



Smarter money for a smarter planet.

We know that a lot of money has evaporated in the current financial crisis—but what exactly is it that has been lost? Obviously it's not hard currency, which represents only 11% of the U.S. money supply. The rest of our "money" flows from a paycheck to a bank to a store and then through the store's supply chain, only to be deposited in another business's account...to start the journey over again.

Money, in other words, has been reduced to zeros and ones. It's intangible, invisible. It's information. Which is central both to the problem we face and to its solution.

Without question, the replacement of physical money with electronic money—and the spectrum of financial innovations that have accompanied it—have helped the world's economy grow and prosper. They have also helped many more people around the world to join the middle class. But our technical and management systems haven't kept pace. They couldn't provide warning signals of risk concentrations, over-leveraging or underpricing. Banks could repackage risk and sell it, but they couldn't value an individual loan in order to unwind the debt when needed.

However, the same digitization that has helped create this challenge is now providing the means to solve it. Intelligence is being infused into the way the world works, including our financial systems. We're all aware of advances like ATMs, credit cards and online banking. But the transformation happening underneath is far more profound. Unprecedented computing power and advanced analytics can turn oceans of ones and zeros into insights, in real time. Which means we could have a safer, more transparent and intelligent financial system for a smarter planet.

We can already see it happening at the level of national governments. The new integrated information system for the Czech Republic Ministry of Finance, for instance, provides insights to help set

monetary policy, and to handle state budget resources and public finance more efficiently.

We see it helping multiple interconnected institutions. The Operational Riskdata eXchange Association, a consortium of 52 leading financial institutions, uses anonymized data to help improve statistical modeling, more accurately quantify risk exposure and address regulatory compliance needs.

We even see it transforming entire global markets. Consider foreign currency exchange, the world's largest single market. Intraday settlement risk of more than \$2 trillion in volume—more than 50% of foreign exchange transactions—has been eliminated.

And through organizations like Grameen Foundation and Financial Information Network and Operations Ltd. (FINO), poor people around the world can overcome impossible odds. Thanks to technology-enabled microfinance, they can get collateral-free loans and financial services to support income-generating businesses—for a brighter future for their families and communities.

These changes are exciting, but more are needed. There is growing consensus on the need for a centralized risk utility, to help avert future crises—perhaps building on the work of the International Monetary Fund and other institutions to create an early warning system for global finance.

Of course, restoring trust and confidence is much more than a technology challenge. It's also a major policy and behavioral challenge. And no system can ever be devoid of risk. But the benefits of smarter finance are clear—for regulators, bankers, investors, companies and communities, rich and poor around the world, all of whose well-being and prosperity depend on a money system that is stable, secure and accessible to all.

Let's build a smarter planet. Join us and see what others are thinking at ibm.com/think

