

Collective Action for Establishing Common Service Platform in Smart Living Business Ecosystem

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Abstract

ICT advancement and growing popularity of mobile and internet-enabled services are expanding the concept of “smart homes” from simple home automation inside homes to “smart living”. The vision of smart living promises a broad range of ICT-enabled services that are accessible everywhere and add value to different aspects of life. Accordingly service providers in several sectors, like health, energy, security and entertainment, has been attracted to move into this domain. However, currently, most service providers offer services on their own specific service platforms. Even service providers in the same sector are using different proprietary service platforms for their service offerings. Such isolated efforts have led to a situation in which countless services and platforms are competing which are not interoperable.

While service providers could continue offering services in isolation, considerable benefits can be gained if they would collaborate for developing and sharing a “common service platform” for offering smart living service. Nonetheless, developing such common service platform for smart living service requires actors from different sectors of industry to work collectively. Since collaborating actors are from distinct sectors with different strategic interests, expectations and business models, several conflicts may arise. In this research project, we use collective action lens to explain how collaboration may arise. The objective of this research is to explore how organizations’ motivations for collaboration are impacted by characteristics of business ecosystem and also characteristics of service platform.

With regard to characteristics of service platform, the extend that a platform is open or closed to third-parties application developers is one of the hot topic in service platform literature. While typically service providers tend to keep service platforms closed to retain most of benefits for themselves, under several circumstances they have to open it. When talking about openness from technology perspective, it may be opening platform in terms of granting complementary providers to access to a platform (i.e. API) to develop complementary services. It could also be opening platform in form of opening source and totally giving up control around it. In the context of this project, to open or close access to platform’s API might be a major concern of actors and may impact their motivation towards cooperation.

Looking into network of organizations working to offer smart living services, it is obvious that each network and business ecosystem have different characteristics compared to other ones. For instance, leadership strategies and/or the level of trust in leader and also in other actors may affect motivations for cooperation. Likewise, the extend that actors are dependent to each other for service delivery is influential. In addition, types of selective incentives offered in a business ecosystem to motivate cooperation may more stimulating than those offered in other business ecosystem. We

expect that such features of a business ecosystem effect motivations for cooperation for a common service platform.

First, we develop propositions from reviewing literature on three core concept of collective action theory, service platform and business ecosystem. Then we will study our propositions in four cases in the specific field of smart living. We will finish our research by testing the results from case studies in a survey among organizations involved in our case studies.