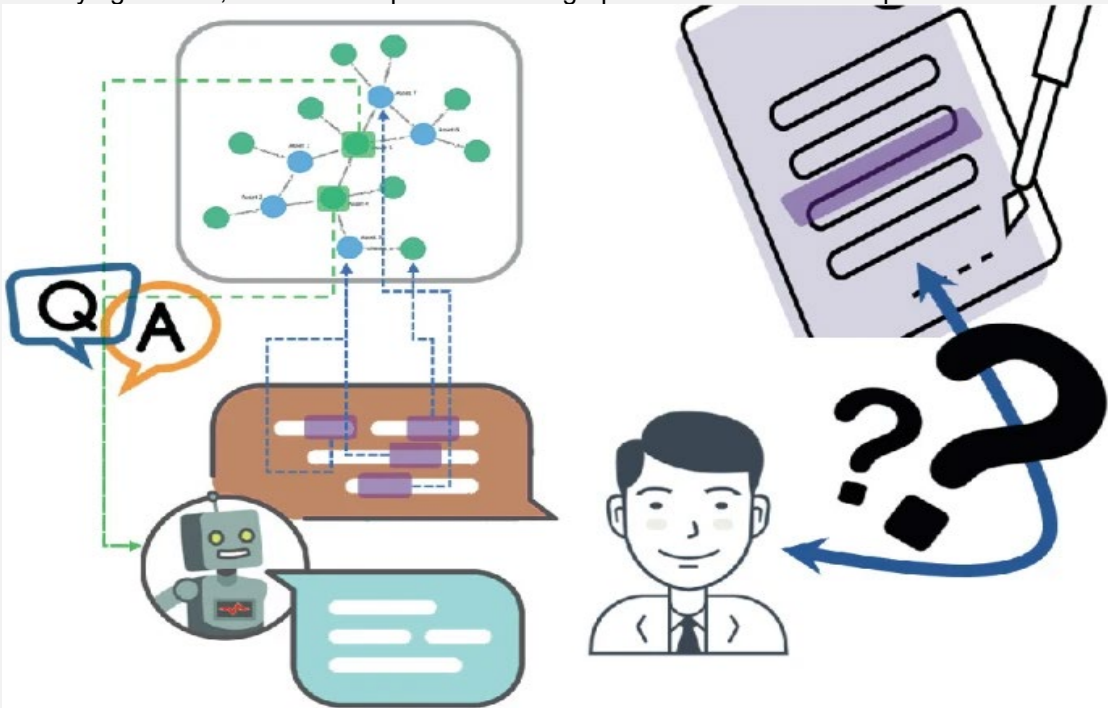
Innosuisse decides, based on the final scientific report's content, whether the information provided is sufficient to close the project officially or if additional information is required.

Final Scientific Report

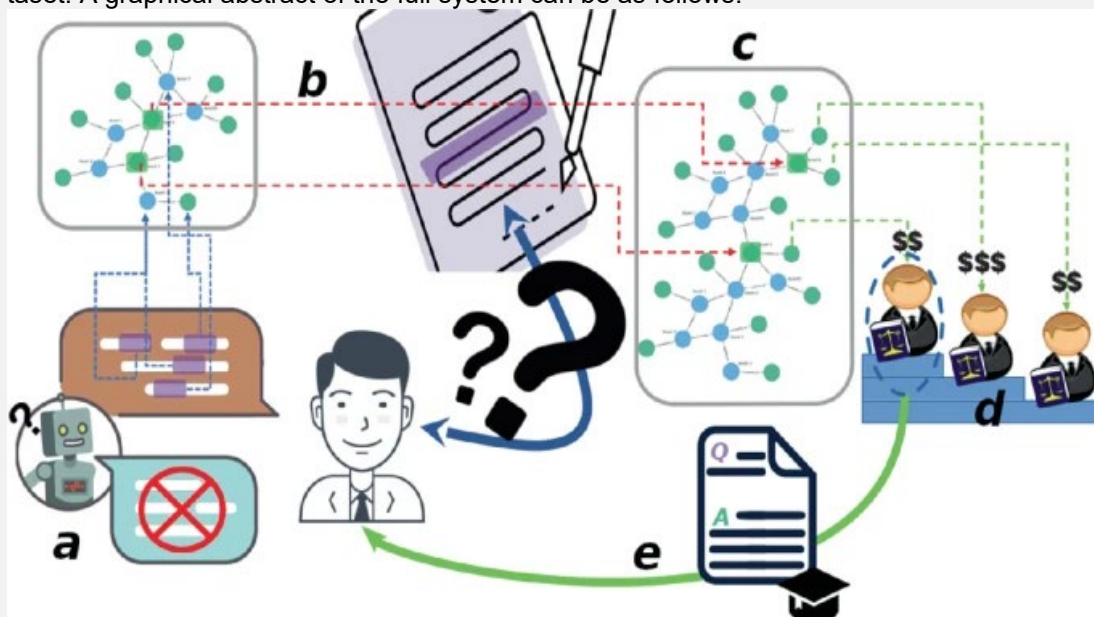
Project no.:50446.1 IP – ICT	Project starting date: 01.09.2021	Project duration (in months): 30
Title: P2Sr Profila Privacy Simplified reloaded: Open-smart knowledge base on Swiss privacy policies and Swiss privacy legislation, simplifying consumers' access to legal knowledge and expertise		
Research partner(s): HSLU - Informatik		
Implementation partner(s): Profila GmbH		
Innosuisse contribution (CHF): 653,940.60		Total project costs (CHF): 1,136,932.40

1. Describe the status and progress of the planned activities in relation to the approved overall project plan and indicate to which degree the objectives of the project have been met: (2000 characters max, refer to the measurable and quantified objectives of each milestone, provide data supporting your achievements and summarize the scientific/technical results of the project) The project is completed within the 6 months extension requested. The objective of delivering a demonstrator that covers the proposed functionalities is achieved. The delivered approach was successfully transferred to the implementation partner. In summary, all milestones were achieved. Two scientific publications at an international venue were submitted, accepted and presented. The demonstrator was presented and discussed with multiple stakeholders and research-oriented players in the domain and appreciated for the innovativeness. Additionally, many reached parties found interesting and promising the peculiarity of the approach, that is to only report extract from sources, thus resolving the issue in mainstream generative NLP models, prone to providing their own "interpretation and summarization" of the matched information. This was recognised as particularly critical when dealing with laws and regulations, where the legal interpretation requires a specific competence. The possibility to then include experts legal practitioners as second-level micro-fees based consultation, complete the platform by providing ad-hoc assistance for still not-clarified questions of the consumer using the solution.		
2. Have further developments or research activities been planned as follow-up activities outside the frame of the Innosuisse project? If yes, what are these follow-up activities and which partner/s will be involved? An extension of the demonstrator to be more sensible to the contexts (such as the geographical location or the legislative jurisdiction) of the consumer is planned by the implementation partner. Potential cooperation with the research partner (HSLU - Informatik) for additional research in this direction has still to be discussed and agreed upon.	☒ Yes	☐ No
3. Have peer-reviewed scientific publications, inventions or patent applications been made? If yes, please give details in regards to the status (e.g., in preparation, submitted, filed, published, etc.) and indicate the corresponding title and abstract.	☒ Yes	☐ No

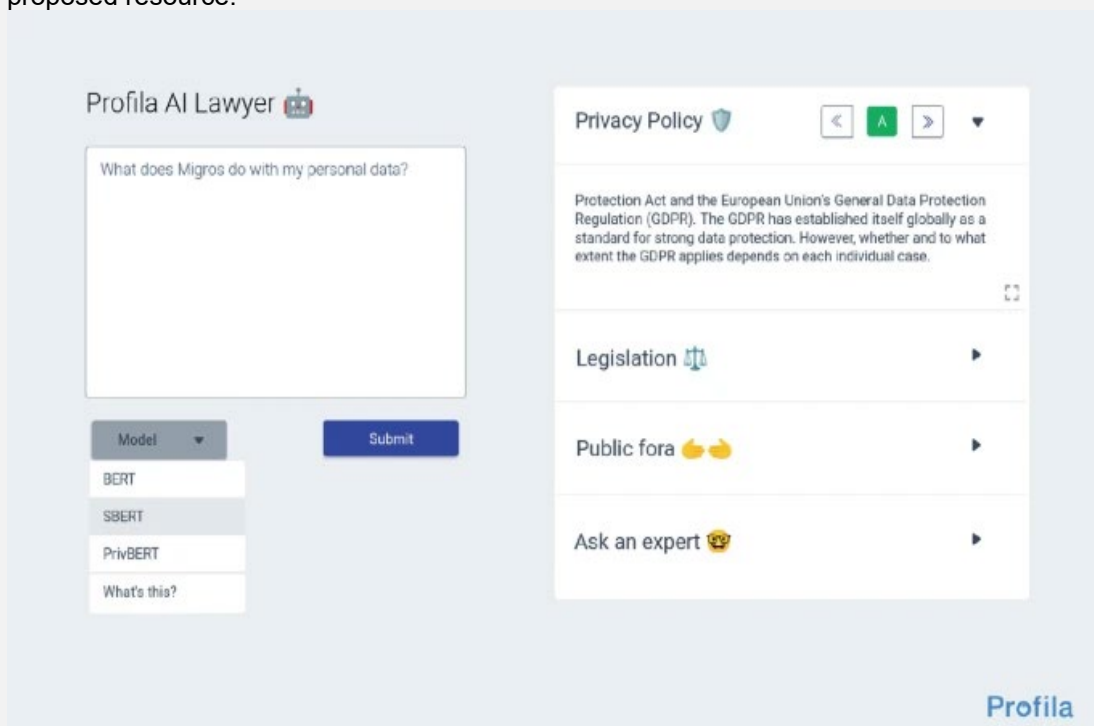
Two published articles in an international conference (HCI International) were published and presented: 1) Mazzola, L., Waldis, A., Shankar, A., Argyris, D., Denzler, A., Van Roey, M. (2022). Privacy and Customer's Education: NLP for Information Resources Suggestions and Expert Finder Systems. In: Moallem, A. (eds) HCI for Cybersecurity, Privacy and Trust. HCII 2022. Lecture Notes in Computer Science, vol 13333. Springer, Cham. https://doi.org/10.1007/978-3-031-05563-8_5 2) Mazzola, L. et al. (2023). A Question Answering Tool for Website Privacy Policy Comprehension. In: Moallem, A. (eds) HCI for Cybersecurity, Privacy and Trust. HCII 2023. Lecture Notes in Computer Science, vol 14045. Springer, Cham. https://doi.org/10.1007/978-3-031-35822-7_14					
4. Describe the implementation plan for market launch and give details of the commercial, economic and/or social benefit. The following points should be addressed: - The status of the implementation plan (i.e., the required steps from project end to the realization or market launch of the product/service by the implementation partner/s). - What implementation scenario is being considered (e.g., product/service, market, type of company, value-added chain)? - What are the main milestones and decision-making points for implementation? - What quantitative economic results can be expected from the implementation (e.g., turnover, profit, market positioning, social value creation)?					
The implementation partner is developing an approach to integrate the server-side REST services into an own platform it already has online. The monetization of the service and the model pricing will be further developed and tested in the next months within the same integrated unique access points for all the services and information from the implementation partner.					
5. Describe the financial status of the project, indicate to which extent the budget provided by Innosuisse has been used up and to which extent the implementation partners' own contributions have been provided: (2000 characters max, refer to the financial plan of the project; a detailed final financial report is to be submitted separately with all the necessary justifications)					
The budget planned for the innovation project has been fully used up, and some activities consumed more time and resources with respect to the original plan. Thus both sides (research institution with Innosuisse contribution complemented by cash contribution, and implementation partner with own contribution to salary costs) have overspent with respect to the approved budget in the signed agreement. This also demonstrated the commitment of both parties for a successful outcome of this innovation project and its relevance, both in scientific and in potentially commercial terms).					
5.1 For projects with implementation partner/s: Has the cash contribution been provided? If not, please explain why the cash contribution has not been paid or will not be paid. (According to the funding agreement the implementation partner/s shall transfer the cash contribution to the research partner/s half way through the project at the latest)				☒ Yes	☐ No
Fully paid within the agreed upon timeframe.					
5.2 Have you submitted the final financial report and related documents to Innosuisse yet? If not, please submit all necessary documents without delay as the final approval is based on both, the scientific and financial reports.				☐ Yes	☒ No
The financial report and the timesheet forms will be sent together with the present document.					
6. How successful was the project overall? (Give a ranking from 1 to 6: 1=very successful and 6=failure)		1 ☐	2 ☒	3 ☐	4 ☐
		5 ☐	6 ☐		
6.1 Are you satisfied with the way the project concluded? Please comment and justify your answer.				☒ Yes	☐ No
All the major milestones and deliverables were achieved, only with a slight time delay (reason for asking a 6-months delay in the project termination).					

6.2 Would you do anything differently if you had the opportunity to do so? If yes, please explain what you would change or modify.	☐ Yes		☒ No	
6.3 How do you assess the impact of the project in terms of ecological sustainability? (1 = strong / 2 = moderate / 3 = none) For example, refer to: • Sustainable resource use (commodities, materials) • Climate change mitigation (energy use, greenhouse gas emissions) • Biodiversity and restoration of natural habitats (land and water) • Prevention of pollution (waste, air pollution)	1 ☐	2 ☒	3 ☐	
By dematerializing and popularizing the access to legally-based check for privacy policies and regulation, we think there will be less need for printed material and thus reduce the cost and ecological impact of current legal-support for consumers.				
7. Provide a summary of the project results for possible publication on the Innosuisse website (max 1-page A4). (No data will be published without informing you and requesting your approval)				
Supporting consumers' comprehension of privacy policies and usage of their personal information collected online is an open problem. Legal agreements regulating this subject are usually difficult to interpret for the general public, due to their length and their domain-specific language and formulation. The resulting demonstrator implements a self-service REST interface, where customers can formulate questions regarding aspects covered by personal data regulations and privacy policies on a company website. The request can be formulated in natural language and the internal customised BERT-based NLP model provides a ranked list of resulting relevant passages in the already indexed documents. Users of the service have also the possibility to individually add new sources (company agreement regarding personal data treatment or national/international regulation and laws) that will "enrich" the underlying dataset, for further requests. Here a graphical abstract of the implemented demonstrator:  Additionally, consumers can search matches between their request and short focalized human-based feedback by legal scholars. This way, a second-level assistance based on micro-fees can be seamlessly integrated into the system, providing the right level of service based on the consumers perceived level of importance for a qualified answer. The provided answer will then be used to valorize the most useful and specialised answers, thus generating a long-term revenue stream of the legal practitioners, but also enriching the platform da-				

taset. A graphical abstract of the full system can be as follows:



A potential Web-based GUI for the initial release of the developed service. Here, the user is guided by the responses' headers to understand the trustworthiness and authoritativeness level of each proposed resource:



This innovation project provided a first prototype for an interface to extract relevant sections from privacy policies based on user queries in natural language by means of question answering within existing legislation and privacy policies, with the possibility to seamlessly obtain inexpensive professional punctual support for the more complex issues.

Innosuisse conducts a confidential online survey among all implementation partners at the end of the innovation project. The survey will take a maximum of 15 minutes. The link will be sent by e-mail separately. We request the implementation partners to take part in this survey as stipulated in the Innosuisse Funding Ordinance¹.

¹ Innosuisse Funding Ordinance Art. 10 - Obligation to provide information on implementation: «Implementation partners are required to provide Innosuisse on request with information on the implementation of the project results within five years of project completion»