System Informatics-based New Service Development

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Plenary Talk Abstract

Various types and massive amounts of data are being collected in multiple industries. Such a big data proliferation has provided ample opportunities to develop more and better services, especially in manufacturing industries. For example, heavy equipment manufacturers monitor, diagnose, and predict product health through prognostics and health management services using the data collected from their equipment. Consequently, equipment managers can cope with potential product breakdowns and maximize product availability for clients. Numerous companies in manufacturing industries have “servitized” their value propositions to address issues on product commoditization and sustainability. A key component of servitization is informatics, which transforms system data into useful information for the system stakeholders. In this talk, informatics-based service is defined as a type of service wherein informatics is crucial to customer value creation. Despite the importance of this concept, studies on the design and development of informatics-based services in manufacturing industries are rare. This talk proposes a conceptual framework of new service development based on the analysis of the data collected from the system in question, called system informatics-based new service development. The framework is introduced using recent case studies in automobile, vessel, energy, and healthcare industries. Observations and findings from the case studies would contribute to promoting and inspiring research on the development of smart services in manufacturing industries.

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