Tools for battery lifetime awareness

Key words: **artificial intelligence, CAD, battery life**

wisebatt

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CEO – VP of Technology and Co-founder of Wisebatt and Project Leader of CPS Lifetime Awareness | Main products: **ESTIMATE and AWARENESS**

Aim
To offer a tool allowing designers to predict battery life and product failure

KEY FACTS

Project started: 2016

Innovation Community:
EIT Digital

Theme:
Digital industry

Funding generated:
EUR 637,000

Number of partners: N/A

The project

Overview

Short battery life is an ongoing and growing issue – both for the engineers who develop systems and for their end users.

Accurately assessing the life of battery powered devices is complex, especially in the early stages of the design cycle. The usual method is to build a prototype, let it run and test it, but this is time consuming, expensive and requires expertise.

CPS Lifetime Awareness developed two solutions to address this challenge. ESTIMATE is a CAD tool that helps software and hardware engineers estimate and optimise the battery life of the device they are designing. AWARENESS is an artificial intelligence programme that can predict with 92% accuracy when a device will fail because of a lack of energy remaining in its battery.

EIT Digital support

Support from EIT Digital was very important to the project development, especially that of Petri Liuha, EIT Digital Action Line Leader for Digital Industry.

Groundbreaking innovation

In addition to their main functions, our products will allow designers to reduce the battery size of the devices they design. This results in less battery waste and less impact on the environment. Furthermore, ESTIMATE is a very simple tool to use, which means that it can be used as a tool by teachers in universities and other higher education settings.

Societal impact

People get annoyed when their phone's battery life drops unexpectedly, but when the same phenomenon occurs with a pacemaker or industrial devices, the effect can be far more dramatic. Our products target designers of medical devices, wearables, security devices and other products for which battery life is critical. This can potentially save lives and definitely bring security and peace of mind.
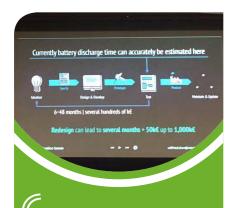
Achievements so far...

We've received our first investment in the company, and the public beta version of ESTIMATE will be ready for launch in late 2017. We have also had significant interest from several large companies.

Teamwork

The start-up team is composed of myself (inventor of the technology, co-founder and CEO), and Marion Blatter (product owner, co-founder, and in charge of the user experience). We lead the company together. Pedro Lusich, Imane Khalis and Hrishikesh Bhosale are part of the team as C/C++ developers.

The project team is composed of Niklas Wirström, researcher at SICS (Sweden), Martin Wagner, Senior Consultant at Atos Research & Innovation (Spain), and Khalil Hachicha, Associate Professor at LIP6-UPMC (France).

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