

ACTIVE News December 2008

Editorial

Dear reader,

This is the first issue of ACTIVE News, the newsletter of the European research project ACTIVE. The project aims to increase the productivity of knowledge workers. What that means in detail is explained by Paul Warren, the coordinator of ACTIVE. In order to reach the project goal, ACTIVE will create a software environment called the knowledge workspace; read the article by Igor Dolinsek to learn more about it.

An important part of the project is the validation of ACTIVE's solutions, which is described by Tom Bösser and Ali Imtiaz and complemented by Ian Thurlow's article on the BT case study.

We hope you enjoy reading this newsletter, and we would appreciate your feedback.

Milon Gupta, Eurescom

Project results & activities

The Aims of ACTIVE

The goal of ACTIVE is to materially improve knowledge worker productivity and effectiveness, and through that contribute to the success of the organisations in which they work. Such a goal hardly needs justification. Knowledge workers, i.e. people who perform mental rather than physical work, are an increasing proportion of the global workforce; and even those who think of themselves as primarily having practical skills, e.g. in agriculture, construction or production engineering, often spend a proportion of their time interacting with computers or other information devices. So the success of the global economy depends on the success of knowledge work.

Of course, there are many aspects to helping knowledge workers; we are focussing on three which we believe to be urgent.

Prioritising information

Firstly, knowledge workers need help in dealing with the enormous quantity of information delivered to them daily and available in their organisations and on the Web. We see the key to this as understanding the context of the user's current work and prioritising information according to that context. We also know that switching context inhibits productivity. Our technology will make context switching easier and swifter, in particular by remembering each of the user's contexts.

Sharing information

Secondly, we know that knowledge workers need to share information. Within the organisation, knowledge workers who are unaware of each other, and may even be on different continents, need to share their work. That work might be the text of a customer proposal prepared by a salesman, a systems design created by an engineer, or the results of clinical trial written up by a medical researcher. In the past systems to share knowledge have tended to be powerful but cumbersome, making use of formal schema. In ACTIVE we are looking at bringing together the power of the formal approach and the ease of use of evolving Web2.0 technologies. Of course, what is written down is important; but it is not everything. Knowledge workers need also to share the tacit knowledge which is in their heads. To do that the right people have to be put in touch; and that is another part of ACTIVE's goal of helping knowledge sharing.

Capturing informal processes

Thirdly, we know that knowledge workers create their own informal processes, distinct from the formal business processes laid down by their organisations. Yet these informal processes are rarely written down. This prevents sharing between co-workers and leads to reinvention. ACTIVE aims to capture those informal processes so they can be reused, shared and improved.

Paul Warren, BT

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The ACTIVE knowledge workspace

One of the project goals is to build a valuable software environment for knowledge workers. To achieve this it is important that end users are provided with this environment at the early stages so that they can provide their feedback and help the developers refine the software.

Therefore the early prototype of the ACTIVE knowledge workspace will be delivered as running software, implementing some basic functionality. In addition, a number of mock-ups will be provided to showcase the usage scenarios in situations where it is not possible to develop the running software due to time and effort constraints. ACTIVE is building on Web 2.0 concepts like user collaboration, which are practised on the public Internet. These concepts are adjusted to fit the needs of the knowledge workers in the enterprise environment.

ACTIVE Web portal

The knowledge workspace will be used only in corporate Intranets. Therefore it is possible to share the information about the participants and their activities in a more relaxed way than on the Internet. An early release of the knowledge workspace will be delivered via the ACTIVE Web portal. In addition, users will be able to download from the portal and install add-ins with some basic workspace features for Microsoft Word, Internet Explorer and Outlook. Early releases of the Knowledge workspace will support registered users, who can form various groups and share their information resources like Office documents and URLs. The ACTIVE workspace will support a resource access policy where creators of the resources can decide to allow access to their resources to certain groups of users or block some users out.

Context management

ACTIVE will explore the context concept from several aspects. The top-down approach to context management will be already built into the early pro-

totype of the ACTIVE workspace. Users will be able to explicitly create and name their working contexts and will be able to share them and to switch between various contexts on their desktop. Outlook, Internet Explorer and Word will be extended with some basic functionality to support the context concept. Resource usage in those tools will be channelled through the context names.

Tagging

Context names will be used in a similar way like popular tags to provide meta-data on information resources, but 'tagging' will be performed automatically by the tools. The end user will select the working context by using a TaskBar tool on the desktop. From then on, all resources processed by the ACTIVated tools will be automatically tagged with context names. This will make it possible for users to search for the information resources they have been using in a certain working context. Users working in the same context at a certain point in time will be aware of that through the ACTIVE Web portal.

Igor Dolinsek, Hermes Softlab

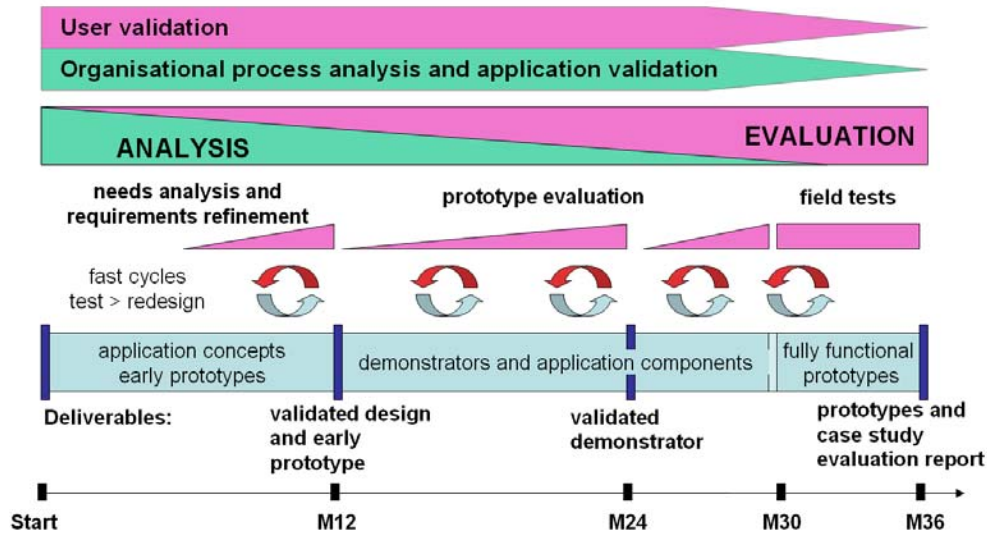
Validation of ACTIVE technology

The purpose of validation is to ensure that the technology developed in ACTIVE can be integrated and scaled to enterprise-size applications which are accepted by users and bring economic benefit. A large project like ACTIVE can validate a technology which is applicable wherever knowledge work is performed in a range of different applications and user groups.

Three case studies

The three case studies at BT, Accenture, and Cadence Design Systems support their staff in sharing expertise and navigating knowledge processes in different ways.

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the results to select the best technology for their purpose and their organization.

All validation activities are based on a comprehensive set of leading-edge methods for efficient and valid assessment of knowledge management technologies. The ACTIVE partners leading the validation tasks will carry out training activities to make the advanced validation methods available in the industry and for technology adopters.

Tom Bösser, Kea-pro
Ali Imtiaz, FIR

User tests include:

- Early analysis of user needs
- Tests of initial prototypes and mock-ups
- Experts and user representatives test the prototypes and components in subsequent development stages
- Conclusive field tests of fully functional prototypes under realistic conditions

Improved quality of information

ACTIVE innovations are visible as new functions on the GUI (graphical user interface), having a direct effect on work procedures and user interactions. The back-end functionality is not directly visible, but has an impact on the information available to users. The improved quality of information will profoundly affect organizational behaviour, for example by reducing the need for direct interactions.

The conclusive field tests will demonstrate the benefit created with ACTIVE technology for individual users and user organizations in terms of efficiency of work processes, effectiveness, and quality of information. Potential adopters can use

The BT case study

The BT case study will validate and test ACTIVE technology in BT Business, a business unit that supplies integrated information technology (IT) and communications services and solutions to UK-based small and medium-sized enterprises (SMEs). Initial interviews with senior managers have revealed two strategic imperatives.

Firstly, there is a need to get bid proposals out to customers as soon as possible after the initial invitation to bid. We know that the faster a proposal is in a customer's hands, the more likely the customer is to close the deal.

Secondly, senior managers want to be more proactive in anticipating customers' needs. One aspect of this is recognising that a solution used for one organisation at one end of the country could be applicable to an organisation, perhaps in a different industrial sector, at the other end of the U.K.

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Reuse of knowledge

The key to both goals is knowledge reuse, which first requires knowledge sharing. We want to reuse solution designs to stop reinventing the same solutions. We also want to reuse the tacit knowledge, acquired through experience, which resides in people's heads. ACTIVE technology has an important contribution to make to these goals.

Increase of personal productivity

In addition to the strategic objectives, a need for an increase in personal productivity has been identified. When our customer-facing sales staff are back in the office, they need information; but they want that prioritised according to their current customer. When preparing for tomorrow's meeting with a customer, they want to know everything that is relevant to that particular customer. In a few days time they may be thinking about a different customer, and that must be reflected in how their information is prioritised. The solution to this lies in ACTIVE's use of context to guide information delivery.

Finally, our BT people use complex information systems. They have business processes to help them, of course. But they also create their own informal processes, their own ways of navigating these complex information systems. ACTIVE will help capture those processes, so they can be shared, reused and improved.

In BT we shall be trialling our technology in a community of several hundred people. We intend to make a real difference to the way those people work, and we hope that their experiences will make a real difference to the way in which ACTIVE evolves.

Ian Thurlow, BT

Past events

INSEMTIVE 2008 in Karlsruhe

On 26 October 2008, the First Workshop on Incentives for the Semantic Web was held in Karlsruhe, Germany. It was co-located with the 7th International Semantic Web Conference ISWC2008. The workshop was supported by ACTIVE.

Further information on the event website at <http://km.aifb.uni-karlsruhe.de/ws/insemtive2008>

Upcoming events

6th Annual European Semantic Web Conference

Heraklion, Greece, 31 May – 4 June 2009

Event website: <http://www.eswc2009.org>

ACTIVE is sponsoring the videoing of the event.

About ACTIVE

ACTIVE is a consortium of twelve partner organisations from seven different European countries, co-ordinated by BT. ACTIVE aims to increase the productivity of knowledge workers:

- by tailoring information delivery according to task context – prioritising the information needed now;
- through powerful but easy-to-use knowledge sharing tools;
- by enabling the reuse and sharing of the informal processes used by knowledge workers.

Project website: www.active-project.eu
