



THE INTERNET OF THINGS AND BIG DATA **How These Two Technology Sector Trends Are Very Closely Related**

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The DCIA is an international trade organization focused on the commercial advancement of cloud computing and related technologies.

Introduction

“Once the Internet of Things (IoT) gets rolling, stand back. We’re going to have data spewing at us from all directions - from appliances, from machinery, from train tracks, from shipping containers, from power stations,” exclaims Howard Baldwin in Forbes. “If that doesn’t get you thinking how to handle real-time data feeds, nothing will.”

Internet of Things and Big Data Go Together

The IoT and Big Data are closely linked, if for no other reason than the fact that billions of new connected objects and smart devices of all varieties, almost by definition, will be generating reams of new data that will need to be processed, analyzed, and protected.

The vast majority of new IoT offerings, in fact, are *primarily* gathering data, typically to provide consumers and enterprises with details on how efficiently their bodies and machines are running, respectively, and comparing new trends identified in such performance data to similar people and things.

Impact in the Healthcare Sector

Sensors that detect and deliver biometrics information to the cloud about end-users as they exercise, consume food and beverages, sleep, and undertake every imaginable physical task are one example. New health and wellness trends and behavioral patterns are expected to be identified through such detailed data collection multiplied in impact and generating enormous value for the millions of people generating it.

For more serious medical issues, similarly, new sensors gathering data on patient response to medicines, treatments, and therapies will inform more beneficial and

precise healthcare practices as the Big Data associated with these finding is understood and acted upon.

RFID for Virtually Any Object

Radio frequency identification (RFID) tags that can be attached to almost any object and generate data about its location, motion, physical state, temperature, moisture level, etc. will further expand IoT & Big Data to virtually all fields of human endeavor.

It is the multiplicity of instances of such applications of IoT micro-data that in the aggregate create new Big Data use cases.

Analyzing vast quantities of small bits of information will reveal valuable new insights not only for improving one's health as an individual, but also for improving the bottom-line for businesses through improved marketing, logistics, and other operations.

Privacy Is a Key Concern

Certainly a key concern as this evolves will be privacy. Who has the right to access and act upon all the data that's generated through IoT?

The most enlightened solutions providers agree – the end-user owns his or her data and should be enabled to provide explicit directions for its use. But watch this aspect to be hotly debated as the IoT & Big Data continue to jointly develop.

Shekhar Gupta is an accomplished executive with a successful track record of launching and managing telecom networks. He has built and managed networks as large as \$100 million and has been very successful in creating new revenue streams for companies he has served. Shekhar has also built new companies from the ground up to multi-million dollars in revenue. He holds over 40 patents. Shekhar currently works for healthcare company Helping Solution in Kansas City, KS where he manages its Social Media and development/deployment of Telehealth, Internet of Things (IoTs), Big Data, and Cloud Products & Services.