

ENERGY WALK

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Design and Impact of Gamification

In the move to a low-carbon economy, industrial energy efficiency is no longer just a technical issue — it's a human one. Underlying the Enertelligence project is recognizing that human capital within organizations is a critical focal point for energy efficiency solutions. It projects technology with human-centered design to change behaviors — across both advocates and employees — and to reposition power dynamics around energy culture in the workplace.

During this project, five concepts were developed. Although not all concepts had a gamified aspect, they all aimed to improve the energy utilization of organizations. One of the more interesting concepts to emerge from this initiative has been Energy Walk. This includes the Energy Walk app and desktop interface, designed to enable a proactive and participatory approach to sustainable action and decision-making.

HOW GAMIFICATION INFLUENCES EMPLOYEES

Insights gathered through the Discover and Define phases of the Double Diamond method — including interviews and surveys with employees and stakeholders — which is defined as a design process model developed that includes four phases:

1. Discover
2. Define
3. Develop
4. Deliver [1]

This revealed several major pain points: a general lack of understanding of company energy goals, employee disengagement, lack of incentives, and a complicated reporting process. These problems highlighted the need for a motivating and engaging approach to modifying workplace behaviors.

Gamification was selected as a primary approach to tackle these issues. By turning abstract objectives into engaging, practical challenges, employees are motivated to engage more actively in energy-saving initiatives. Systems for points,

monitoring progress, and competitive challenges offer recognition and tailored suggestions based on an employee's position and skills. The outcome is an interactive, game-oriented strategy that inspires through individual involvement and external rewards.

HOW WE IMPLEMENTED THAT IN ENERGY WALK

To implement this approach, the Energy Walk solution was created with interfaces for both mobile and desktop use. The application motivates staff to engage in energy conservation initiatives via challenges, real-time monitoring, and tailored focus areas. It also assists in integrating training and updates on regulations, ensuring that efficiency is aligned with compliance.

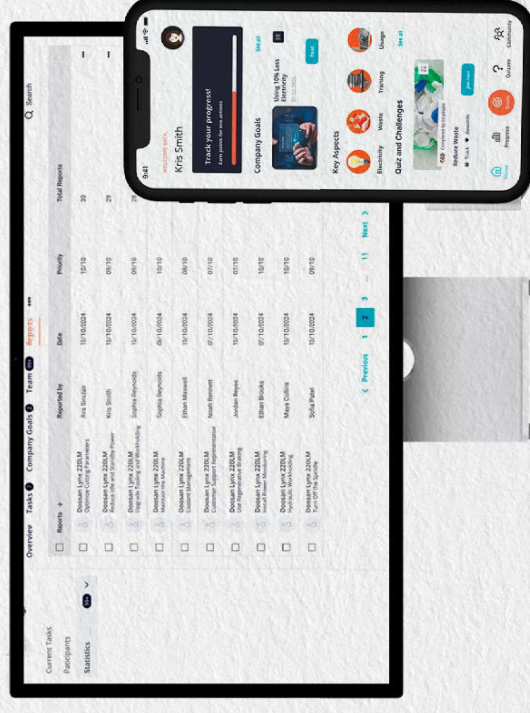
A standout feature of the application is its efficient feedback process. You can report, using your phone, any energy-related issues you may face to enhance the energy in your organization. This approach not only removes communication barriers but also distributes responsibility more evenly and helps improve from the ground up within the organization.

The interface was designed in Figma using a systematic and adaptable design strategy grounded in the Double Diamond model. The Energy Walk desktop interface complements the mobile app, enabling companies to drive their comprehensive organizational energy objectives. It enables management to allocate tasks associated with energy efficiency and subsequently track overall progress towards these objectives, while also viewing the suggestions provided by staff. This feedback loop helps align strategic goals with on-the-ground insights, turning external demands into shared, actionable standards across the organization.

The system does not only oversee data, but it transforms how data is flowing within an organization. This harnesses employees with power to contribute to company level carbon footprint goals.



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To reach an economy less dependent on carbon, Energy Walk demonstrates that technology can be used as a bridge between the strategy of a company and individual power and thus organizational culture. This tool enables workers to feel as they are part of the energy efficiency problem, without making the situation a matter of competition between individuals which improves our understanding of energy use as a collective effort. Thus, the focus is on the employee who becomes the central part of an organization and therefore can influence energy efficiency positively

The application, by decentralizing energy management, allows staff members to manage the regime themselves and gives them the chance to perform normal activities at the same time. The tool, on one hand, assists users to have enough knowledge to make the right decisions and to be influential, and on the other hand, it empowers non-top-down categories to express their views on energy strategy. This way, the app Energy Walk is able to reorganize the source of power, thus, it is no longer people at the top giving orders, but one can see more

participation and more people being allowed to talk. It is such a two-way street that employees can not only internalize the changes but they also can have a significant positive impact on those changes.

PROJECT INFO

The purpose of the Eneertelligence -project is to support energy savings and the use of renewable energy in industry through data-based solutions. The solutions aim to reduce the need for energy storage, build low-carbon industry, and create new green, intangible business. The project's goal is to develop digital energy optimization service demonstrations for sustainable and data-based decision-making.



ENERTELLIGENCE



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