Who owns the Internet of things?
If you're a manufacturer and expect to vacuum up and mine customer data with impunity, think again

September 16, 2013
By Chris Rezendes and Peter Rysavy

Just as it didn't take long to top 1 million smartphones applications, thanks to the right combination of tools, devices, and service plans, plenty of stakeholders are betting that the machine-to-machine/Internet of things (M2M/IoT) market will explode once all the elements fall into place. Growth may be more uneven given the disparate technical underpinnings, from cloud services and low-cost wireless connectivity to miniaturization and the cost of embedding smarts in billions of items. But once IoT gets rolling, it could have even more impact.

One area that's needs more attention though: the mountains of data IoT will generate. Who owns it, who gets access, how do we make the best use of it, how do we secure and regulate it? And who gets to decide?

In the pre-Snowden era, most people never gave a thought to the vast amount of personal data collected about them by everyone from Internet providers to Facebook to the government. Now, they're paying attention. Meanwhile, enterprises are considering just how much machine data will be produced by tens, or even hundreds, of billions of unattended devices.

IoT is going to make many people uncomfortable, not so much because of the volume, variety, or velocity of the new data stream but because it's going to further drive massive changes in the way users view data value, ownership, access, and deployment rights.

Possession vs. Ownership
Prevailing thinking in many developing IoT markets is that the provider of a product or service is the center of gravity. For example, original equipment manufacturers (OEMs) in
many industrial and commercial markets expect to define and deliver new services by leveraging IoT capabilities in their products. The implied, and often explicit, assumption is that OEMs will own and control the resulting data.

There’s even a school of thought that IoT is the next great frontier in persistent advertising and marketing. Adherents posit that manufacturers should deploy IoT such that they maintain a persistent connection to their products, customers and markets throughout the useful life of the item, whether a car, refrigerator, or smart meter. The primary (or at least a strong ancillary) driver: Use the item as a marketing and advertising platform.

These are high-risk strategies. They're based on deeply flawed assumptions about the market perception of the value of services, the value of data, and ultimately the role of IoT-enabled technology itself. In other words, the IoT is significantly more than an ad platform.

The owners of all those IoT-connected appliances, cars, and industrial equipment are likely to believe that the data those items throw off is theirs—not the OEM's.

But that's only the tip of the iceberg. Most assets that we plan to instrument, digitize, and connect within the IoT have a number of stakeholders, each with unique interests. Consider the car or truck. Insurance agencies, government registries of motor vehicles, service and repair shops, and local dealerships all have financial, legal, or other interests in those assets.

Value can be created for everyone in the chain with data generated by IoT solutions—but only under the right terms.

Exactly what those terms are is a discussion that needs to start now. Who might benefit from access to IoT intelligence? Do those entities have a right to access some of this intelligence? How? What privacy protection must be in place? If there is economic value to the data—and there almost certainly is—how might it be allocated to the various stakeholders?

To help forward an understanding of the forces converging to launch the IoT market, we’re holding a workshop on M2M/IoT on Oct. 8, in Chicago. See the agenda here. In our view, companies that are sensitive to evolving thinking about data ownership are much more likely to succeed than those who make either overly simplistic or dead wrong assumptions about how IoT data is managed and distributed.

Peter Rysavy is the president of Rysavy Research, Wireless Technology Consulting, and Chris Rezendes is the founder and president of INEX Advisors.