Perspectives on Inclusive ICT Business

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Information and Communication Technology (ICT) has become an integrative part of modern life and drives businesses and economic growth. In developed countries, connected life and work becomes reality and nearly everybody has the chance to benefit from ICT. This poses the questions which groups are at risk of exclusion from these benefits and what research and industry can do to expedite inclusive ICT business.

Advantages in technology – following Moore’s Law and reducing costs for ICT – and initiatives such as ‘one laptop per child’ are building blocks to help the developing world to get access to ICT. Today mobile communication is a strong complementary for fixed line networks and is a way to get countries without nationwide wired telecommunication infrastructure online.

However, access to technology for everybody itself is not sufficient. People must be able to use it, and applications must support local business needs. What impact does this have on usability, support concepts, application and business development for niche markets?

Using a keyboard and a screen with letters is not applicable for disabled or illiterate people. Voice interfaces, touch screens, gesture recognition and pictograms instead of text show a promising way on how to address accessibility from a technology perspective. In parallel, application development has to step on and implement innovative user interaction methods. In addition, handling has to become so intuitive that no education or training is necessary. What industry calls ‘intuitive usage’ today is often not appropriate for people with limited access to education.

Today, most ICT users have access to support for set-up, troubleshooting and repair when needed. To make ICT available anywhere and any time for everybody, 100% support-free concepts have to be implemented. Rough external conditions, faulty usage and malware must not disable the devices in such a way that support is required.

Inclusive ICT Business requires not only advantages in technology. Furthermore, how to develop is at least as important.

For companies – as profit-oriented organizations – it is rational to focus on large, financially strong markets or on niches where high margins (or other, non-financial earnings like reputation) can be expected. Special requirements of certain groups can be at risk of being not addressed by ICT companies if there seems to be no positive return on investment. So, what can be a business perspective for e-inclusion of all groups? There are two helpful concepts: standardization and open development.

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We have seen that standards such as the PC or the World-Wide-Web paved the way for an infinite variety of applications no company or industry had dreamed of before. Standards are a way to democratize development: It becomes possible for small companies, non-profit organizations and private persons to develop new applications. With application programming interfaces (APIs) and developer tools for creating mashups easily, Web 2.0 accelerates open development even more. Nearly everybody is able to develop applications. Tailored solutions for very specific, commercially disregarded segments start to mushroom. This is a big chance for inclusive ICT business, in particular since open development and APIs creates a win-win-situation: it allows people to create communication enabled business processes in areas where ICT companies would not become active themselves.

To make best use of this chance, we need standards and solutions that improve the interoperability of networks and applications, harmonized data languages with standards such as XML, concepts for secure use of ICT and for identity management and – last but not least – we need enabler and service libraries that everybody can use to build all kinds of applications.

Access to information and communication technologies, easy-to-use applications built for accessibility, standards and open development together create a promising breeding ground for inclusive ICT business.