

'Invisible magic' in a Networked World

November 4 2005

All the things we use in our everyday lives will one day be networked with one another. “They will perceive their environment, process data and communicate with one another,” explains computer researcher Friedemann Mattern in an interview in the Siemens research magazine Pictures of the Future. “That will seem like invisible magic to us.”

One of the visionary ideas from experts specializing in distributed systems at the Swiss Federal Institute of Technology in Zurich (ETH) is a lawn sprinkler equipped with a sensor that measures moisture in the ground. At the same time, the sprinkler obtains a weather report from the Internet and uses this information to calculate when it should water the lawn, and how much water it should dispense.

Mattern is a firm believer in the fusion of microelectronics, sensor technology, new materials and wireless communications. “That automatically leads to ‘smart objects’ of this kind,” he says. We could, of course, continue to get by without networked objects, but “our pursuit of safety, status, comfort and entertainment will lead to a point where many such applications become accepted practice.” That’s because networking is what provides the real added value — just as the value of a human being is far greater than the sum of the cells in a person’s body.

The only technical obstacles the expert sees lie in the power supply for the devices. “In terms of resolving the energy problem — meaning lower power consumption and longer battery life — things are moving more slowly than I’d like,” Mattern says. And he doesn’t find the various networking scenarios ominous, because he believes we will never be

entirely dependent on “intelligent things” – our environment will always be able to function without the help of intelligent systems.

Citation: 'Invisible magic' in a Networked World (2005, November 4) retrieved 20 April 2024 from <https://phys.org/news/2005-11-invisible-magic-networked-world.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.