

Title: Compose – Internet of Things Market Place

Author: Eliezer Dekel

Abstract

Computing becomes increasingly integrated into our environment. The number of devices connected to, communicating through and interrelate on the Internet is on the rise. It has already exceeded the number of humans using the Internet. In this talk we present our vision of the future Internet. We will focus on the Internet of Things. In this context we will discuss our European project COMPOSE. The COMPOSE project aims at enabling new services that can seamlessly integrate real and virtual worlds through the convergence of the Internet of Services with the Internet of Things. COMPOSE achieves its goal through the provisioning of an open and scalable marketplace infrastructure, in which smart objects are associated to services that can be combined, managed, and integrated in a standardized way to easily and quickly build innovative applications.

The COMPOSE project builds upon existing European research projects and ongoing standardization activities to provide a comprehensive marketplace framework that will be able to cover the whole service lifecycle by integrating a number of innovative technological enablers in a coherent way. In this project we develop novel approaches for virtualizing smart objects into services and for managing their interactions. This includes solutions for managing knowledge derivation, for secure and privacy-preserving data aggregation and distribution, and for dynamic service composition advertising and discovering objects' capabilities and service provisioning and monitoring.

The COMPOSE project is expected to give birth to a new business ecosystem, building on the convergence of the Internet of Services with the Internet of Things and the Internet of Content. The COMPOSE marketplace will allow SMEs and innovators to introduce new Internet of Things-enabled services and applications to the market in a short time and with limited upfront investment. At the same time, COMPOSE will allow major players in the information and communication industry, particularly cloud service providers and telecommunications companies, to reposition themselves within new Internet of Things-enabled value chains.