



CTM and the I³ Project

I³ has its roots in a number of independent business research projects carried out by Marshall Faculty and The Institute for Communications Technology Management (CTM). When these findings were combined with the Viterbi School of Engineering technology understanding, we began to understand market forces that serve to inhibit market development and mechanisms that allow these obstacles to be overcome.

The I³ (Intelligent Internet-of-Things Integrator) is an innovative IoT data management system developed by USC's Marshall School of Business and Viterbi School of Engineering with encouragement from the City of Los Angeles and other business interests seeking to create an ecosystem that will encourage the accelerated deployment of IoT technology by creating an environment that allows citizens and businesses to form community managed data marketplaces.

The I³ project calls for the creation of an IoT meta-layer that is inserted between the IoT devices and their upstream platform / application environments. The I³ meta-layer has been designed to integrate data from many independent IoT device owners into a consolidated data river which makes the data more accessible to the upstream applications. The I³ project is attracting significant interest from organizations that understand that communities of data are significantly more valuable than a series of isolated data streams.

As a market driven meta-layer, it is important that I³ understand and respect the privacy parameters of each individual owner, provide tools that allow communities of trust to emerge and evolve, and support the incorporation of a data-based value-added ecosystem that would be stimulated by such an environment.

Some researchers forecast that there will be 75B IoT devices connected to the network by 2025. That is equivalent to 10 devices for every person in the world. By this measure, the evolution of IoT will be even more impactful to the way we live and work than the Internet.

USC, the City of Los Angeles, and the companies that are working together to create the I³ consortium believe the benefit of IoT will be maximized when communities work together to utilize their data in a respectful, open, and trusted information exchange.

USC's multidisciplinary approach to solving complex problems and creating technological advances such as I³ demonstrates what can be achieved when diverse perspectives are brought to bear on a complex topic.

CTM is one of the Marshall School Business's Centers of Excellence. CTM works with its member companies to focus on business and technology-centric business issues as they seek to put increased light on business and market driven issues that are constantly working to reshape our world. Technology driven changes bring both disruption and opportunity. Companies and organizations that are committed to establishing and maintaining a leadership position work with CTM on particularly vexing strategy and marketing issues which are magnified by our increasingly complex business environment.

Disruptive technologies, evolving consumer behaviors, changing competitive landscapes, and new business models have transformed the value chains for device makers, network service providers, content creators, consumers, government agencies, and enterprises alike. The increasingly connected consumer and workplace environments presents incredible opportunities for the nimble as long as key challenges can be understood and addressed.

The Institute for Communication Technology Management (CTM) is a Center of Excellence within USC's Marshall School of Business. It facilitates strategic and multidisciplinary efforts that support corporate and product planning programs for its members. It creates linkages that serve to allow our members to define and shape solution specific issues and directions. It provides educational programs and forums/workshops focused on the rapidly evolving business ecosystem. Sometime referred to as Industry 4.0 or Digital Transformation programs, the market forces that impact current business practices are being driven by massive changes in communications technology, data driven decision making, business strategy, and entertainment services. This increasingly dynamic environment is creating a complex maze of threats and opportunities that has to be successfully traversed in today's business world. Founded in 1985, CTM is known by business leaders as a forward-looking, impactful source of thought leadership.

The Institute is also a powerful connector of decision makers and forward looking innovators in the industry. Our board members represent companies from multiple industry sectors with the common thread that they see technology as a means of thriving and prospering in an increasingly vibrant and challenging business environment. The network of CTM associated professionals adds both depth and detail to the spectrum of affiliates that drive our understanding of market knowledge forward. Professionals participating in CTM programs provide invaluable insights and help drive innovation across the larger digital communications ecosystem while CTM serves its members by providing a source of non-traditional and independent thinking that needed to break free from legacy operational patterns.

CTM is not a high visibility organization and prefers to work in the background, supporting the CTM member companies. The continued success of our member companies and their employees represents our greatest achievements

CTM member driven services:

- High-potential employee education programs
- Access to multidisciplinary pools of subject matter experts
- Sponsored strategy/market workshops and projects
- Corporate/student-centric investigations based on out-of-the-box thinking and challenges
- Thought leadership and catalytic thinking tiger teams

To Learn More about CTM activities, please feel free to explore our website

www.marshall.usc.edu/ctm.

You may also contact us directly by email at ctm@marshall.usc.edu or by phone at 213-740-0980

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