

8-5-2011

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## Recommended Citation

Mayer, Jörg H. and Steinecke, Neon, "Managing the Future—State-of-the-art Environmental Scanning Systems and Initial Design Principles for a New Generation" (2011). *AMCIS 2011 Proceedings - All Submissions*. 305.

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# Managing the Future—State-of-the-art Environmental Scanning Systems and Initial Design Principles for a New Generation

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## **ABSTRACT**

The 2008/2009 economic crisis provided a sustainable impulse for improving environmental scanning systems (ESS). Although a rich body of knowledge exists, these concepts are not often used in practice. This article contributes a literature review addressing not only why this knowledge is not used, but what elements of it can be leveraged for the work on hand. The results are structured in terms of the elements of information system (IS) design theories and the research method applied. At the end, we derive six initial principles for reworked ESS that are more applicable than the state of the art. These principles should improve the "grasp" of weak signals and allow better incorporation of environmental scanning findings into the executive decision-making process. Two instantiations helped us to highlight how current developments in IS contribute to successful design, implementation, and day-to-day operation of reworked ESS.

## **Keywords**

Corporate management, balanced chance and risk management, new information and communication technology (ICT), management support systems (MSS), business intelligence (BI), information systems (IS) design