

“Organizations need to show they are transforming, and we need to help our customers create their own workable cyberspace, offering services that really engage and enhance brand loyalty. And the roadmap for this can have a number of shorter-term, separate propositions that will integrate into a single ‘full spectrum’ approach.”

**Jethro van Dorp**

# PREPARING FOR THE FUTURE

TECHNOLOGICAL DEVELOPMENTS NOT TO BE DISCARDED



**Han van der Zee**  
For a full biography, please see page 31.



**Hubert Tardieu**  
Top sponsor of the Atos Origin Scientific Community and CEO advisor.

**W**hen the economic crisis comes to an end, we shall face a very different world. It is difficult to anticipate what new regulations will have been introduced and how enterprises and public services will react to them. However, we can anticipate how technology will shape this new world: with four billion active mobile phones and two billion Internet users, several hundred million of us are actively participating in social networks within communities or in open collaboration at work. It is clear that our user experiences will profoundly evolve—becoming more connected with others and with smarter systems.

The Y generation (those born between 1976 and 1989) is way ahead of the game in this respect, as the pioneers of SMS and Twitter interactivity and sharing content on Facebook and MySpace. This generation did not opt for these changes but have moulded

their social habits around the technologies as they developed. The ‘Y-gens’ cannot envision living in a world without them.

Inter-connectivity between individuals has been made possible because of the technology, but only now will it impact significantly on both our private lives and our working environment at the same time. Belonging to communities with people having similar interests or collaborating with co-workers beyond the traditional hierarchical line will radically change our experience and bring a collective dimension to our behavior and decisions. Communities will influence our decision patterns, relying more and more on the opinion of friends or colleagues to such an extent that preformatted marketing messages will soon be seen as out-of-date. In the working environment, collective intelligence will be increasingly promoted by enterprises and public services. >>

“People around 30 will get involved with collaboration communities but are not wholly engaged or familiar with them. For younger people—say, those in their early 20s and below—these collaborative communities are second nature. As these people are now joining large organizations, management must prepare the workplace as an attractive environment in which to do business for this new generation. This concept is understood, but a willingness to initiate the change is currently lacking. Admittedly, it’s not a quick process but, by focusing on one area at a time, short-term propositions do exist. One good starting-point that demonstrates how social networks can provide additional and inevitable corporate value is social network analysis—allowing organizations to influence opinions and connect with the really powerful players in networked communities. Ultimately, we should offer integrated technology and consulting services to establish professional social network presence for our customers, with the spotlight on end-user experience and how to make that instant formal interaction.”

**Jethro van Dorp**

**Jethro van Dorp** is currently working as Principal Consultant at Atos Consulting in the Netherlands. His main areas of expertise are IT governance, risk, and compliance in which he manages several programs for central government and banking industry. He is also a track leader in the scientific community for which he is leading a team focused on social networking, including the meaning and value of the social graph (information stored in social networks) in relation to business process management.

“Organizations must not expect instant change and added value simply by deploying collaboration tools. Collaboration is about knowledge-sharing, the knitting together of partnerships and communities inside and outside the organization. The problem is, many organizations cannot fully leverage the knowledge within their own four walls, making it all but impossible to do so in the wider working space. The answer lies in a change of management process and culture, rather than just substituting technology. Indeed, this isn’t a case of rip-and-replace at all but of integrating new with old, of empowering staff to drive new business processes with common objectives and values. Achieving this depends on how much an organization is willing to allow its employees to realize the opportunities available with new technology. Picking a pilot group—perhaps a whole department—to measure the tangible business benefits is definitely the way to start, as long as the group has a real need to collaborate.”

**Adil Tahiri**

**Adil Tahiri** is a Strategy Director at Atos Origin Managed Operations and a member of the scientific community. He has more than 10 years’ experience in delivering large and complex IT transformation programs with particular focus on infrastructure technologies and collaboration tools.

» Processes will be automated and standardized whilst simultaneously maximizing flexibility and encouraging the use of technologies to create ad hoc working groups. Making decisions at work without getting the best available expertise will not be seen as acceptable. For both the private and working environments, information and communication technologies (ICTs) will be an unprecedented tool to support both the social graph that describes the relationships between individuals in a community and the process agreed by the organization to get the best efficiency for collaboration and decision-making.

Beyond this paradigm shift, resulting from inter-connectivity with others, users will also benefit from connection to smarter systems.

Access by everyone to everyone through mobile

devices will radically change our user experience. When we communicate with the surrounding world, users will expect systems to recognize which type of device they are using, which kind of connection is available, and where they are located, even up to the point that the required data or function is automatically ‘gestimated’. This is ‘context-aware computing’ that will provide the user with ready access to the relevant enriched services, as well as to friends and co-workers currently available.

User interfaces and the timely application of context will be the most visible change in user experience. Multi-touch screens, accurate positioning and orientation, gesture awareness, and voice recognition will make ICT the natural working tool to an extent that can today only be appreciated by watching children playing with video games. In this emerging

picture of Ubiquitous ICT, no-one except the ICT professionals is currently interested in the machinery just around the corner.

Professionals need to be prepared for massive shifts in provisioning, invoicing, and delivery models, giving access to these context-sensitive services everywhere without charging for the infrastructure, with a service that is rendered in a way that can be measured by the user. This means a radical move from the current delivery model to alternative ones—today referred to as ‘cloud computing’ or ‘SaaS’. These services can only be delivered through incredibly complex systems. They have to be controlled by monitoring systems, which in turn will guarantee a high level of services despite inevitable failures in the infrastructure. Building smarter systems to give a better experience to users is the challenge ahead of us.

“Trust and openness are crucial with the collaborative approach. To operate successfully and safely in the networked world requires a comprehensive level of authentication and security. To this end, organizations must recognize that clear GRC and Identity & Access Management processes and technologies must already be in place.”

**Jethro van Dorp**

Four building blocks have been identified that will interconnect the eight service areas and play a significant role in the Atos Origin vision, identified to bind the service areas to an holistic view of interconnected services: **Process Model, Social Graph, User Interface, and Context.**

**Process Model** describes the sequence of tasks to be performed in order to implement a business process or to handle an event occurring within the context.

**Social Graph** is the data model of person-to-person relationships as captured to represent the social network.

**User Interface** is the combined hardware and software engine, which allows the user to control and command the appliances, giving access to the applications and systems.

**Context** will be characterized by the user’s location, activity, environment, identify, and/or community with the delivery of the service also informed by the capabilities of the network and the user’s appliance.

“The recession has made us think a lot harder about delivering investment value, so it is no surprise that quantifying the business impact of social networking remains a challenge. You can’t switch from a command-and-control mode of operations to a fundamentally engaging and collaborative approach overnight, especially as the network effect requires many people to actively contribute voluntarily. Very often, the number of active contributors to internal Wikis and blogs is significantly lower than those who just use the information: growing such communities is a gradual, sometimes lengthy, process. The danger is these Wikis and blogs remain only standalone tools. Viewed in this way, they cannot engage with other areas of the business and add value. At the very least, an organization must integrate these tools with a reliable and accurate search facility to allow quick access to shared knowledge as part of the first phase of exploitation.”

**Adil Tahiri**

The Atos Origin Scientific Community was established in May 2009, at the initiative of the CEO and under the sponsorship of Hubert Tardieu, to anticipate technological and scientific disruptions in the Atos Origin field of operations. It includes 50 leading Atos Origin scientists, nationally and internationally recognized in all domains of excellence and technical innovation.

As part of its charter, a community vision has been developed around eight challenges (new challenges such as Green IT and Work Environment 2014 are in development), which represent a grid of services to be addressed by Atos Origin in the future.

**Alternative Delivery Model (1)** is reflecting the current trends such as cloud computing and SaaS.

Ubiquitous delivery will facilitate the emergence of **Context Aware Applications (2)**, which can be used via ambient smart objects either in a working or domestic environment with the ability to apply context in a timely fashion to the user’s current situation. This context will relate to what is known about the user that is relevant at the time a service is delivered. Delivery will also be informed by device type, network capability, and method of access. Context Aware Applications also have the intelligence to combine inputs into pre-programmed responses.

User Interfaces will gradually take advantage of multi-touch screens, motion capture feature, and enhanced graphics using consumer electronics advances in **Infotainment and Gaming (3)**.

In addition to context, applications will benefit from the knowledge of social networks to which the user belongs, either for the purpose of **Collaboration (4)** at work or for grouping in a **Community (5)** of interest.

The social network will be a major disruptor for the way Ubiquitous ICT experiences will be perceived. In the context of Collaboration, **Business Process Management (6)** will facilitate Lean business processes that can be translated into executable business logics.

A specific class of application in Collaboration mode will be **Decision Support (7)**, which will enable business groups to take collective decisions. Use of simulation tools will help both to anticipate possible problems and to facilitate user adoption of these business processes. **Control Command Systems (8)** will be required to monitor and control all of the complex connections, information flow, and systems involved.