ADVisE

Adaptive **D**ata **Vis**ualizations Fram**E**work

http://advise.cs.ucy.ac.cy

University of Cyprus
Department of Computer Science

Meeting Number

1

MEETING MINUTES

Project Kickoff Meeting

Date	22/02/2017
Time	10:00- 16:00
Location	Dept. of Computer Science, University of Cyprus, Room #148, 1st Floor
Participating Partners On-site	▪ Prof. George Samaras **(UCY)** ▪ Dr. Panagiotis Germanakos **(UCY)** ▪ Dr. George Spanoudis **(UCY)** ▪ Georgia Kalli **(UCY)** ▪ Dr. Panayiotis Andreou **(UCLAN)**
Participating Partners Remote	▪ Dr. Constantinos Mourlas **(NKUA)** ▪ Olympios Toumazou **(RAI)**

DESCRIPTION

The meeting started with an introduction by the project coordinator Prof. George Samaras. The meeting then continued with a presentation from all partners. University of Cyprus (UCY) presented the highlights of the ADVisE project. Next, UCLAN presented earlier work and expertise in data analytics and visualization methods and techniques. The NKUA discussed previous work on user modelling and data mining algorithms applied on insurance data sets, followed by a presentation of the company profile and team of RAI, including some description on ongoing projects and other related systems/products.

Next, the UCY team presented a general overview of the ADVisE project and its main objectives, followed by a discussion of its work packages, tasks and deliverables. Throughout the discussion on the work packages and deliverables various comments and issues have been discussed by all partners. The most important comments are summarized below:

- NKUA raised an issue regarding the design of the user studies of the project. In particular, NKUA suggested that user studies should be conducted in early stages of the project with the aim to investigate the effect of cognitive factors of users in the design process of data visualizations.
- UCY pointed out important considerations that should be taken into account in the design of the users' cognitive factor elicitation process. Various cognitive aptitude tests and cognitive style theories (Riding's CSA, Witkin's GEFT, Peterson's VICS, etc.) have been suggested for consideration.
- UCY suggested different explicit and implicit user modeling techniques to elicit various cognitive factors of users and incorporate these in the user model of the ADVisE framework.
- RAI raised the challenge how the user modeling component of the proposed system could be utilized by the various business roles, professionals and decision makers.
- UCLAN introduced also the necessity of investigating thoroughly the collective expertise of the end-users and to start early the design of the visualization engine component so to be able the soonest possible to obtain a variety of data visualizations from the provided data sets.
- NKUA emphasized, in addition to the last point, how to provide different adaptation effects according to specific cognitive factors of users and what attributes of visualizations should be altered.
- UCY suggested as a pre-phase of the user studies and experimentation to learn from the experts; to create interview guides and conduct on-site interviews/ observations collecting information regarding professionals' and decision makers' daily business tasks and actions on data visualizations based on frequent requests. To formulate focus groups for collecting requirements, needs and pain-points in the workflow process, and receive suggestions regarding the relationship of visualization types and goal-directed actions. A new questionnaire for collecting end-users' expertise should be devised. All this knowledge could feed the design of the first user studies for measuring the impact of the cognitive factors on specific types of data visualizations and formulating accordingly the mapping rules to be used in the adaptation engine.
- UCY and UCLAN proposed the development of a seamless approach of cognitive factors elicitation. A point has been raised during the discussion how this could be achieved given the heterogeneity of the tests to be used.
- Thorough discussions were conducted on future prospects of the work. In particular, UCLAN and RAI suggested that the proposed framework could be utilized in different

lines of businesses. In addition, the interaction challenge introduced of designing adaptive interactive environments for data exploration in smaller devices other than desktop PCs, such as tablet PCs and smart phones.

The session ended with a discussion on the current deliverable and task assignment. Main aim of the discussion was to resolve any inconsistencies or blur areas that could hinder the effectiveness of execution and collaboration. The discussion concluded with the assignment of task leaders and the work that should be carried out on each task and deliverable. The final task assignment list is presented below:

- Task 1.1: Administrative and Financial Management (UCY)
- Task 1.2: Technical Management and Quality Assurance (UCY)
- Task 1.3: Risk Assessment (UCY)
- Task 2.1: Dissemination (UCY, UCLAN, NKUA, RAI)
- Task 2.2: Exploitation (UCY, UCLAN, NKUA, RAI)
- Task 3.1: Analysis of Existing Data Visualization Tools and Methods (UCY, UCLAN, NKUA, RAI)
- Task 3.2: Adaptation and Personalization Processes and Techniques (UCY, NKUA)
- Task 3.3: Human-centred User Model Specification (UCY, NKUA)
- Task 4.1: Content Generalization/ Specialization Analysis (UCY, NKUA)
- Task 4.2: Data Transformations (UCLAN, UCY, NKUA)
- Task 4.3: Mapping Rules (UCY)
- Task 4.4: Adaptation Engine (UCY, UCLAN)
- Task 5.1: Platform Architecture Design and Specification (UCLAN, UCY)
- Task 5.2: Specification and Development of Security and Privacy Infrastructure (UCY, UCLAN)
- Task 5.3: Responsible Industry and Innovation (UCLAN, UCY)
- Task 6.1: Components Development (UCY, UCLAN, NKUA)
- Task 6.2: Platform Integration (UCLAN, UCY, NKUA)
- Task 6.3: Platform Testing and Validation (UCLAN, UCY, NKUA, RAI)
- Task 7.1: Theory Verification and Human-centred User Model Validation (UCY, UCLAN, NKUA, RAI)
- Task 7.2: Pilot Trial Set-Up and Operation (RAI, UCY, UCLAN)
- Task 7.3: Practical Design Guidelines (UCY, RAI)

In the last session, the UCY team presented preliminary versions of various candidate Web-site designs and functionality that would be used as the official Web-site for the ADVisE project. All partners agreed to utilize the Web-site design illustrated in Fig. 1 as the official Web-site of the ADVisE project. The partners also commented on the overall design and functionality of that particular Web-site, and the UCY team will incorporate these comments in the next version.

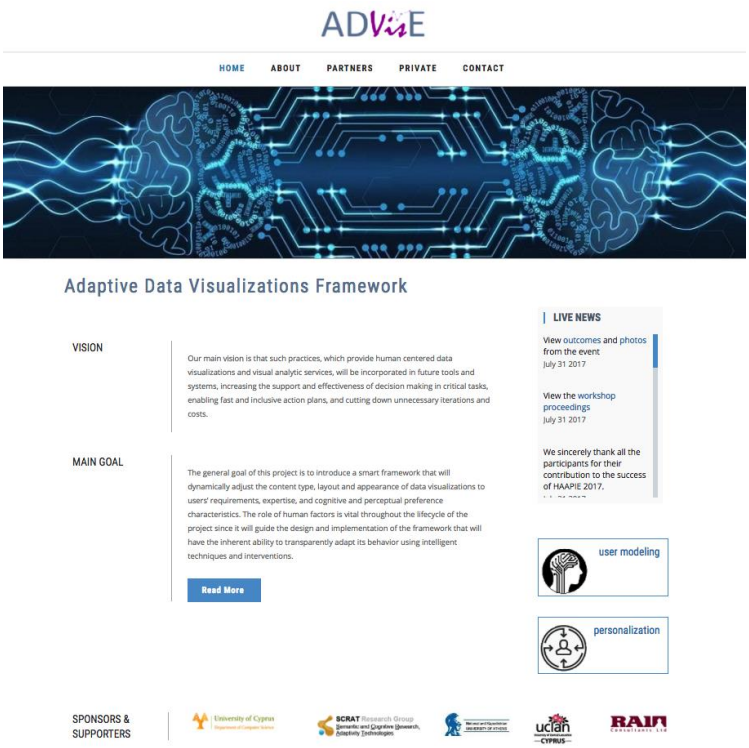

Figure 1: ADVisE Web-site Design

The meeting ended with a poll about the logo that will be used for the ADVisE project Web-site and deliverables. The consortium voted for the following logo (see Fig. 2):

Figure2. ADVisE Logo