GAIA - Green Awareness In Action



D5.1 – Public Website

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Abbreviations

Abbreviation	Expression
DoW	Description of Work
EC	European Commission
IPR	Intellectual Properties Rights
PM	Person Months
SC	Steering Committee
TC	Technical Committee
WP	Work Package
PhC	Phone Conference
ТСВ	Trials Coordination Board
EPB	Ethics and Privacy Board
Ga	General Assembly



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Executive Summary

GAIA will deliver an IT service and application ecosystem that will consist of a set of infrastructure deployments on buildings within the educational community (kindergartens, schools, universities), a set of data processing/mining/visualization services, and end-user applications/ games targeting the efficient use of energy. The considered scenarios are heating, electricity, transportation to schools and collaborative use of resources. The produced IT ecosystem, will on the one hand facilitate monitoring and profiling energy use of users and buildings and on the other hand will provide guidelines and recommendations for better energy management by users. With the envisioned applications, GAIA will increase the self-awareness of users regarding their energy use profile and by proper and continual recommendations will stimulate their behavior change toward more energy economical activities and habits. By engaging the educational community, GAIA will increase energy efficiency literacy that will produce a multiplier effect on how our behavior affects energy consumption by a significant part of society. The fundamental principles envisioned in the project: *green awareness* through *engagement*, *education, competition* and *innovation*.

GAIA will engage the entire educational community at all levels: kindergartens, schools, universities by targeting the following user groups:

- Students will be engaged via an educational game and applications. GAIA will make users aware
 of their energy footprint and make them perceive how individual, every day actions can impact
 energy consumption. Moreover, with proper, continual recommendations, user behavior will be
 reshaped toward becoming more energy friendly. GAIA perceives users as actuators who, with
 the proper recommendations, guidelines and education, will become capable of regulating and
 defining the energy consumption within their environment.
- Teachers will be also engaged by GAIA with applications and an educational game. GAIA will
 support teachers during the educational process with specifically designed courses and
 workshops aimed at further increasing the energy literacy of their students through participatory
 activities and demonstrations. Courses are going to integrate the developed services and the
 game in order to facilitate the building of community into the classroom.
- Building Managers will be aided by GAIA with business intelligence tools profiling overall building energy needs and support (analytics, recommendations) in order to facilitate decision making.

GAIA core ideas

Targeting Energy Efficiency in the context of the educational community is clearly very important due to a number of reasons. Students essentially comprise the next generation of citizens. Thus, by focusing on increased energy awareness and behavioral transformation within this group we can envisage multiple benefits if we use the right approach. Most apparent are the significant savings to be had in the context of school infrastructures themselves which, due to their size and ubiquity, contribute a significant portion to energy consumption in terms of public buildings' use. Moreover, we expect a chain reaction to take



place, with students communicating and showcasing newly acquired knowledge in their family environments while in the future this knowledge will transform into common behavioral practice in their workplaces and within the families they are going to raise themselves.

GAIA will target all levels of the education system, starting from kindergartens to primary and secondary schools through universities and will provide the appropriate tools for a large range of building types with different users. Moreover, GAIA will cultivate personnel (teachers) and students at different ages toward more efficient energy use.

GAIA will modulate its components and activities in two directions. The first direction is ``Data Services for Energy Efficiency''. This consists of all the required data acquisition/processing/mining/visualization services which are a prerequisite user and building modeling, for analyzing energy consumption data and for optimizing recommendations offered to users. The other direction is ``Applications and Services for Energy Efficiency''. This consists of end-user applications, educational games and social networking applications for engaging and building communities as well as interacting with users with the ultimate goal being a change in their behavior. All these activities are organized in 3 major phases: Design (WP1), Development (WP2, WP3), Trials and Evaluation (WP4).

GAIA will provide tools with the capacity to handle and adapt to a wide range of environmental and socioeconomic conditions, while covering the need and fulfilling the requirements for most buildings used for educational purposes across Europe. The produced services and end user game/applications will be thoroughly evaluated through a set of trials in pilot buildings in Greece, Italy and Sweden. Thus we will benchmark and evolve GAIA, in order to motivate users with different backgrounds and varying contexts to change their behavior and become more energy friendly.



Public Project Website Overview

The project website aims to initially provide a project description, project vision and objectives, the relationship between the project and the programme and the composition of the consortium with partner profiles and respective areas of expertise. As such, in this initial phase of the project, the website contains mainly information about the abovementioned aspects, while we aim to significantly expand its scope and content in the following months reflecting the evolution of the project.

The public website is publicly available at the following URL:

http://gaia-project.eu/

The homepage of the website reflects the initial minimal approach taken currently. In general, we have tried to follow a modern, esthetically-pleasing and functional approach to the website's design, aiming to emphasize the most essential aspects of the project and minimize the usual clutter caused by more traditional "research project website" approaches.



What is GAIA?

Figure 1 The home page and rolling banner of the GAIA public website

On the header of the homepage, a number of links leading to other parts of the website are included, i.e., "Blog", "Gallery", "Partners" and "About". A rolling banner is also featured at the top of the homepage of the website, emphasizing key aspects of the project. Underneath this initial set of pointers, follows a short introduction to the project, along with a set of additional links, pointing to important categories of information about the project:



- Consortium partners
- The schools participating in the project
- The project objectives
- The technologies used in the implementation of the hardware/software components of GAIA
- Available resources.



Figure 2 Pointers to key parts of information regarding the GAIA project

The "Blog" section of the website will serve as a way to provide updated feedback regarding the progress of the project. It is meant e.g., to include news posts regarding events like visits of the GAIA consortium or participation in research conferences or exhibitions. A number of entries have already been inserted to this section of the website.





Figure 3 Entries in the blog section of the website (updated May 2016)

There is also a "Partners" section in the website, providing basic information regarding who is participating in the project and pointers for further information. There is also a contact form and a form to submit email addresses, in order to sign up for GAIA's newsletters, when they will be available.







Figure 5 Contact form and newsletter signup pointers

In the "About" section of the website, we have initially included content related to the overview of the project, its objectives and the envisioned approach GAIA will follow to achieve such objectives.



Figure 7 The summary of the GAIA objectives



An additional section titled "Resources" will host all resources publicly available to download, including public deliverable texts, presentations, reports and publications. This section will be updated in regular intervals to reflect the availability of project-related material.

Green Awareness In Action	BLOG	GALLERY	PARTNERS	ABOUT	RESOURC	ES	Q
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 D1.1 GAIA Design - Report Month 6 D5.1 Public website - Report Month 2 D3.1 Applications Prototypes - Demonstrator Month 12 D4.1 Initial Trial Documentation - Report Month 12 SHARE: f in is 			Sear Sear Catego • Activ • Meet	ch pries vities (3) 		Q	

Figure 8 The Resources section of the Website

The site will be regularly updated by consortium members over the lifetime of the project with relevant publications and other public materials that showcase all relevant progress in the projects implementation. Further sections will be also introduced in order to facilitate a more interactive communication approach with the community involved in the project, i.e., educators, students, etc.



Technical Details

The project website is based on the popular WordPress CMS platform. It allows for a great deal of flexibility, along with having a vast number of plugins providing additional functionality. The website of the project is hosted in a CTI-maintained server. The GAIA VM has a Debian GNU/Linux 7.3 Operating System installed with 2GB Memory, 1 Virtual CPU and 8GB of local storage. Open-source technologies like Apache (Debian) and MySQL are utilized. As the server is hosted in CTI's server facilities, it is easy to upgrade its specs in the future, in order to deal with potential increased future workloads.

The list of technologies utilized in the project website will be augmented as additional functionality is integrated into the various website sections.



Other online activities

The project will maintain its presence on social media such as LinkedIn, Facebook and Twitter, amongst others. Such activities will be used for interaction with a more professional community (researchers, SMEs, large industry), or will be used for directly interacting with the general public, informing them about the progress of the project.

In order to advance such activities, the consortium has set up an account on Twitter, *eu_gaia*, whose feed is available at the following URL:

https://twitter.com/eu_gaia

This account is meant to provide information regarding the progress of the project in a more frequent manner, e.g., by reposting updates in the website, pieces of information related to GAIA, or events happening organized by the consortium, among a number of potential subjects. The GAIA Twitter account is currently administered by EDOC, who is responsible for posting and updating this communication channel.