

Have We Found the Key to the Smart Community?

Thomas P. Keenan, FCIPS, I.S.P., ITCP
Professor, Faculty of Environmental Design and Adjunct Professor of Computer Science
University of Calgary
Calgary, Alberta, CANADA

Abstract

The concept of being a Smart Community has been at least since 1999 when the Intelligent Community Forum (ICF) chose Singapore as its first Intelligent Community of the Year. The ICF's criteria have been refined over the years, but they still seek out places that "understand the enormous challenges of the Broadband Economy, and have taken conscious steps to create an economy capable of prospering in it."

But what does that really mean in a world where cardboard VR viewers are given away as conference swag, high school students are creating augmented reality tours of their schools, and citizens can report a pothole, or a messy neighbor, on an app like SeeClickFix?

There is also an important confluence between the fields of "Smart Communities" and the concept of "Safe and Secure Communities". A community cannot really be considered "smart" if its habitants do not feel "safe" going about their daily routines.

On the flip side, many of the tools that will enable and enhance public safety (sensor based networks, big data analytics, public participation in decision making) have significant security and privacy implications. An innovative new program is being created at the University of Calgary to help in "Designing Smart and Secure Communities" while preserving privacy and avoiding a "Big Brother" world which would be antithetical to the goals of being a Smart Community.

Thoughtful experts in this field believe that we can have many of the benefits of being a smart community, including enhanced safety, without having to give up too much of our personal privacy. They also acknowledge that this is a tricky balance to strike, and that it will be hard work.

There are excellent examples from around the world of cities that have found innovative ways to involve their citizens in a meaningful way in decisions that affect their lives. It will also consider some "platform technologies" such as non-financial applications of the blockchain, which can be used to build trust and confidence in civic applications.

Things can also go horribly wrong when citizen engagement projects are poorly designed and implemented. As a creepy cautionary tale, and a warning about what might be coming down the road, we just have to look at the controversial use of "DNA Shaming" in Hong Kong to catch spitters and litterbugs.

Permission to make digital or hard copies of part or all of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. Copyrights for third-party components of this work must be honored. For all other uses, contact the Owner/Author. Copyright is held by the owner/author(s).
SIGGRAPH '16 Talks, July 24-28, 2016, Anaheim, CA, ACM
978-1-4503-4282-7/16/07.
<http://dx.doi.org/10.1145/2897839.2956558>