

## ECORYS studies impact of ICT on firm-level innovation

11 November 2008 - InfoDev (The World Bank) has commissioned ECORYS to conduct in-depth study of the impact of ICT on firm-level innovation in Poland, Russia and the Baltic States. This study assesses the diffusion and impact of ICT at the firm level in both traditional and emerging sectors, and whether and under what conditions have these sectors been successful in harnessing ICT to improve productivity.

A Consortium of three companies has carried out the study: ECORYS Nederland B.V. led the Consortium with TNO and IDEA as partners. ECORYS Polska (Warsaw) was responsible for the survey in Poland; Cycleplan (Tallinn) &ndash; for the survey in the three Baltic States; The International Management Institute of St. Petersburg (MISP) &ndash; for the survey in Russia.

The analysis is based on 620 firm-level questionnaires, which build on an earlier questionnaire used by the OECD in the EU-15. The findings emerging from the study reveal a number of issues surrounding the development, application and utilisation of ICT and its implications for innovation and economic growth. The main conclusions can be summarised as following:

- ICT in itself is often insufficient for improving economic performance. Rather a range of complementary factors is required such as organisational change and new marketing strategies.
- ICT use among firms in transition countries is primarily geared towards improved production and transaction processes, e.g. organisational change and improved marketing, rather than the development of new or improved products.
- There are significant sectoral differences in the role, scope and impact of ICT use. The potential effect of ICT on the firm's performance is determined much by the information intensity of the product. The greater the information intensity of production and transaction processes, the greater the scope for applying and using ICT.
- Promoting the application and use of ICT for improved economic performance requires tailored policies to the individual sector as well to the individual country.

From a policy making perspective, it is thus necessary to identify how ICT fits within the overall socio-economic fabric and the sectors relevant for the country's comparative advantage, rather than how the socio-economic fabric needs dramatic restructuring in order to realize some pre-conceived notion of an optimal and uniform knowledge economy. The emphasis should therefore be on how ICT can be used to increase value added and improve performance within the prevailing socio-economic context, and thus explore opportunities for using ICT as a vehicle for moving up the value chain within existing sectors.

Notwithstanding the differences between countries, the findings of this study have highlighted a range of common problems facing transition countries. More specifically, an appropriate policy and regulatory environment is critical for companies to begin using ICT for competitive advantages. Irrespective of the nature of the use of ICT, it is thus evident that there has to be a suitable policy and regulatory environment in order to provide firms with an incentive to use ICT to improve their competitiveness. It is important to stress that differences in wider institutional and socio-economic context do not mean that there are no opportunities for countries to learn from each other's experiences and engage in active policy learning. Rather, such policy learning has to take account of the different contexts in which the policies are implemented. Finally, it is important to note that the activities and processes of the emerging knowledge economy (or economies) are increasingly taking place across a global terrain. From this conclusion it does not necessarily follow that national policy makers are therefore powerless. On the contrary, the more the world becomes a single market place, the more significant it may become that the actions of national authorities provide a supportive regulatory and policy regime.

To see the publication please look at:  
<http://www.infodev.org/en/Publication.553.html>

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