

IST 2002 Conference, Copenhagen

Workshop: Organisational Ecosystems for SMEs

Executive Summary and Conclusions

Small and Medium Size Enterprises (SMEs) need to take account of the fact that networks were rapidly changing. The best way to survive and be competitive was to be adaptable. However, the cost of different integration approaches could vary significantly. Also for this reason, the European Commission must not just publicise this process, but drive it. At the same time, SMEs should take advantage of expertise that could be offered by universities, and create enduring relationships.

SMEs were more susceptible to present productivity issues, rather than to possible future advantages. It was therefore crucial for policy makers, at a European Union as well as at a local level, to provide necessary information in the present, and not to submit scenarios for the unforeseeable future. In this respect, it was important to underline that SMEs, as well as customers, sought business solutions more than a specific technological one. In the future new models will emerge and bringing a scenario of multiple co-existing models (e.g. *utility model*, in which consumers could use and pay for a specific service only when it was of use to them; *on subscription model*, *sharing model*, etc...). The local level was often more pragmatic, owing to its proximity with people and organisations. It should therefore complement any European Union policy. It was stressed that only a full involvement at local could really help in developing good organisational ecosystems for digital SMEs.

Open-source was presented as a feasible solution for most problems related to the developments of the basic software infrastructure. The main advantages could be flexibility, re-distribution, the right to use software in any way, avoidance of dominant positions, etc. However, open-source could not be considered the solution to be necessarily applied for all the applications living in the ecosystem.

Details of Main Issues Raised

The session identified and discussed scenarios on innovative Information and Communication Technology (ICT) use for small organisations and small businesses, including, for example, improvements and innovations using ICT in supply chain management and customer relationship management. Also, the session addressed innovative business models such as new-generation utility Application Services Providers (ASP).

Marko Seppa, of the E-business Research Center of Tampere, in Finland, presented a local model for innovation. He referred to an initiative of the municipality of Tampere (eTampere) that addressed some of the most relevant issues and goals set by the *eEurope* initiative. Marko Seppa presented eTampere as a local pilot that brought schools, homes, citizens and enterprises in the network environment and increased digital skills. The logic of the make-up of this project was to take account of four major factors – technology, economics, social and cultural. Through the action of six sub-programmes addressing these main areas, the eTampere initiative strengthened the knowledge base, created new businesses and placed public services on-line. Responsible partners were the City of Tampere, the University of Technology in Tampere and the University of Tampere as well as other educational institutions. Marko Seppa stressed that local realities were essential for the developments of the Information Society as a whole. At this level it was possible to be more pragmatic and therefore better address individuals' needs. Also, it was clear that SMEs represent in themselves a *very local* reality.

Karstin Bodell of IBM focussed on small businesses and current market trends. The main issues raised touched customers' needs and wants, the barriers to e-business and some scenarios for the future. Customers considered an outstanding Information Technology (IT) level as a *given*. Thus e-business issues should be tackled by business solutions for SMEs, rather than by seeking technological answers. At the same time, e-business developed according to different maturity levels, ranging from instant messaging to the provision of Web services. Corresponding levels of IT maturity were, then, a necessary support to this evolution. Overall, however, security and trust and the Return on Investments (ROI) were still major barriers to a full development of e-business. Karstin Bodell also suggested that in the future the focus of e-business would shift even more on the demand side. Quoting the Chairman of IBM, she described the *utility model* in which, as was currently the case for the use of electricity, IT instruments would be paid for only when actually used.

Andrea Nicolai of T6, presented the view of digital ecosystems for small businesses, focusing mainly on the issue of change. Quoting Charles Darwin, Andrea Nicolai underlined that, also with respect to industry and businesses at large, "not the strongest [...] survives, but the most adaptable to change." The increase in computer ownership, in clients and servers and the change in roles strongly influenced today's networks. In addition, networked markets were organising themselves thanks to information available through the Web, and could offer a varying set of services.

With a view to possible future developments, Andrea Nicolai stressed that, just as electricity, software would run all devices and would be distributed everywhere. However, different integration approaches clearly differ in terms of costs. For example, the service oriented integration faced higher costs in the customisation phase, while Web services adapters were strongly susceptible to changes. Moreover, building digital ecosystems also encompassed well-known problems and constraints, such as the relation between new services and old clients, reliable business process composition, interoperability, heterogeneous combinations of software and hardware, the lack of central control, the need to adapt the environment to enhance efficiency etc.

Peter Weiss of FZI Forschungszentrum Informatik an der Universitaet Karlsruhe addressed adaptive open-source environments for small organisations. He underlined two general assumptions. One was that SMEs were focussed on systems that could support their businesses rather than on the overall developments of e-business, and the other was that they still depended on bigger businesses.

In this view, the starting point for ICT support to SMEs was the consideration of different scenarios for the future, where extended products and standards would be present. Peter Weiss stressed that *open-source* was open for (nearly) every problem. But, the pre-requisite for positive externalities and their exploitation was the presence of an organisation to ensure standards. Peter Weiss argued that open-source was a win-win situation for suppliers, the community and consumers. The main advantages of open-source could be flexibility, re-distribution, the right to use software in any way, etc.

Jonathan Sage began the discussion session by underlining first of all that the different presentations focussed on different, but complementary views: while Marko Seppa from Tampere gave an example from a local community, Andrea Nicolai suggested a vision for the future. Karstin Bodell and Peter Weiss, on the other hand, had a more pragmatic approach, namely what could be used by SMEs.

He also, communicated that the European Commission has established specific web-pages where you can follow the initiatives, the debates and the documentation related to Digital Ecosystem: <http://www.europa.eu.int/godigital> under "SMEs research" item.

After this initial remarks, the ground was open for discussion, questions and answers.

A first issue concerned the interaction between universities and the business environment. A member of the audience emphasised the role of students in assisting research and development programmes within businesses.

Moreover, concern was expressed on a possible overestimation of SMEs and their grasp of models such as eTampere. The issue here was how to help SMEs reach such an understanding. Addressing this point, Jonathan Sage underlined the necessity of a pragmatic approach. Providing the needed information rather than suggesting possible advantages in a distant future seemed more in line with SMEs' focus on *current* productivity and performance. In fact, time restraints emerged as one of the main problems since developing a deep understanding could cause SMEs to lag behind.

A third issue raised was the risk implied by raising expectations for SMEs. In other words, giving too much hope on the potential and advantages of digital change might create wrong assumptions.

Marko Seppa acknowledged this as a meaningful issue. However, he stressed that the role of the European Commission should be that of a *driver* to change, not simply to publicise innovation without further commitment.

Karstin Bodell, in intervening on this, suggested that the main focus should be put on the business aspects rather than on technology.

Another issue that emerged during the general discussion concerned how to induce SMEs to enter an ecosystem and what this really meant in terms of vertical and horizontal marketplace. In response, it was argued that it was not easy to enter a vertical marketplace and at the same time Jonathan Sage suggested the need for a set-up phase together with the SMEs – just calling them was not enough.

Finally, a question was raised with specific reference to the Polish reality, although it had general value. The issue there was the Polish SMEs' strong propensity to change business partners and, therefore, ways of working. This attitude implied the need to lower costs of reshaping applications.

Additional Information

Session Chair:

Jonathan Sage, Price Waterhouse Cooper, Belgium

Speakers:

Marko Seppa, eBRC, Finland

Karstin Bodell, IBM, France

Andrea Nicolai, T6, Italy

Peter Weiss, FZI, Germany

Profile of the speakers and slides:

http://2002.istevent.cec.eu.int/2002conference/session/index_en.asp?id=69

DISCLAIMER: This report has been drafted by an independent rapporteur. This report does not necessarily reflects the official European Commission's or Speakers' view of the workshop.
--