

Deep drills as toolkit for decision-makers

ICT prospective forecasting project in Hungary

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Extended abstract

The Hungarian National Council for Communications and Information Technology launched an ICT technology assessment and forecasting project as a proactive approach in 2005. Decision makers receive the results of this project: short studies called “*deep drills*”, longer studies with scenarios called *visions*, and also a bimonthly *Panorama* with commented short news. There is a community of 40-50 professionals discussing the new studies, commenting and using them for consulting and for higher education. The approach is to find and describe the most probable future, but not the most desirable one. The ethic of the researchers is not to paint unrealistic picture about the future, neither in the positive nor in the negative side.

At first we had to define the *scope* of the project, and cut into twelve main areas: physical basis, communications technologies, end-user devices, system design, application tools, content management, development and maintenance on the *technology supply* side while business,, governmental and home usage cover the *demand* side, and security and regulations are included as *cross-cutting* issues. Afterwards the main parts of each area have been shortly described, indicating possible *disruptions*. Then *cross effects* were seen: impacts on each others, .

Deep drill has a defined template in order to concentrate on the huge amount of information processed. The first sentence is the *thesis*, it must have main message for the reader: *what do we expect in the future, and why is this important for us*. The further parts of the study show the scope, the current status, the ongoing researches, the most probable future trends, analyses the main drivers and impacts, and shows the specialities in Hungary. These short studies intend to inform decision makers and their advisors, and are not for researchers of the topic.

Thirty *deep drills* has been prepared on the following *technology supply* topics::

- Unlimited bandwidth and storage, Biology and informatics, Nanoelectronics, Plastronics,
- Next Generation Networks, IP based television, Radiofrequency identifications, Future of Internet
- End-user devices, Flexible man-machine interface, Personal identification, ICT implants,
- Sensor systems , Agent technologies, Embedded systems, Privacy enhancing technologies, Long term archiving,
- Business intelligence, Computerised text analytics, Semantic technologies, Mobile robots,
- Web 2.0, P2P and its influences, Collective content providing, Virtual presence and virtual worlds, Online multiplayer games.
- „Open source” software, Security focused planning, Service oriented applications, IT Utilities,

The *vision making* of an application area needs more sophisticated approach: beside technology supply, changes of the demand should also be examined. These changes depend on different drivers, and the forecast should be based on drivers. The more certain drivers lead to the core vision, the uncertain ones lead to different scenarios. Selecting one social driver and another driver among the technical ones is a practical choice leading to four scenarios. Visions are illustrated by narratives as a feedback.

The paper describes the methodology and the impact of this technology assessment project.

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