

Project Partners



FZI Forschungszentrum Informatik, Karlsruhe



FZI is a non-profit research and technology transfer organisation, which is closely linked to the University of Karlsruhe, which is one of the universities of excellence in Germany. FZI offers its partners a unique interdisciplinary environment that fosters joint research among diverse fields of Informatics, Economics, Mechanical and Electrical Engineering. FZI has experience in a huge number of national and EU funded research, development, and specific support projects in different areas, and is member of the standardisation bodies

World-Wide Web Consortium (W3C), particularly within the OWL Working Group, and Object Management Group (OMG). The IPE department: FZI will be represented in the Consortium through its IPE department (Information Process Engineering) which encompasses the R&D teams headed by:

- Prof. Studer (knowledge management & semantic technologies),
- Prof. Stucky (business and process engineering, collaboration processes, VO),
- Prof. Lockemann (middleware, context management, cross-organizational workflow)
- Prof. Weinhardt (information engineering and management)

The IPE division within FZI has a strong record of transferring research results into industrial practice, both through its three Spin-Off companies and by contract research with industrial partners like DaimlerChrysler, SAP and numerous SME companies. FZI additionally is the focal point of a network of more than 100 IT companies within the high-tech region of Karlsruhe.

Jožef Stefan Institute, Ljubljana



Jožef Stefan Institute (JSI) is the main research institution for natural sciences in Slovenia. It consists of over 800 researchers within 25 departments working in the areas of computer science, physics, chemistry and biology. The Department of Knowledge Technologies is one of the largest European research groups working in the areas of

machine learning and data mining. It has approx. 40 researchers covering different aspects of data analysis with special emphasis on textual data, social networks/graphs, complex data visualization, cross modal analysis, temporal (stream) data and in particular on scalability of approaches and deployability of research results in real life environments. In the recent years the research shifted towards semantic technologies, where the main goal is to combine modern statistical data analytic techniques with more traditional logic based knowledge representations and reasoning techniques. The department developed several software tools, among others: Text-Garden suite of text mining tools, OntoGen system for ontology learning, Document-Atlas for complex visualization. The Centre for Knowledge Transfer, also participating on the VIDi proposal, consists from 10 researchers and technical staff working in the areas of research results dissemination and e-learning. In particular, the centre is well known by the portal <http://videlectures.net> with multimedia materials of numerous scientific events, on-line training materials, and collection of tutorials on different scientific fields. The centre is involved in training and dissemination activities for many FP6 projects.

<http://www.vidi-project.eu>



Corvinno Technology Transfer Center, Budapest

Corvinno Technology Transfer Center Non-profit Ltd is a spin off company of the Corvinus University of Budapest. It was born when a group of erudite people decided to create an organization that completely focuses on the exploitation of the gathered knowledge and experience. These people have demonstrated their aptitude and efficiency in leading organizations from the public and the private sector. The common feature of Corvinno team possesses a unique combination of innovation, management and technical expertise and above all sharing the same professional and ethical values. In accordance with the innovation life cycle, Corvinno is proud of leading prestigious research projects in the field of ICT, disseminating its results through conferences, publications and trainings, and offering consultancy and solutions to its clients.



INEPA, Institute for Electronic Participation, Ljubljana

The Institute for Electronic Participation – INePA's mission is founded in a concept of electronic democracy. Research objectives are focusing on eDemocracy, eParticipation, eGovernance, involvement and inclusion. The institute is the first Slovene non-profit non-governmental organisation fully dedicated and professionally involved in the area of electronic democracy. For this purpose, institute performs political science research and technical implementation for open-code e-participation web sites, forums. Special emphasis is put on designing, delivering, administering and moderating interactive web applications that enable deliberative and participative debates on public issues. INePA main activities:

- NGO's open source web portal Predsedovanje.si – a single access point for involving Slovenian and European NGOs in Slovenian presidency of the EU Council.
- Moderated e-forum Dialogue between the EP and NGOs
- On-line information service of the European Parliament Information Office for Slovenia



NOESA, Hungarian Public Employment Office

The Office for Labour and Social Affairs belongs to the Ministry of Social Affairs, it is main coordinating agency of the use of active instruments in the world of labour. Beside the central office, there are liaison offices in every county. The office is responsible to track the changes in employment, it coordinates the mobility, amongst other to administers the unemployment, also offers new jobs, re-training and social benefits. The office is an integrated part of the public administration and has very strong links to the civil and professional organisations, like employers' association, chamber of commerce, trade unions. The office under several different names and organisational structures but operates for almost 20 years, from the very beginning of the transition to the market economy.



LATA, Mestska cas Kosice-Sidliisko Tahanovce

LATA is a typical self-governmental subject with 22 employees and 23 elected councillors. The establishment of LATA consists of a major, a deputy major and a chief executive. The major is a statutory representative of a city ward and he coordinates all activities. He is also responsible in all questions of life in the city ward. The deputy major is a representative of councillors and he organises and coordinates their activities. The chief executive is a director of a local authority. She coordinates and controls the activities of employees. The local authority consists of four departments – administrative and social, economical, for building and environment and organizational and legal. The representative of these departments is a head of department. Each department is divided in several sections they are carrying out specific tasks. The employees of departments are well-educated persons in their working area with long lasting experiences. Some of them work in this position more than 10 years. Through this period LATA has been a member of various IST programs and projects where LATA has played the role of the testing member and has helped to build an architecture of the basic knowledge of e-Governmental programs.

<http://www.vidi-project.eu>

Visualising the Impact of the legislation by analysing public Discussions using statistical means

(no: EP-08-01-014)





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Policy development can be considered in many respects as an innovation process, where there is a need to initiate ideas, collect evidence for and against the ideas and finally develop a workable policy. This process requires considerable discussion with businesses, NGOs and civil society to ensure that both experts in the subject domain can provide input and also that those that might be affected by the resulting policy have an opportunity to provide evidence. There is a need to ensure that knowledge collected through online discussions is appropriately identified, represented and shared. However, although online consultations through discussion forums are typically moderated, any analysis is typically left to after the consultation period in terms of performing various statistics on the total number of contributors, total number of posts, the most active contributors and the most popular posts. Although these are interesting metrics, they do not enhance the conversation or provide potential users with real insight into the topic under discussion. Therefore such analysis is not available in a manner that would ease navigation, comprehension, and understanding the social interaction. What is needed is an analysis that has the potential to support users to have more informed discussion and to support government to better understand the emerging arguments and ideas contributing to the policy.

In order to resolve this problem, various visualization techniques can be applied to make knowledge emerging through the on-line discussion more explicit. Proper visualization metaphors have the ability to support the users in improving their ability to process large and complication information spaces. Such techniques include visualization of both quantitative and qualitative data within and about the discussion. The visualization can show which topics are popular and how the interest changes in the time, i.e. how do they evolve over time. Moreover, such an analysis can show what people

like and what dislike regarding the topics they are discussing about (a kind of sentiment analysis). The main advantage of the visualization is that it enables a multidimensional view on a discussion and not one-dimensional interpretation of its results. For example, instead of having a statistically-based statement that 60% of citizens support legislation draft in an on-line discussion forum, a proper visualization of this discussion can show how and why it happened. Further, it can show that at the beginning of the discussion 85% people supported the draft (related to "how" question), but after introducing the issue of the climate protection, the number of supporter decreased relatively to opponents (related to "why" question). In other words, the role of discussion analyses is not only to support policy making process with the public opinion in terms of "citizens like it" or "citizens dislike it", but rather to explore the "why" and "how" (beside "what") in the public opinion. This process has two important implications:

- 1) Policy makers can not only hear (what), but also understand (how, why) public opinion, which leads to a better understanding of the impact of the legislation**
- 2) Citizens can not only express (what) but also efficiently explain their opinion, by using the current context of the discussion (how, why), which leads to their more active/detailed involvement in the participatory legislative process, which again leads to the better understanding of the impact of a legislation**

Therefore, the main goal of the visualization is to support various types of analyses which can explore the long tail of the discussions, i.e. the information hidden between "big" arguments, which in fact contributes enormously to understanding the public opinion. Additionally, statistics of these analyses plays an important role in assessing the costs and benefits of proposed or adopted legislation.

Current tools for the visualization miss this opportunity, especially the explicit link between the discussions related to legislation and their impact on this legislation. The main challenge of VIDI proposal is to close this gap, as presented in Figure 1.

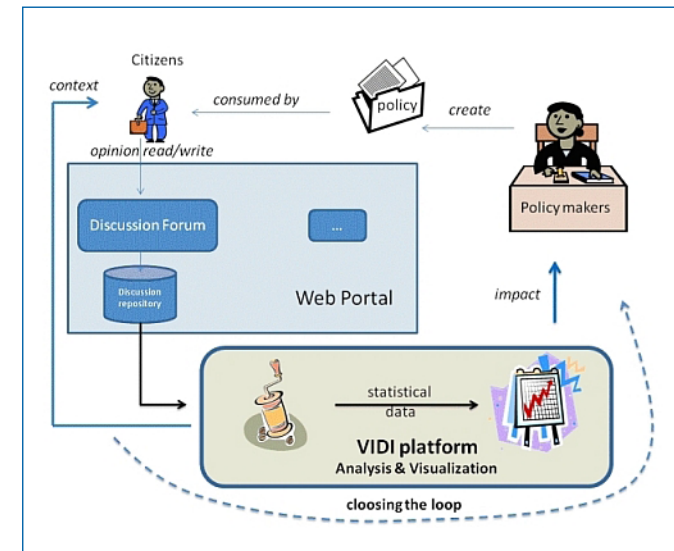


Figure 1. Closing the policy making loop: Policy makers create some legislations, which are consumed by citizens, who express their opinion through participating in various discussions forums. VIDI platform takes data from discussions, analyzes and visualizes it, returning to the policy makers the public opinion about the legislation. In the same time VIDI platform gives the context about current discussions to the citizens, that provokes their more active involvement VIDI represents a very innovative technological solution, based on the powerful combination of the linguistic and statistic analysis of the text documents (discussions) in order to extract information from them, known as Text Mining, which enables further, extensive, sentiment-based analyses of the discussions, known as Opinion Mining, inclusive estimating their impact on the legislation and the "cost" of implementing the legislation. We use novel visualization techniques for presenting different views on the information and enabling efficient navigation through this large information space. In particular, VIDI will provide an efficient toolset for an advance visualization of messages posted in an on-line discussion forum, that will support „monitoring“ and analyzing discussions. The ultimate goal is a better understanding of emerging arguments and ideas contributing to the policy making process.