

YouPower – A Social App for User Engagement in Power Grids

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Keywords: Power Grid, Energy Community, Social Participation, Social App, YouPower

Abstract: The abstract should summarize the contents of the paper and should contain at least 70 and at most 200 words. The text must be set to 9-point font size.

1 INTRODUCTION

In this paper, we present the design of YouPower, a social smart grid platform that is designed as a means to explore the potential and challenges of supporting social participation, awareness and engagement of power grid users. The intention of developing such a system is to make energy visible, to inform users' energy know-how, to promote pro-environmental social norms, and to facilitate users in their day-to-day life to take energy-friendly actions together with online communities.

(copied from the previous year's paper. needs to be updated and rewritten) The idea of linking smart grids with (online) *Social Networks* (SNs) as a joint R&D topic has recently caught much attention in media (Boslet, 2010; Chima, 2011; Erickson, 2012; Fang et al., 2013). There are many research efforts on either topics, but research on combining SNs with smart grids has just started. A number of recent works propose frameworks or approaches that interconnect smart meters (or smart homes) as SNs for energy management and sharing (Ciuciu et al., 2012; Steinheimer et al., 2012). In addition, Silva et. al. (Silva et al., 2012) conducted surveys to understand user needs for energy services including SN services. Several frameworks or simulation models for demand side management and value-added web services with SN aspects have been developed (Chatzidimitriou et al., 2013; De Haan et al., 2011; Lei et al., 2012). Others have used simulation models to demonstrate

the feasibility of social coordination in supply and demand (Skopik, 2014; Worm et al., 2013). Our research interest expands on the related work in that it focuses on smart grid user communities. The research is performed within the framework of the EU FP7 CIVIS project (www.civisproject.eu).

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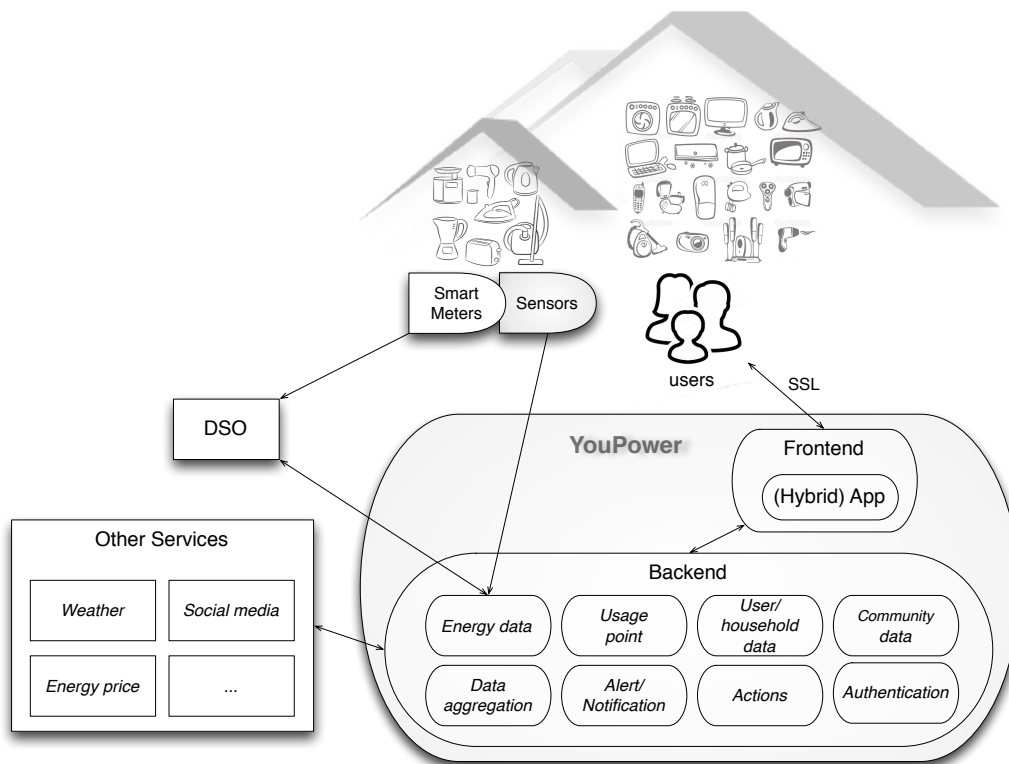
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DSO (Distribution System Operators), SSL (Secure Sockets Layer)

Figure 1: YouPower system overview

2.1 Manuscript Setup

The template is composed by a set of 7 files, in the following 2 groups:

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Use the command `\title` and follow the given structure in "example.tex". The title and subtitle must be with initial letters capitalized (titlecased). If no subtitle is required, please remove the corresponding `\subtitle` command. In the title or subtitle, words like "is", "or", "then", etc. should not be capitalized unless they are the first word of the subtitle. No formulas or special characters of any form or language are allowed in the title or subtitle.

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Section, subsection and sub-subsection first paragraph should not have the first line indent.

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2.4.3 Sub-Subsection Titles

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Table 1: This caption has one line so it is centered.

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Example text 1	Example text 2

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Equations should be placed on a separate line, numbered and centered.

The numbers accorded to equations should appear in consecutive order inside each section or within the contribution, with the number enclosed in brackets and justified to the right, starting with the number 1.

Example:

$$a = b + c \quad (1)$$

2.4.7 Program Code

Program listing or program commands in text should be set in typewriter form such as Courier New.

Example of a Computer Program in Pascal:

```
Begin
  Writeln('Hello World!!');
End.
```

The text must be aligned to the left and in 9-point type.

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ACKNOWLEDGEMENTS

This research is funded by the EU FP7 CIVIS project.

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APPENDIX

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`\section*{APPENDIX}`