

SMART+2013

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An Intelligence-Based Tool for Energy Management by Device Interoperability in Smart Houses

Smart houses — Smart information processing — Smart energy and optimal consumption — Intelligence-based service design — Device Interoperability
 Andrea Capitanelli — Alessandra Papetti — Margherita Peruzzini — Michele Germani

The recent developments in Information and Communication Technologies (ICT) and Internet of Things (IoT) make several house devices cooperate to each other to achieve higher energy performances and offer new services. However, the increasing embedded intelligence of smart devices is also generating a huge quantity of data, which must be properly managed. In fact, it is difficult to easily manage data to make certain functions available and to define a strategy for results maximization. This paper defines a methodology to improve smart home information management based on the selection, aggregation and classification of the sensible data and the correlation with the device typology, nature, and destination of use. Furthermore, a case study focused on washing machines is presented to demonstrate how this methodology can be implemented to realize a supporting tool encouraging service ideation to benefit the different subjects involved. The proposed model represents a first step towards the creation of a standard for smart house information management and device interoperability.

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Hensikt og mål med prosjektet

Målet med prosjektet er å lage et brukervennlig brukergrensesnitt. Som er nødvendig på grunn av nettsidens utdaterte utseende, og en utdatert søkefunksjon.

Resultater, viktige funn

Et fungerende brukervennlig brukergrensesnitt. Ved implementering av fuzzy search, bokmerking, innholdsvisning funksjon.

Frontend på litteratursøk

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Purpose (aims/objectives)

The goal with this project is to create a user friendly user interface. Which is necessary because of the website's outdated looks and a outdated search function.

Results, findings, additional details

User friendly user interface with the implementation of fuzzy search, bookmarks and a content displaying function.

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