

A Million Heads Are Better than One: Combining Digital and Social Intelligence

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What do we mean by ‘Smarter?’ Most of us have technology in mind. Sensors gather data, networks aggregate it, analytics process it. As a result, systems are able to act more efficiently. Traffic flows more smoothly. Energy is distributed more effectively. Healthcare is delivered more economically.

I have a different view of “smarter.” In my view, people can *enhance* digital smartness. Just as sensors can gather information, so can people. Just as digital systems can analyze data, so can people. Just as control systems can act in the world, so can people. Because people do these things very differently from the way digital systems do them, it means they can add layers of value, interpretation and innovation. “Smarter,” in my opinion, means human intelligence and digital smartness working together, in a complementary fashion

Just as advanced technology has enabled digital smartness, it has also enabled what I call social intelligence. The mobile devices in our pockets turn us into walking sensors; networks enable us to share and discuss what we discover; online communities and social networking sites provide venues for collective action. Wikipedia is perhaps the best known example, with over three and a half million articles in the English edition. Even more impressively, it can generate new articles literally overnight. For example, within an hour of the 2011 Tōhoku earthquake and tsunami in Japan, a three paragraph article had appeared; that, in turn, was edited over 1,500 times in the next 24 hours to produce a well-formed article with maps, photos and 79 references.

The place where digitally-enabled social intelligence will really come into its own is in cities. Cities are filled with dense collections of micro-experts. Me, for example -- I’m the world expert on my yard. I know where water pools when it rains, and where it runs off into the storm sewers. I know the slab of sidewalk that has been pushed up, and that parents with strollers don’t like it but the skateboarders sure do. And I’ve got bad news about the tree in front of my house: it’s sick, and it might be the Emerald Ash Borer that is expected to take out all two hundred thousand Ash trees in my city over the next decade. So, if anyone wants to understand storm water runoff in my city, or sidewalk maintenance needs, or figure out logistics for managing the urban forest, just ask me... and a million of my neighbors.

And, astonishingly, this is becoming possible. In the last decade a multitude of applications have arisen and are tapping the social intelligence of large populations. [The IBM Social Sentiment Index mines social media channels to reveal citizens’ sentiments on topics from traffic to commerce](#). [FixMyStreet](#) allows people report potholes and other street problems, while IBM [CreekWatch](#) lets people report on the status of urban waterways. [Cyclopath](#) gathers ratings and other input from users and provides bicycle-friendly routes around my city, taking into account everything from pavement conditions to scenery. What these systems have in common is that they are not relying on solely on altruism. Instead, they are tapping into less lofty but more dependable motivations such as self interest, indignation and group identity.

Insert infographic <http://www.ibm.com/analytics/us/en/conversations/social-sentiment.html?commuter=1>)

So when we think about “smarter,” let’s not forget about people. We’ve used digital technology to create systems that are more efficient, and that’s a good thing. But let’s not stop there. People are everywhere. They are experts on local information – their homes, their places of work, the routes they travel every day. That’s what they care about, and that’s what will get them involved. And when we design systems that make a place for people to be active, first class participants, where millions can share what they know, then we’ll really see smarter.

Read more about my thoughts on applying “Smartness” [here](#).