RESPRO

Leading Projects Responsibly

Dissemination and User Intervention

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Executive summary

The RESPRO project aims to enhance project management education by developing people skills and focusing on responsible leadership and well-being at work. With the rise of international projects and the increasing complexity of team dynamics, the need for project managers to possess strong leadership and interpersonal skills has become more critical. The project addresses these needs by creating innovative learning tools: easy-access short courses and an e-simulation game focusing on responsible leadership components. These tools promote team well-being with proactive leadership, and using job crafting, responding to Europe's growing demand for soft skills in project management education. Led by a consortium of four higher education institutions from Spain, Finland, Latvia, and Austria, RESPRO leverages interdisciplinary expertise to ensure the relevance and sustainability of its outcomes. Through transnational collaboration and integrating innovative pedagogical approaches, RESPRO aims to strengthen project managers' ability to lead effectively in diverse and complex environments, fostering a more resilient and people-focused approach to project management.

Introduction

About the project

Mission

The mission of the RESPRO project is to reinforce the people skills in project management education across European HEIs by analysing best practices in responsible leadership, integrating these principles into curricula, and delivering Easy-Accessible Short (EAS) courses, an e-simulation game, and a Teacher Guidebook that can help HEIs institutions to create these skills in their students.

Vision

The vision that guides the project is create a higher-education ecosystem where responsible leadership and well-being at work are embedded as core competences of every project manager; where educators and students use job crafting as a method to achieve this ecosystem; and where RESPRO's open resources are used as a model of tools to use.

Values

The RESPRO project is guided by a series of values that must be followed to ensure a framework of understanding that is both caring and efficient. These values are as follows:

- Responsibility & Ethics. We consider responsibility as the knowledge of the consequences of decisions.

- Well-being & Psychological Safety – We foreground team well-being as a driver of progress.
- Openness – We commit to open access for results and materials, enabling broad adoption and reuse.
- Inclusion & Accessibility – We design for diverse learners and contexts, ensuring activities and outputs are accessible to all.
- Evidence-based Improvement – We ground decisions in research and evidence to refine processes and outputs.
- Co-creation – We build with and for our communities: students, teachers, practitioners, and associated partners.
- Digital Readiness – We deliver practical, user-friendly digital solutions that enhance teaching and learning.
- Impact Orientation – We focus on measurable value for learners, educators, institutions, and the labour market, and on the transferability of results.

About this document

This document is part of Work Package 4, task 3 Dissemination and User Intervention in the RESPRO project. It has two aims: to provide a practical user manual for the e-simulation game (student and teacher views) and to capture, analyse, and apply user feedback from surveys and pilots. This document covers: web-facing dissemination materials; a step-by-step User Manual for gameplay and the teacher dashboard; the design and administration of the user intervention; and an analysis section that informs the Next Steps backlog. Primary audiences are higher-education lecturers adopting the eGame and their students; secondary audiences include programme quality teams and external stakeholders.

Dissemination

It is important to make the e-Simulation Game discoverable, usable and used by Higher Education Institutions (HEIs). In line with the project's dissemination framework, the project website is the canonical hub for public results and evidence, complemented by targeted HEI announcements and mailings that drive academics to a simple, privacy-aware form to request support and signal adoption.

Internally, partners will use institutional channels (programme coordinators, department lists, intranet news, teaching & learning offices) to announce availability and call for adoption.

As method to disseminate the eGame to unknow public Project use the website. The project website consolidates the project narrative and hosts all public results; it remains the single source of truth for the eGame and related materials. The eGame release page contents the "What it is", "How to use in class", quick start for teachers, and a short student view. Hosting remains on the institutional domain operated by UPV, ensuring continuity (http://respro.webs.upv.es).

Surface support: Embed the eGame interest & questions form (see below) and an FAQ (LMS/LTI, SSO, data protection, minimum tech). Map answers to the WP4 use cases (scenario creation, gameplay, teacher results/export).

User Manual

The educational game developed within the RESPRO project is designed to test, practice, and improve leadership skills through a business management simulation. The player enters a virtual company with the objective of making it grow and prosper. To achieve this, the player builds different types of rooms on a board, each contributing to the company in a specific way (e.g., production spaces, innovation labs, well-being areas, marketing departments).

Throughout the game, the player faces decision-making scenarios in which each answer influences the company's performance indicators and the overall leadership score. The game therefore combines strategic management with situational challenges, encouraging players to reflect on the consequences of their decisions in a safe, simulated environment.

The system is divided into two main components:

- Game (Student/Player)
- Teacher (Dashboard)

Student/Player Section

Students can join an existing session and play the game either in Open/Demo mode, with pre-built scenarios, or in Custom mode, where the content has been configured by their teacher. During gameplay, students manage their virtual company by building rooms, responding to scenarios, and observing how their choices impact indicators such as productivity, innovation, employee well-being, and reputation. At the end of a session, the results are displayed, and the student can choose to automatically share the results with their teacher.

Game design

In Respro, gameplay is structured into distinct daily cycles. Each in-game day represents an 8-hour workday (from 8:00 to 16:00), which lasts approximately two minutes in real time.

The player starts with an empty board and gradually builds their company step by step. On the main screen, they can view key information such as the indicators displayed in the top right corner, while controlling and accessing game actions through the menus located at the bottom right.

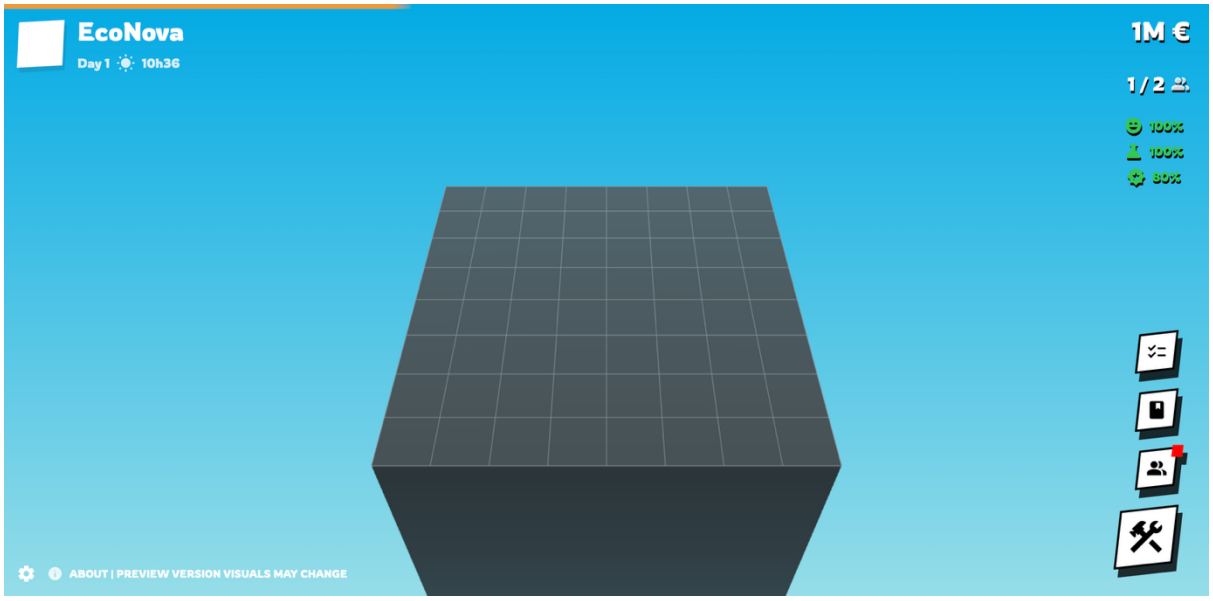

Figure 1 - Game Board

The main objective for the player is to survive as many days as possible, while ensuring the growth and prosperity of the company. Every new day introduces specific challenges in the form of scenarios that the player must resolve through decision-making.

Success is measured primarily by the company's financial performance: the more profit generated, the stronger the company becomes. However, players must also pay attention to additional parameters — such as innovation, employee well-being, and reputation.

The company fails, and the game ends, if the bank balance falls to zero or below, resulting in bankruptcy.

Game indicators

In addition to financial management, players must also monitor several key indicators that directly influence the gameplay and the overall performance of their company.

There are five core indicators:

1. Employee Well-being
2. Innovation
3. Reputation
4. Leadership
5. Job Crafting

The average of these indicators forms the Productivity Index. This overall score serves as a central performance metric, directly affecting the company's profitability. For instance, the production rate

of production rooms is primarily determined by this index, meaning that the player's ability to manage employees, foster innovation, and sustain a strong reputation is essential to maximizing revenue.

To strengthen these indicators, players can construct specialized rooms that enhance their resilience (reducing the negative impact of challenges) and improve their recovery (accelerating the restoration of the indicator).

Examples of such rooms include (listed in order of effectiveness, with more powerful rooms being more costly to build):

- **Employee Well-being**: Lounge, Fitness Room, Recreation Room
- **Innovation**: R&D Laboratory, Creative Studio
- **Reputation**: Marketing Department, Customer Service

Rooms

One of the central components of Respro is the system of rooms, which together form the structure of the player's company. Each room has a specific role and directly contributes to the company's development and performance.

There are several main categories of rooms:

- **Production Rooms**: Generate revenue for the company. Examples include the Office and the **Open Space**, which increase income based on the number of employees assigned.
- **Well-being Rooms**: Improve the Employee Well-being indicator by providing relaxation and comfort spaces.
- **Innovation Rooms**: Boost the Innovation indicator by fostering creativity and new ideas.
- **Reputation Rooms**: Strengthen the company's Reputation through visibility and customer engagement.

In addition, there is an additional special room: classroom, which plays a unique role in improving employee skills and will be described in detail later.

To construct a room, click the Build button located at the bottom of the screen. This will open the room selection menu, where you can choose the type of room you wish to add. After selecting a room, click on any available tile on the board to place it. You can build multiple rooms, as long as you

stay within the available limits. Once you are done, click the Build button again to exit construction mode and return to normal gameplay.

Figure 2 - Room Build Menu

Once a room has been built, a control menu appears at the bottom of the screen, allowing you to upgrade, manage, or remove the room if necessary.

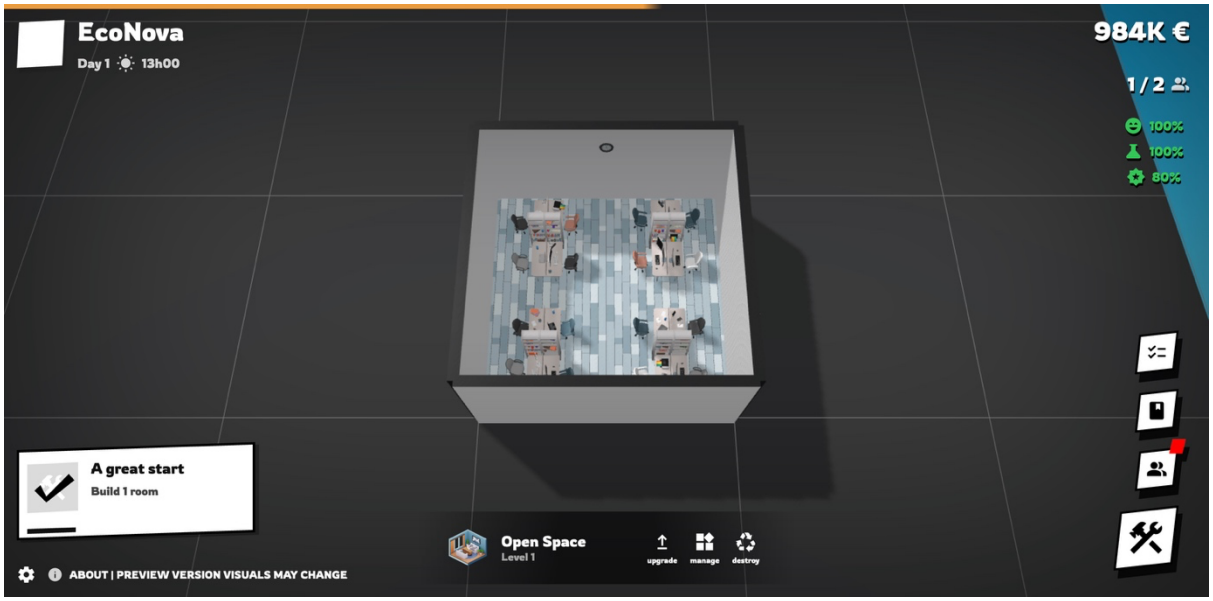

Figure 3 - Board With Open Space Room (Focused)

Workers

Workers are the core resource of your company. They can be assigned to different rooms to activate or enhance their effects. For example, production rooms generate revenue only when workers are placed inside them, and the more workers assigned, the higher the output. Similarly, workers in innovation or well-being rooms contribute to improving the corresponding indicators. Managing workers efficiently is crucial: assigning them to the right room at the right time can make the difference between growth and bankruptcy. Keep in mind that workers represent not only manpower but also motivation and skills, meaning that their well-being and development must be balanced with the company's financial goals.

Since the open space is a production room, employees must be assigned to it before it can start generating revenue. By default, one employee is hired at the beginning of the game, and you can recruit an additional one. To do so, open the employee menu (the second button from the bottom).

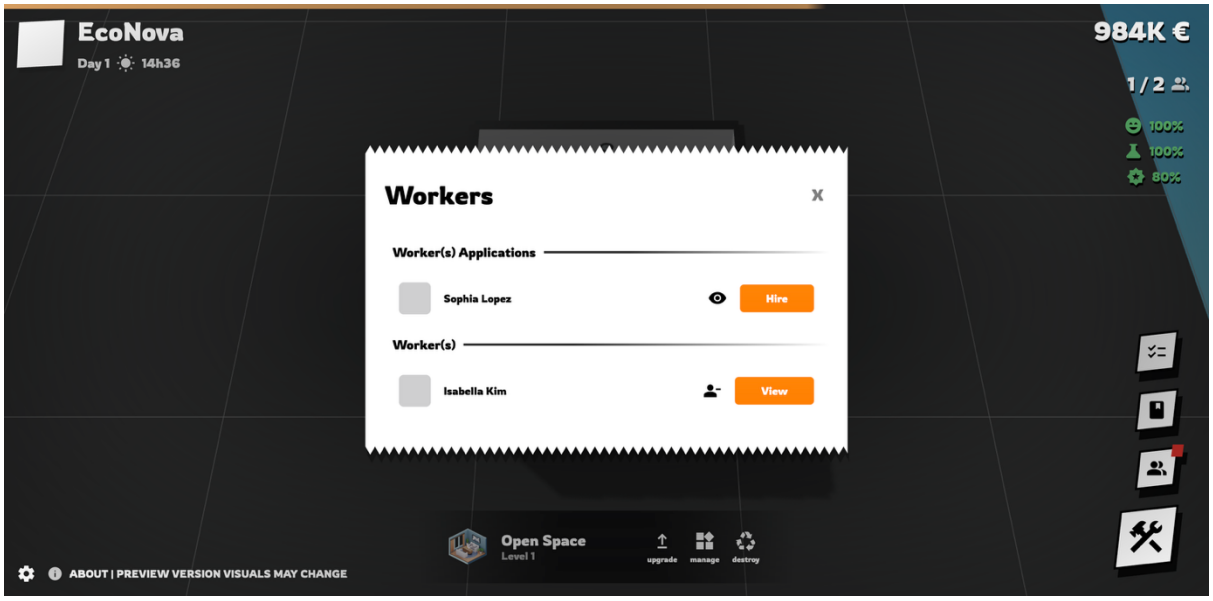

Figure 4 - Workers Menu

As you can see, one employee is already hired, and another becomes available for recruitment each in-game day. This means you will have the opportunity to hire a new employee regularly.

Each employee has their own skill level, which directly influences the company's performance indicators. The more skilled an employee is, the more revenue they can generate.

➔ It is also possible to improve employees' skills by assigning them to the dedicated "Classroom" room.

Once hired, employees can be assigned to a room by selecting the room, clicking the “Manage” button, and then assigning them one by one.

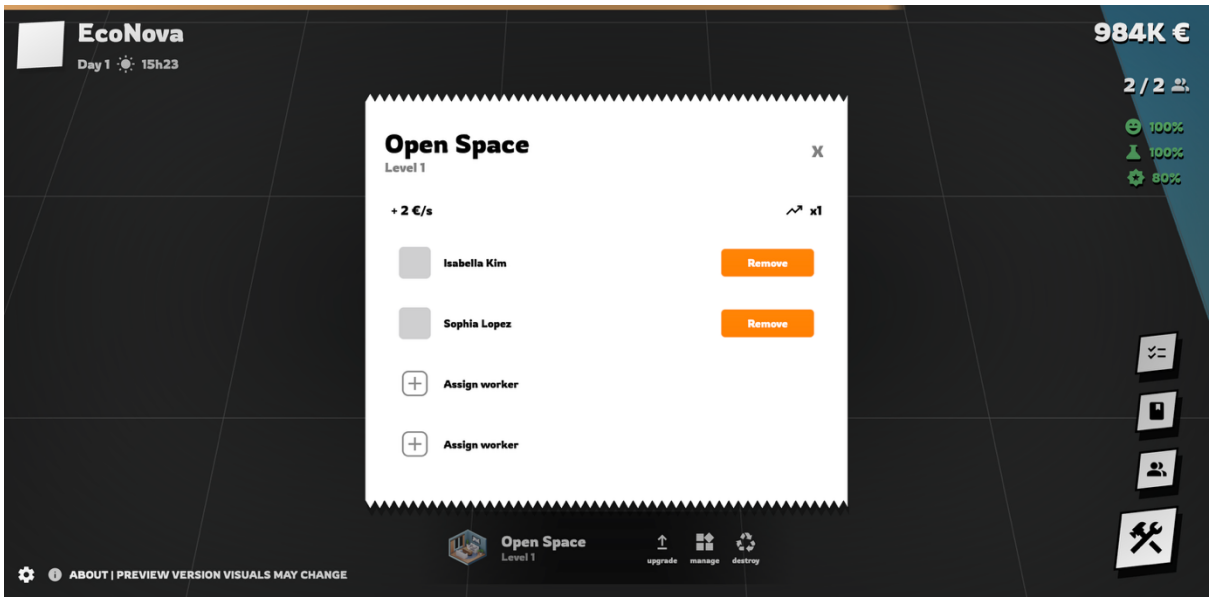

Figure 5 - Room Control Menu

Scenarios

During the game, scenarios will appear randomly in the rooms you have built, introducing situations that simulate real-life business dilemas such as resolving employee conflicts, making strategic investments, or responding to unexpected crises. Each scenario offers multiple possible choices, and

the decisions you make will have a direct impact on your company's key indicators such as employee well-being, innovation, and reputation.

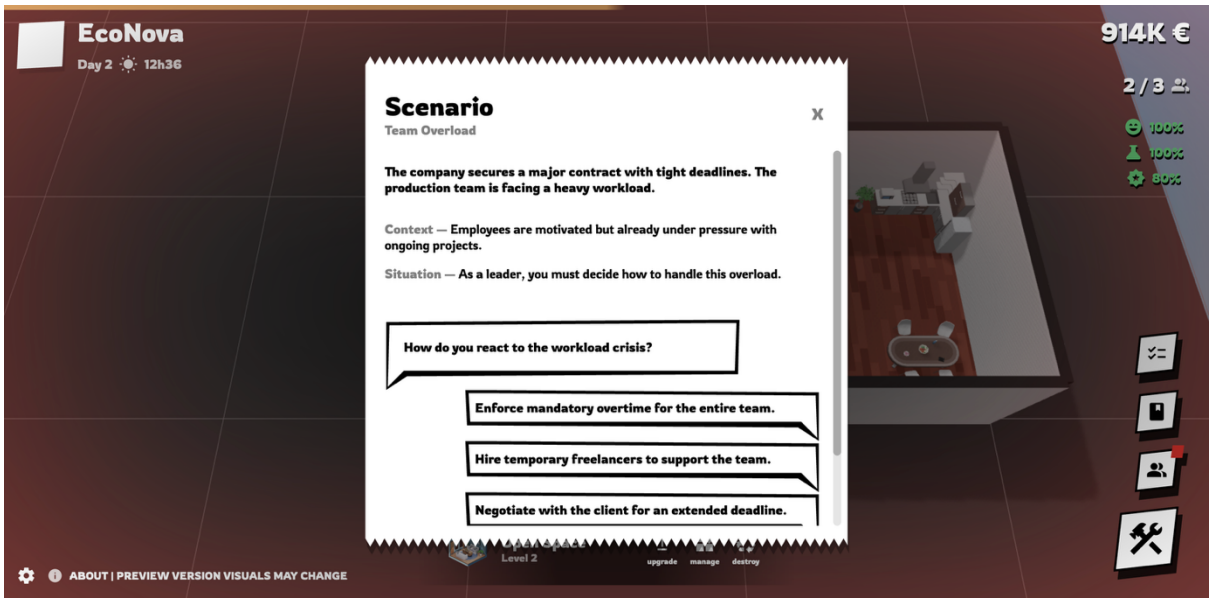

Figure 6 - Scenario Answer Menu 1

After responding to a scenario, feedback will be displayed showing the effects of your chosen answer.

The answers to each question in the scenario directly impact the company's indicators. These indicators directly influence performance and productivity.

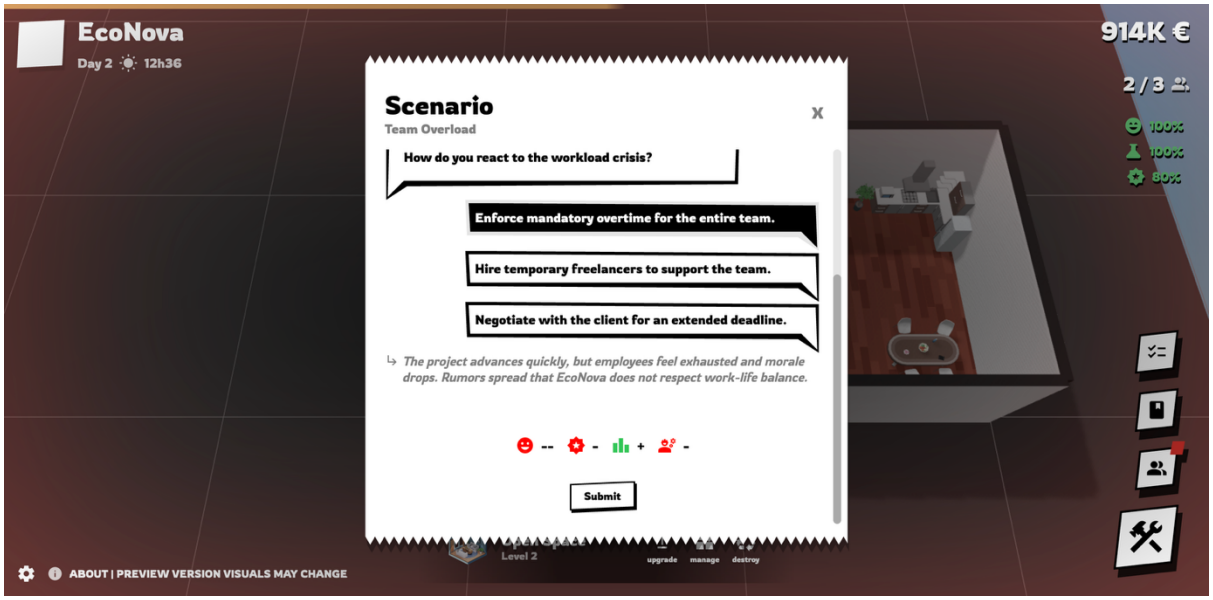

Figure 7 - Scenario Answer Menu 2

Side Missions & Tasks

It is also possible to increase profits by selecting side missions. Depending on their predefined risk level and duration, these missions can generate additional gains for the company.

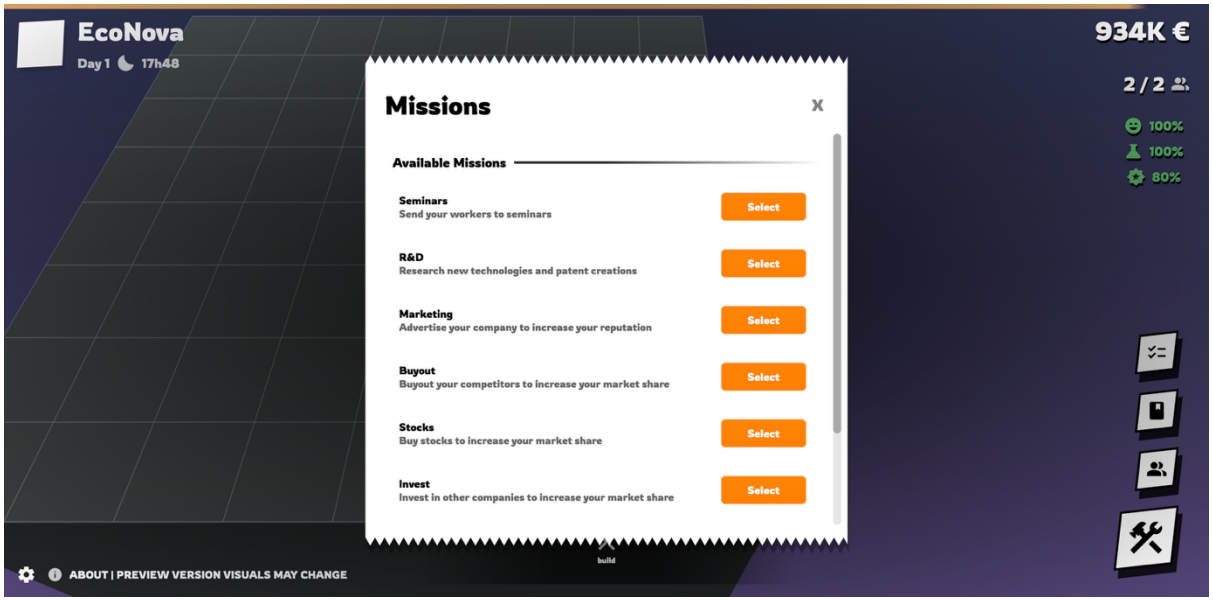

Figure 8 - Missions Menu

Tasks are also assigned at the beginning of the game to help you discover and explore the many features it offers.

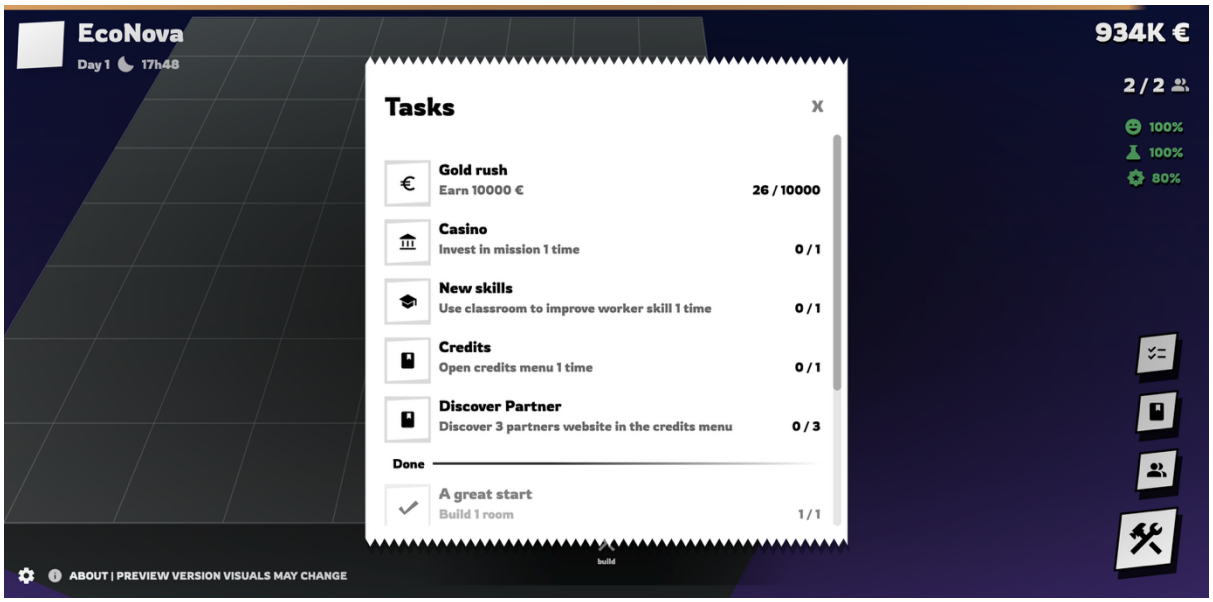

Figure 9 - Tasks Menu

Game Lifetime

Example of gameplay after building several rooms, with an active scenario :

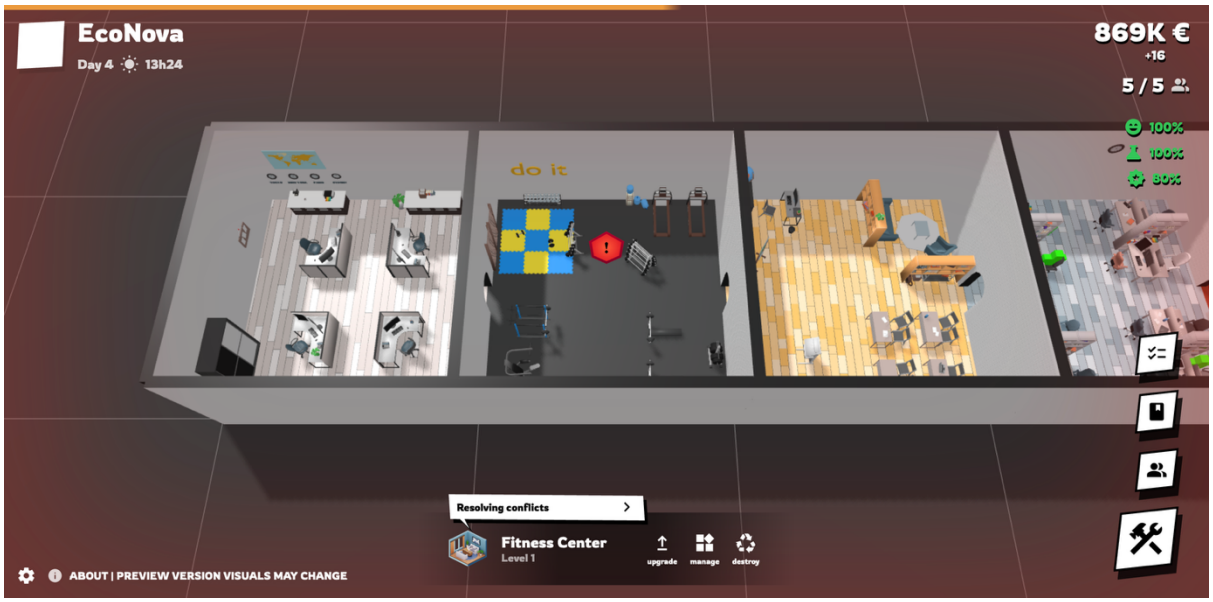

Figure 10 - Multiple rooms with scenario

The game is structured around fictional days. At the end of each in-game day, a summary screen is displayed with the day's statistics. As a reminder, at the end of each day you also have the opportunity to hire new employees.

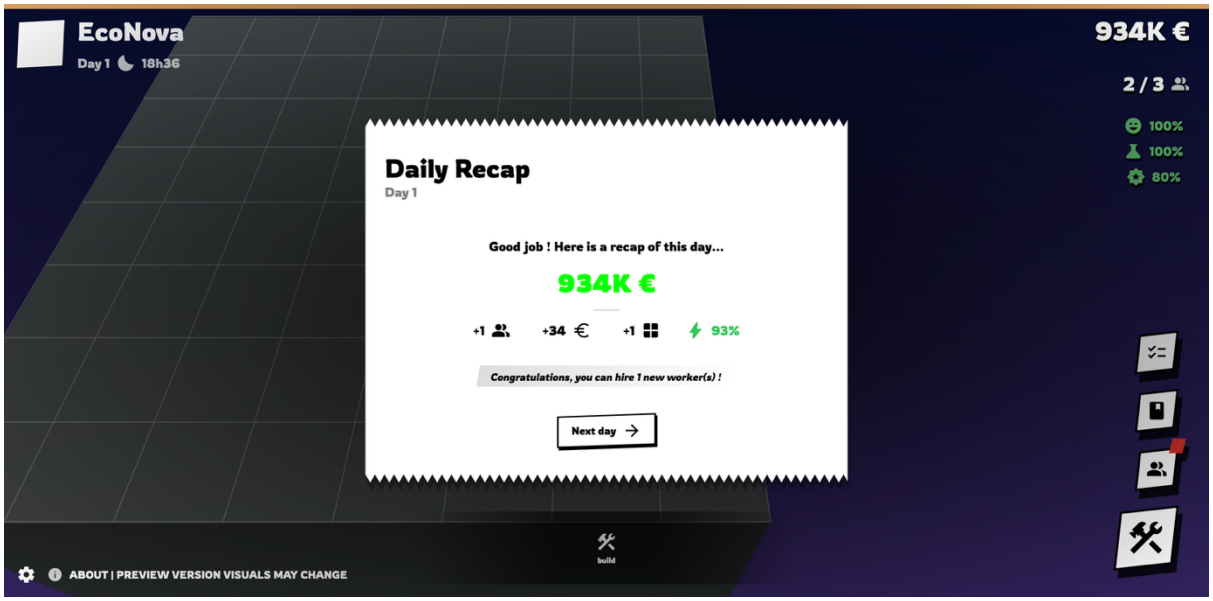

Figure 11 - Daily Recap Menu

However, if at the end of the day the company's balance reaches zero or below, the company is declared bankrupt and you lose the game.

Figure 12 - Game over – Bankruptcy

At the end of the game, session statistics are displayed, and you can automatically share them with the creator of the company (for example, the teacher).

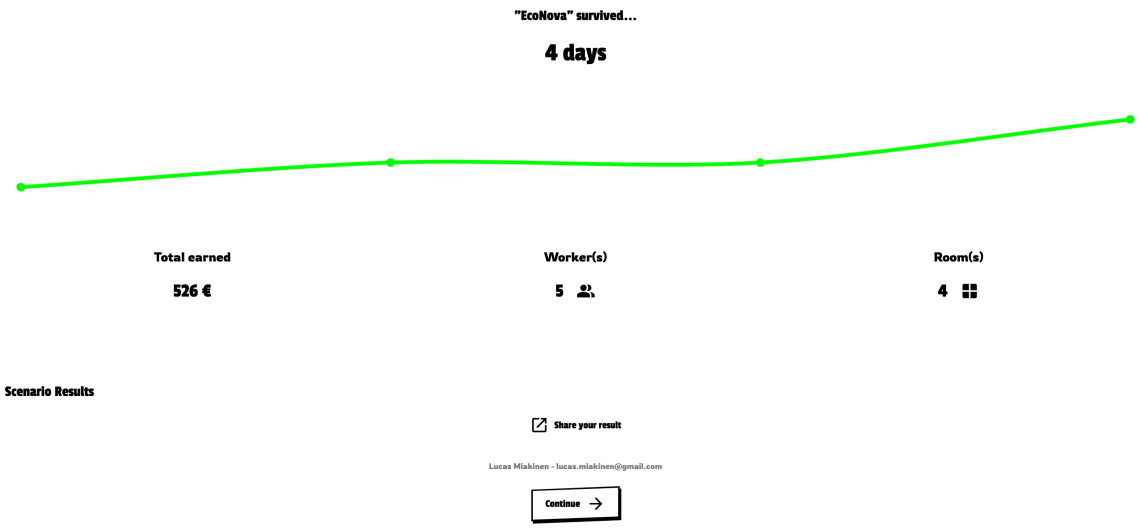

Figure 13 - Game statistics summary

Teacher Dashboard

Teachers have access to a dedicated dashboard that allows them to create and configure game settings by creating a "company." They can define scenarios, adjust settings, and design parameters

specific to their company to adapt them to their educational objectives. Each company creates a code that is shared with students, who can then log in and play according to the configuration defined by the teacher. Teachers can also use the dashboard to track performance and collect game results submitted by students for evaluation.

To access the Teacher Dashboard, click on the Teacher Dashboard link located in the navigation bar on the main page.

Login

Access to the **Teacher Dashboard** requires an internal account. A new account can be created directly through the registration page, and there are no restrictions—anyone can create one. However, it is important to follow the required input format when filling out the registration form :

- Email ***(required)***
  - Must be a valid email format.
  - Allowed in the local part: letters, digits, dot (.), underscore (), percent (%), plus (+), hyphen (-).
  - Domain allows letters, digits, dot (.) and hyphen (-).
  - Top-level domain must be at least 2 letters.
  - Must not already be registered.
- Password ***(required)***
  - Minimum length: 8 characters.
  - No additional complexity requirements (no mandatory uppercase/digit/special).
- First name and Last name ***(required)***
  - Each must be at least 2 characters long after trimming spaces.

Figure 14 - Teacher Dashboard - Register Page

Figure 15 - Teacher Dashboard - Login Page

Create your first company

Once logged in, the main page displays the list of custom companies you have created. If you have just registered your account, this list will be empty.

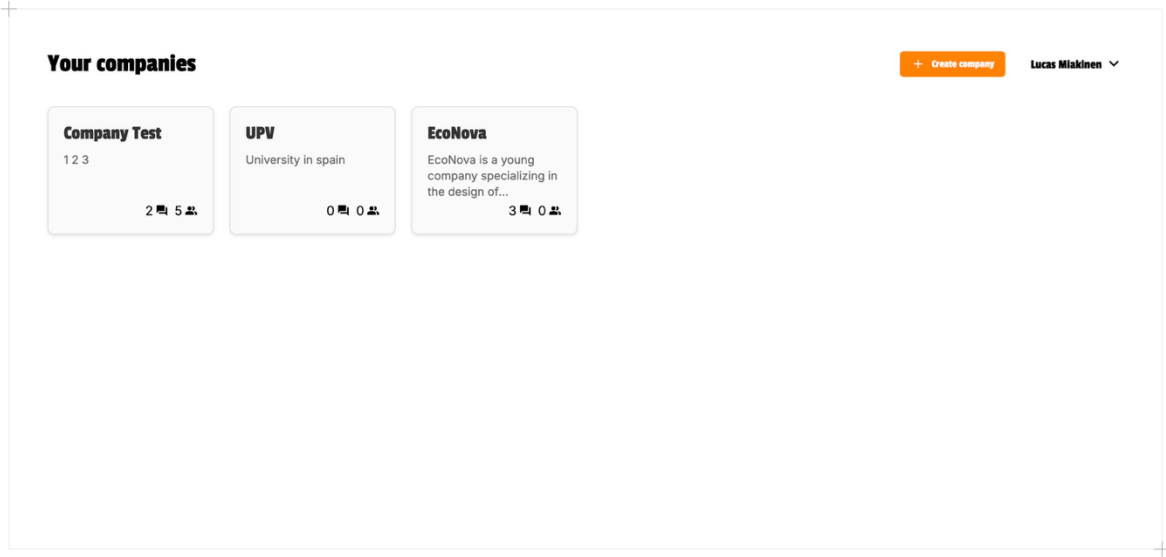

Figure 16 - Teacher Dashboard – Exemple of companies list screen with multiple companies

To create your first company, click the button located at the top right of the page. In the creation screen that follows, fill in the required information, such as the company name and a short description.

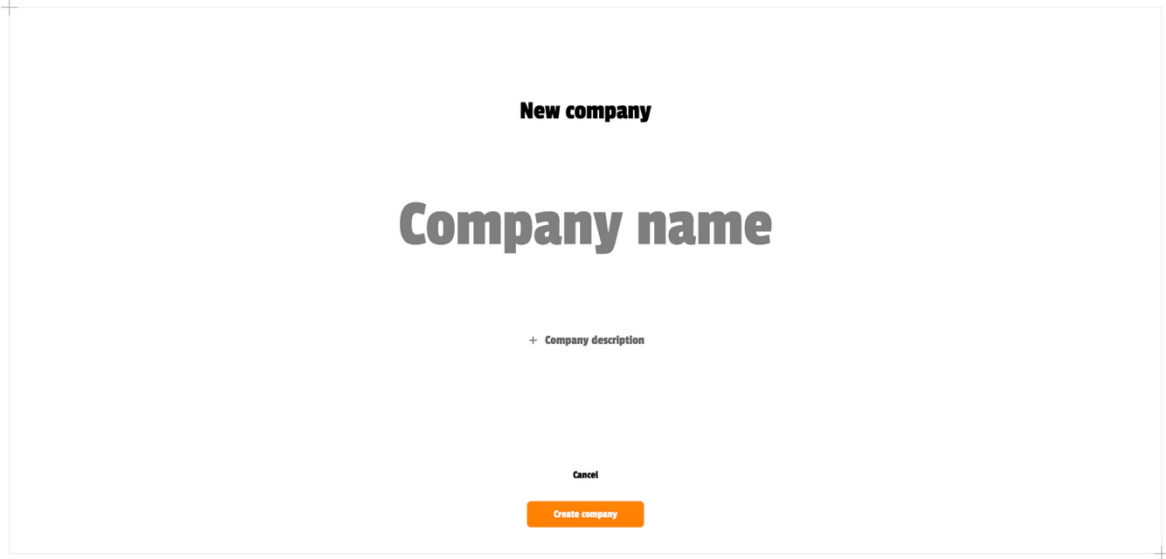

Figure 17 - Teacher Dashboard - Create Company Screen

How does the “company” system work?

In the Company Management screen, you can configure the company’s information and parameters through different categories:

- **Overview:** Manage basic details such as the company’s title and description.
- **Scenarios:** Create new scenarios or modify existing ones linked to the company.
- **Results:** Access the list of student result reports associated with the company.

Creating a company allows you to design custom scenarios and predefine a specific game structure with your own questions. This gives you the ability to personalize the gameplay experience for your students and adapt their evaluation according to your criteria.

Once the company is configured, simply share the company code, which is displayed at the bottom left of the screen. Students can enter this code in the “Play with code” section on the home screen to join the game session with your predefined setup.

At the end of their session, students can choose to automatically transmit their results by checking the option “Export my result.” These reports will then appear in the Results section of the dashboard, where you can review all evaluations with the associated indicators. This feature helps you analyze student performance and their responses to the scenarios.

Note: To identify students, they are required to enter their personal details (name and email). However, no identity verification is performed.

Company management and configuration

On the management overview page (shown below), you can change your company name and description.

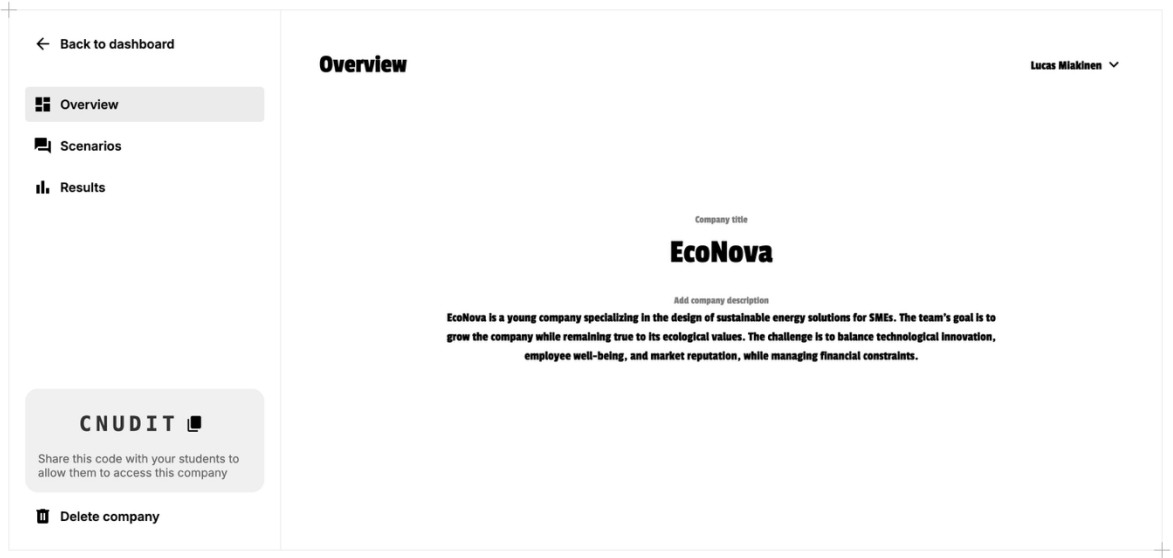

Figure 18 - Teacher Dashboard - Company Detail – Overview Screen Exemple

The Scenarios page allows you to manage your scenarios by displaying existing ones and adding new ones.

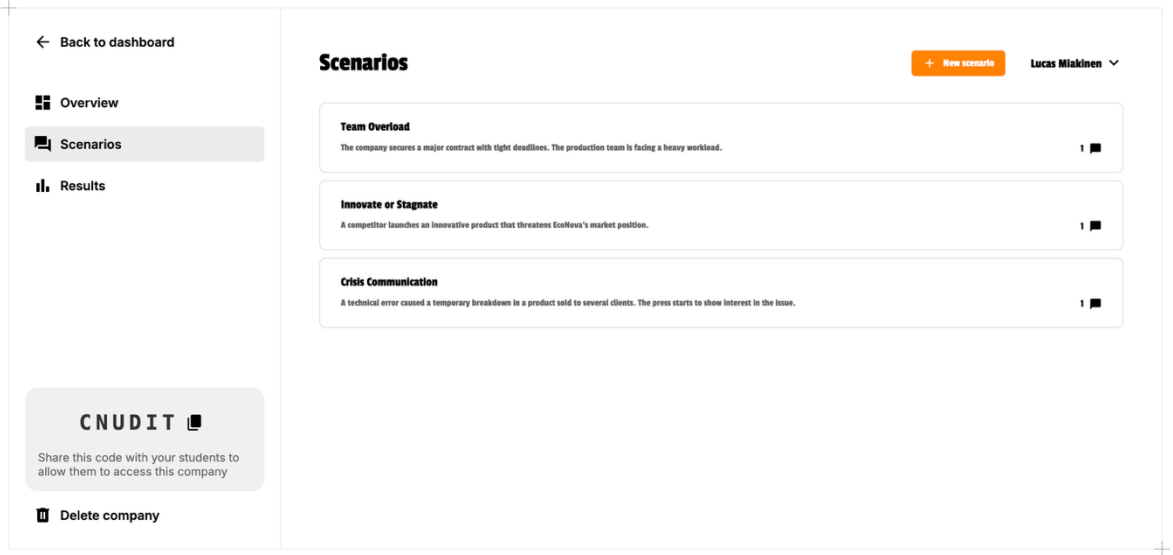

Figure 19 - Teacher Dashboard - Company Detail - Company Scenarios List Exemple

Clicking on a scenario opens its dedicated page, where you can fully manage its content. From this page, you can edit the title, description, context, and situation, as well as create as many questions as

you wish. Each question can be configured with multiple answers, along with their corresponding consequences and impacts on the indicators of your choice.

Remember to save your changes before closing the page to ensure your modifications are not lost !

Note: When you modify a scenario, the changes are applied automatically and immediately, meaning that new players will see the updated version. Keep in mind that altering scenarios should be done with caution, as two sessions—one played before the change and another after—may differ significantly (for example, adding a new question result in a different game experience).

To avoid inconsistencies, student reports always display results based on the exact parameters in effect at the time the game was played. Therefore, editing a question or adjusting a score will not affect previously generated reports.

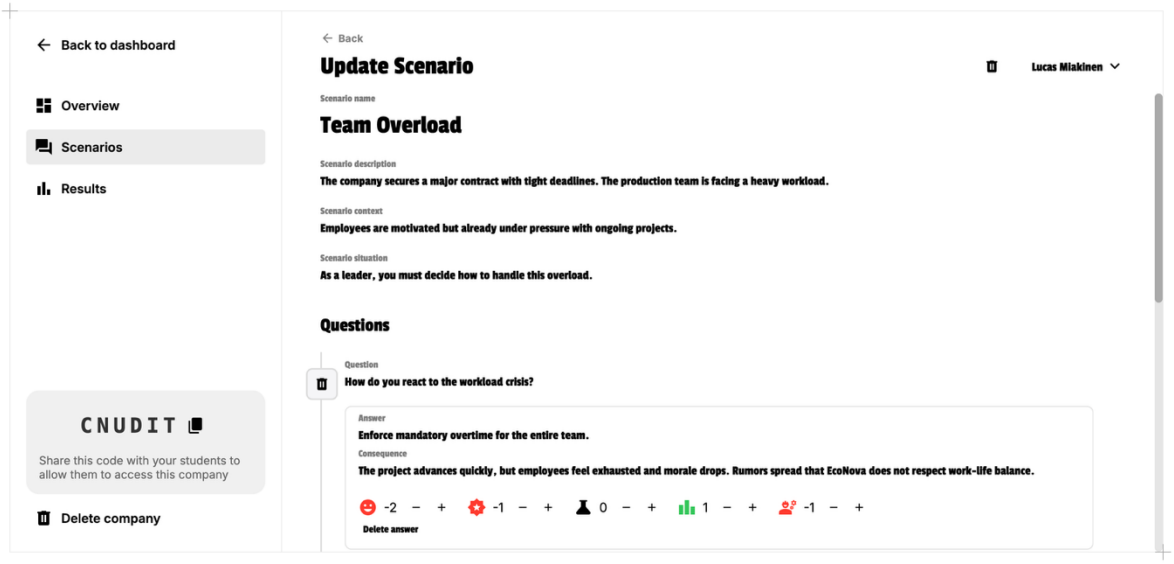

Figure 20 - Teacher Dashboard - Company Scenario Detail 1 Exemple

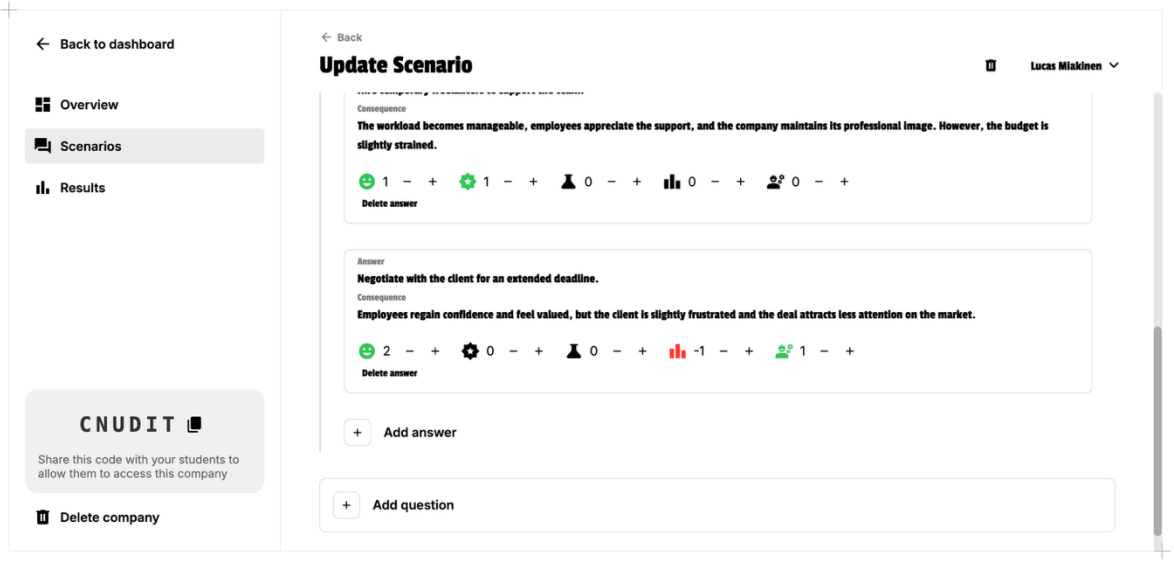

Figure 21 - Teacher Dashboard - Company Scenario Detail 2 Exemple

Finally, the Results section allows you to view the list of students who have played and shared their reports :

Figure 22 - Teacher Dashboard - Company Results List

Each object corresponds to a game session and therefore to a report. By clicking on a specific report, you can view detailed information about that session (shown below), including:

- The detailed score for each indicator
- The number of days survived
- The total amount of money generated
- The final number of workers
- The final number of rooms built
- A graph showing daily revenue progression
- The complete list of scenarios, with the chosen answers and their impact on the indicators

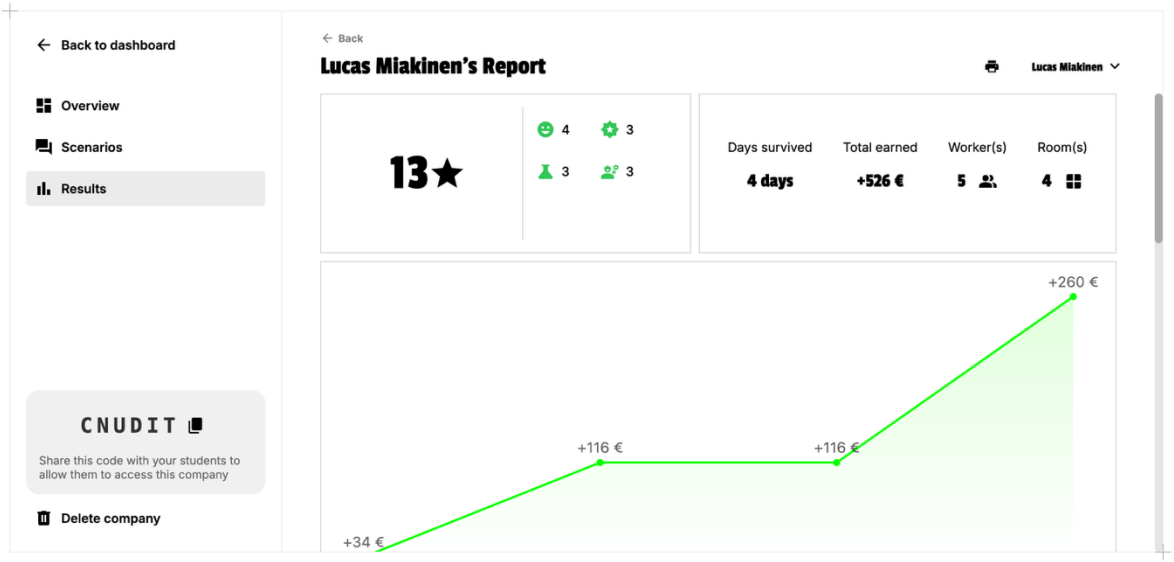

Figure 23 - Teacher Dashboard - Player Results Report 1

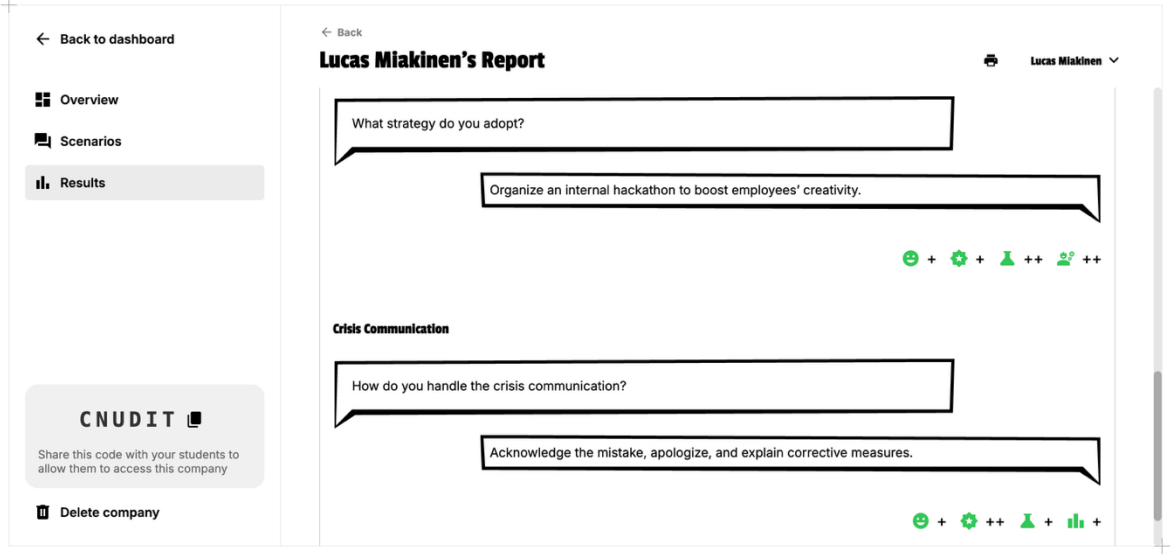

Figure 24 - Teacher Dashboard - Player Results Report 2

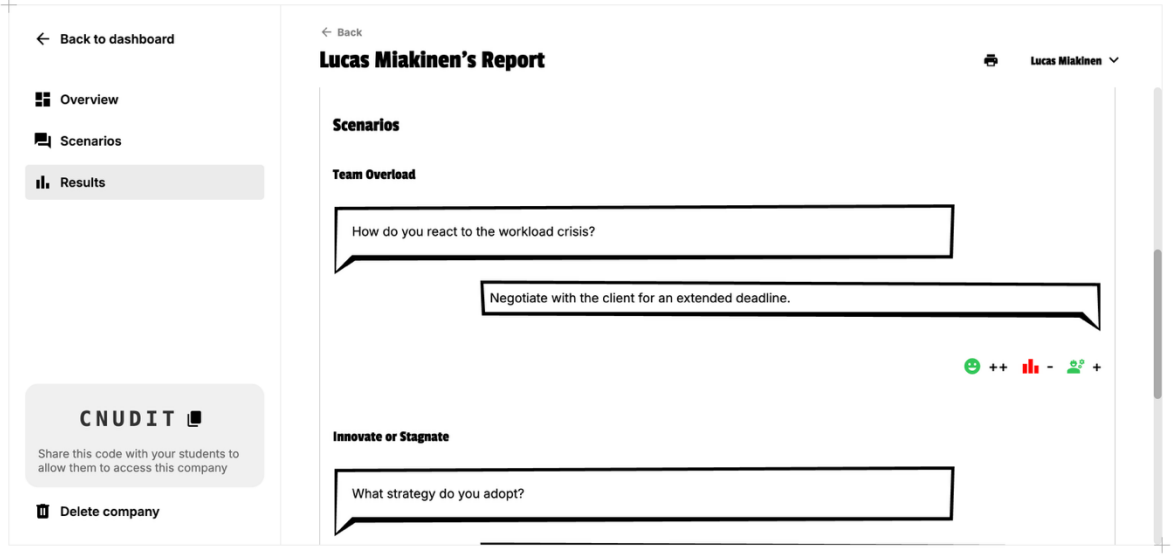

Figure 25 - Teacher Dahsboard - Player Results Report 3

By combining these two perspectives, the game offers a flexible educational tool that can be used for both independent learning and structured classroom activities. It promotes experiential leadership learning by combining simulation, interactive scenarios, and guided reflection.

User Intervention

The intervention of the users is carried out through face-to-face sessions in the classrooms or through sessions that students can do after receiving an invitation email to text and use the game. The face-

to-face sessions are used in project management subjects while the rest have been offered to students simply so that they know the environment of the game developed in the project.

To properly collect information from the students' experience, a form is used, which will also be described below. Afterwards, the responses are collected and analysed to determine both the changes that can be made to the eGame and the rest of the actions for possible projects and the use of this tool in the classroom.

Form description

The form can be obtained in this link: https://forms.office.com/e/ZZQHdtvjpx. As detailed in the project specifications, the form is stored on OneDrive servers because all partners use the same platform, and this platform complies with all European Union requirements regarding anonymity and data protection.

Starting message

The form starts with a. message that provide basis information to the user (Figure 26). This message covers the basic target of the questionnaire, the link to the project and the link to the beta version of the eGame.

Figure 26. Basic information of the feedback form.

Context data

The background data is simplified into three questions to go directly and not wear out the student or user. The first question is about the universities of the partner universities or other universities or even a public or private organization, company or similar. We distinguish a lot from universities and companies to determine the answer and separate it based on whether the person completing the questionnaire is a student or a professional. The second question is the current or completed level of studies; we do not distinguish so as not to wear out the respondent and finally the project management experience from none to maximum expert experience. In these previous questions, the option "I prefer not to say" is always allowed to remain anonymous and comply with the project specification requirements.

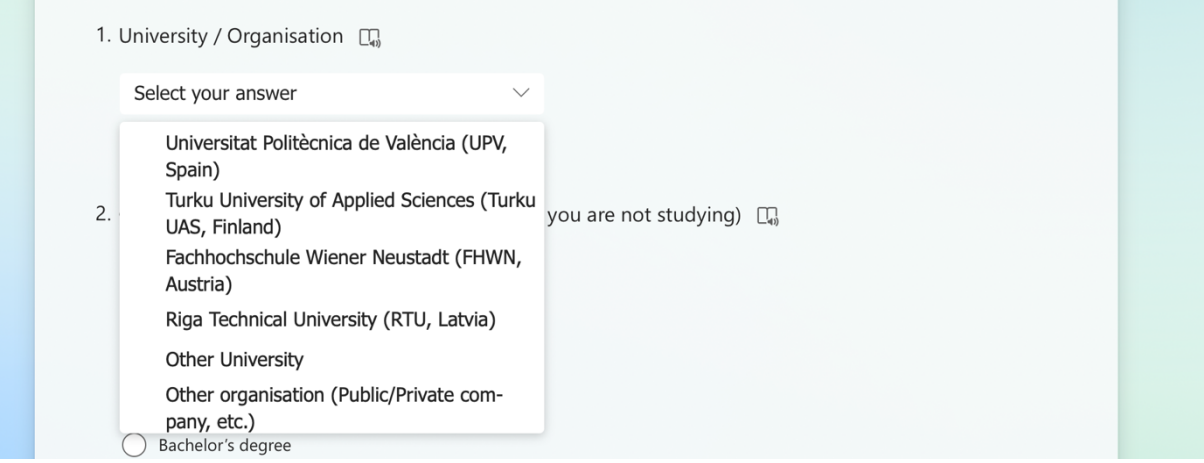

Figure 27. Options of the question 1 University/Organisation

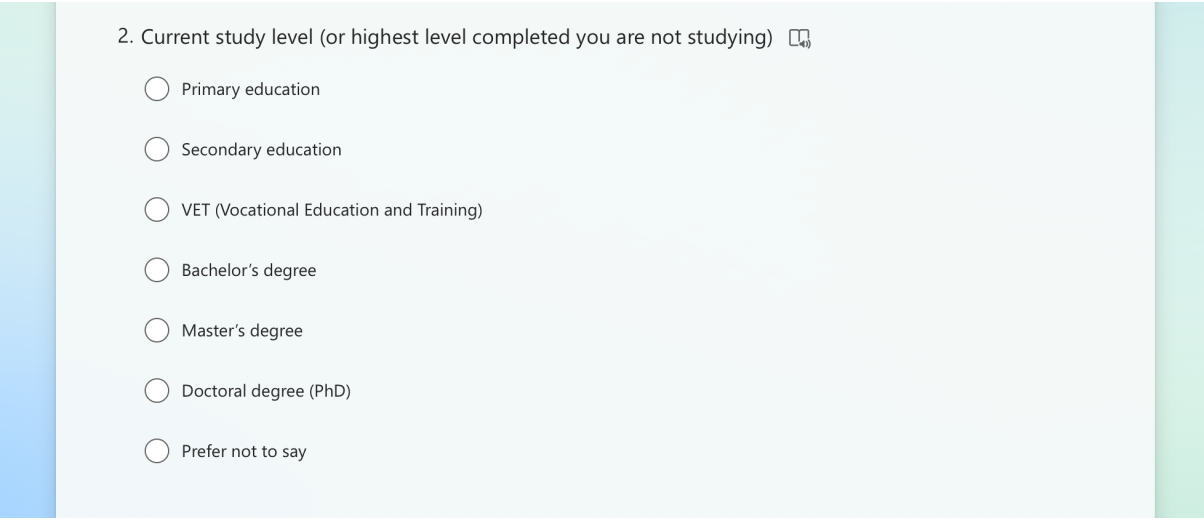

Figure 28. Options of the question 2 (study level).

Figure 29. Options of question 3 (experience in project management)

eGame appearance

After collecting the necessary data to know the context of the person who is answering the survey, two questions are asked about the visual appearance. It is important to keep in mind that they have previously been asked if they understand the objectives of the application.

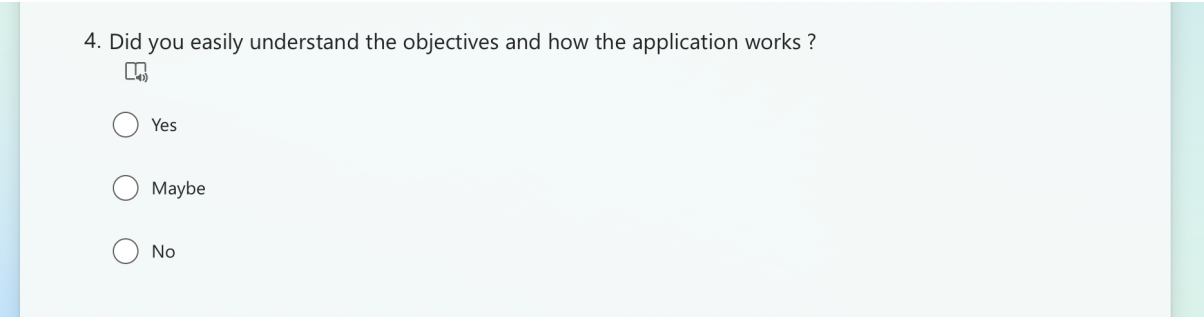

Figure 30. Objective question.

Regarding the appearance, two questions are asked: visual appearance and accessibility. The visual appearance is to know if the visual design carried out under the criteria of the partners by RTU are with have been fulfilled and then about accessibility, clarity of navigation, simplicity of menus, etc.

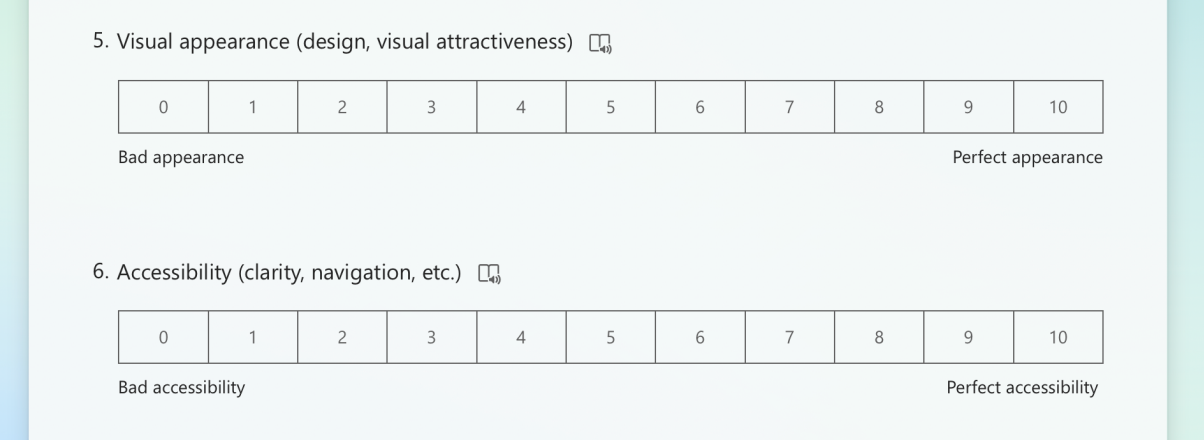

Figure 31. Questions about appearance.

eGame experience

The user experience is measured through various questions, the first of which is the experience in fluidity, is it easy to carry, and so on. Then we move on to ask about the characteristics, to say if the options the player has available are relevant. Then we talk about intuition, is it easy to understand the mechanism by which it is being played.

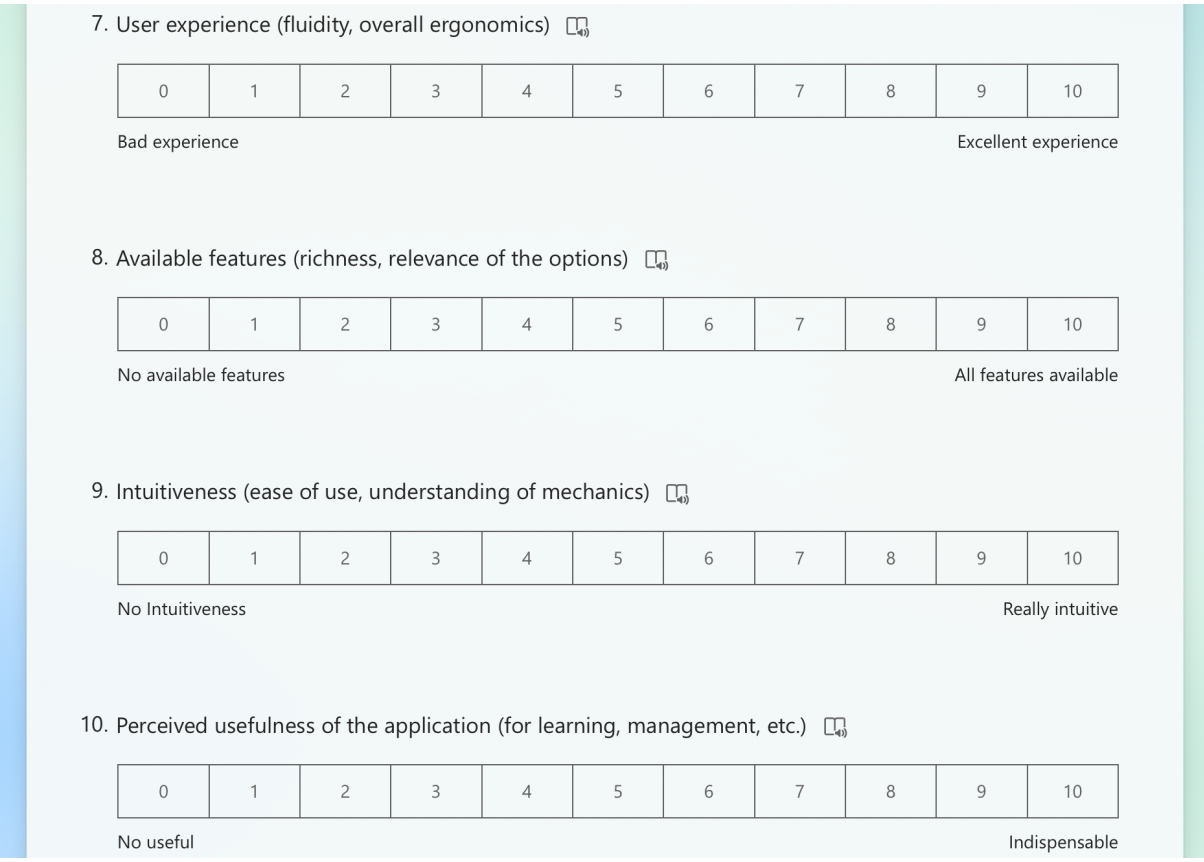

Figure 32. Experience questions.

Finally, a question about usefulness is used, that is, is it interesting both for learning and for being able to develop the necessary skills. From there, the last questions about the background of the game are about the characteristics and the content. Is it useful for the purpose it has developed.

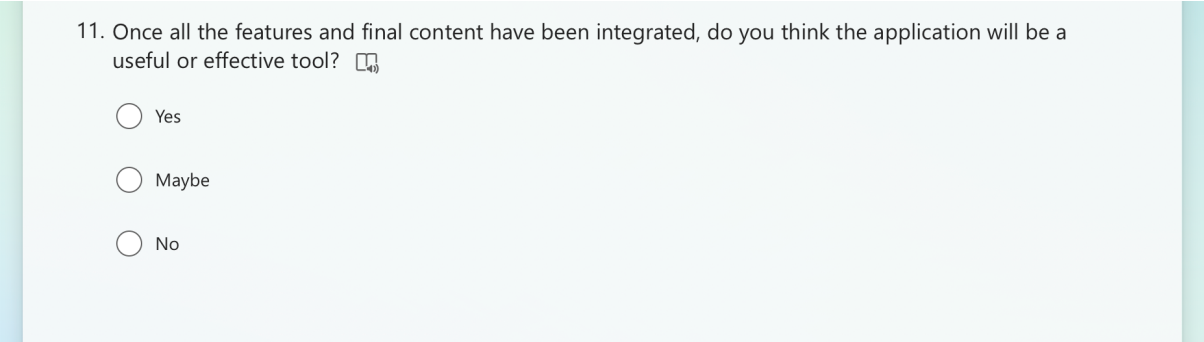

Figure 33. useful question.

Feedback

The last question is specifically designed to provide an open field for users to give their opinions. This question asks about the app's strengths, which aspects should be improved, and especially ideas and suggestions for future implementation.

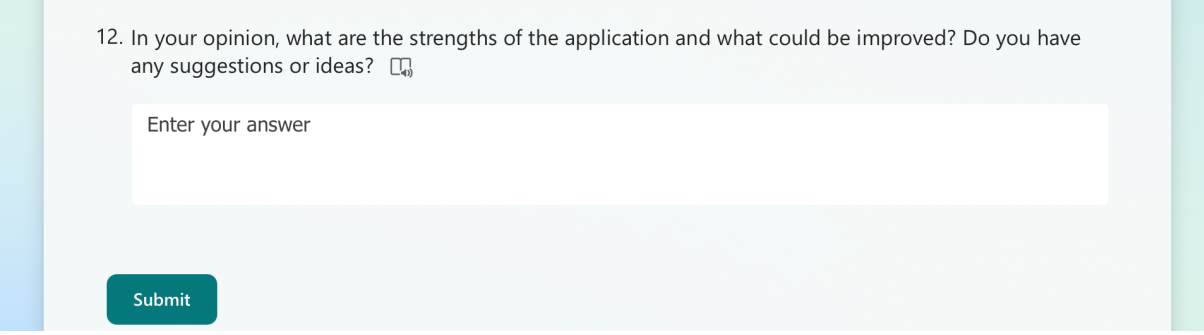

Figure 34. Feedback question.

Collecting answers

Data collection is conducted through two controlled means: email and in-person sessions. The website and social media were not used to better control the sample, meaning known students. We collect answers in classroom and sending a mail to students of the partners HEIs.

Students Sessions

The first sample sessions and data collection and analysis sessions are held in the partners' classrooms. These sessions allow us to show both the game to all students and provide them with the link to both

the game in its trial version and the survey to determine the improvements and the validity of this as a teaching tool.

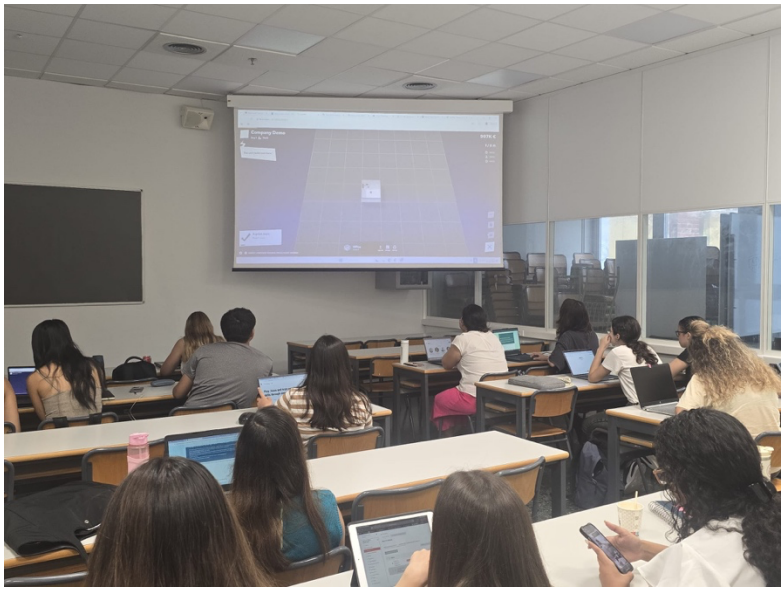

Figure 35. One of the sessions of eGame dissemination.

In these sessions, the game was explained from the teacher's point of view so that the students had a general vision and then they were invited to play either with a scenario they had created or with the scenario they decided to create. The teacher then invited them to complete the very short survey and in this way, it was certain that the students had not only seen the game but had also been able to ask questions about aspects that were not clear and that through a mailing list these aspects are very difficult to explain.

Mailing

Email has been used to disseminate the video game application, although it has been considered better to have the surveys collected for later analysis since more than 5,000 emails were sent. And it is not easy to determine which of them correspond to students and if the students have been able to respond with the sincerity that the students in the face-to-face sessions responded. The text included in the mail sent is show below

Dear Student

In the context of the project RESPRO (http://webs.respro.upv.es) in which your university is a partner, a tool is developed. The tool is a game to learn and practice concepts about responsible leadership.

We need your feedback. It would be helpful if you could visit this address:<eGAME URL> where the beta version is located and try the game (for a few minutes). Once you've tried it, please fill out this survey: <SURVEY URL> it would be very useful.

If you need more information, please contact Jose-Luis, the project coordinator, at jopolu@upv.es. Thank you in advance for your collaboration.

<RESPRO PARTNER NAME>

Responses Analysis

Because the Microsoft Office 365 platform is used by all partners and given that it is the one that the universities will provide to the team, Microsoft Forms was used to collect the information and consequently the first analysis that is done is through this tool.

Microsoft Forms strictly evaluates results using quality assessment levels, not academic standards. That is, a score of 9 or 10 out of 10 is considered "Promote" or favourable; 7 or 8 out of 10 is considered "Passive" or indifferent; and 6 or lower is considered "Detractor" or unfavourable.

Context Data

The study-level profile (Figure 36) shows a clear undergraduate majority: Bachelor's 39 (73.6%), Master's 9 (17.0%), and PhD 5 (9.4%), with a total sample of 53 respondents. Using simple binomial 95% confidence intervals, these proportions are approximately 73.6% ± 11.9 percentage points, 17.0% ± 10.1 percentage points, and 9.4% ± 7.9 percentage points, respectively. This confirms that the survey primarily reached undergraduate learners.

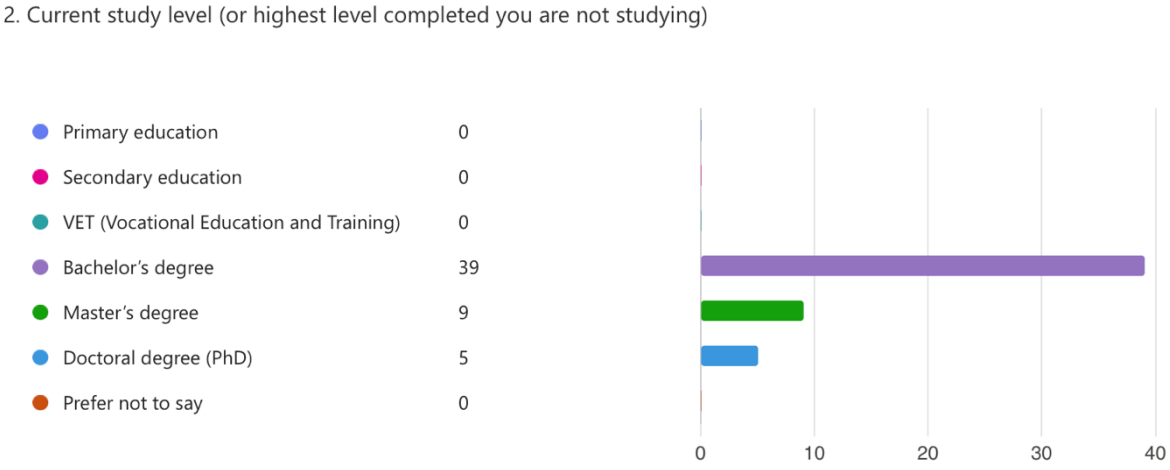

Figure 36. Results of question about study level.

This composition has practical implications for interpretation and design. A predominantly undergraduate cohort is likely to rate perceived usefulness highly when content feels new, while simultaneously reporting lower intuitiveness or fluidity due to limited prior exposure to project management. To address this, onboarding should include concise primers, example-led tutorials, and context-sensitive explanations of key terms. Language and pacing ought to favour plain English and progressive disclosure of complexity. Assessment and scenario difficulty should be calibrated to novice or intermediate competence, with optional "advanced" paths available for the smaller Master's and

PhD segment to maintain relevance across levels. Supporting materials such as a student quick-start and a facilitator guide will further ease first-time adoption.

From an analysis standpoint, it is advisable to segment results by study level to test whether issues related to intuitiveness, accessibility, and flow are concentrated among undergraduates. If the goal is to generalise findings beyond this specific cohort, consider weighting results by study level or commissioning a small follow-up sample with a larger share of Master's and PhD participants. For future data collection, a more balanced mix—such as a 60/30/10 split across Bachelor's, Master's, and PhD—would help stress-test advanced features while ensuring difficulty and guidance are appropriately tuned for upper-level learners.

The experience-profile (Figure 37) shows a predominantly early-career cohort: none 12 (23.1%), beginner 18 (34.6%), intermediate 13 (25.0%), advanced 6 (11.5%), and expert 3 (5.8%). These figures are based on 52 valid responses, indicating one missing or skipped answer. Using simple binomial 95% confidence intervals, the approximate margins of error are ±11.4 percentage points for "none", ±12.9 for "beginner", ±11.8 for "intermediate", ±8.7 for "advanced", and ±6.3 for "expert". Even allowing for these intervals, the sample is clearly concentrated among novices and intermediates.

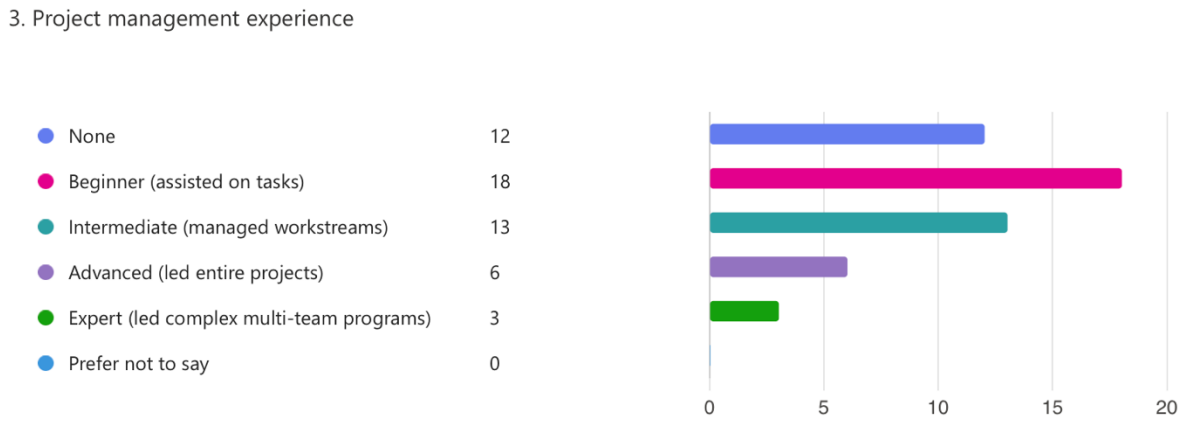

Figure 37. Results of question about the project management experience.

This composition has direct design consequences. The product should be optimised for first-time and early-stage learners, with scaffolding that explains concepts as they arise, plain-English copy, and progressive disclosure of complexity. A short, example-led tutorial and contextual definitions will help reduce cognitive load for those with limited prior exposure. At the same time, the presence of more experienced participants argues for optional depth: advanced branches, tougher trade-off scenarios, and richer analytics that reward expert play without overwhelming newcomers. An adaptive difficulty setting or instructor-controlled "difficulty packs" would allow the same scenario to scale appropriately across experience levels.

From an evaluation standpoint, it is advisable to segment outcomes by experience band to test whether challenges with intuitiveness, accessibility, or flow are concentrated among those with little or no background. Simple group comparisons (e.g., novices versus intermediate-plus) can reveal whether specific pain points diminish with prior experience, guiding where to invest in onboarding versus where to enrich expert pathways. For future rounds of data collection, consider recruiting a larger share of advanced and expert users to stress-test high-complexity features and ensure the upper end of the learning curve remains engaging without compromising the novice experience.

eGame Appearance

The apperance question responses (Figure 38) indicate that most participants felt they could easily understand the objectives and how the tool works, with 35 out of 52 respondents answering “Yes” (67.3%). A substantial minority selected “Maybe” (16 responses; 30.8%), and only one respondent chose “No” (1.9%). Using simple binomial 95% confidence intervals, these proportions are approximately 67.3% ± 12.7 percentage points for “Yes”, 30.8% ± 12.5 for “Maybe”, and 1.9% ± 3.7 for “No”. There appears to be one missing or skipped answer, bringing the valid N to 52. Taken together, the results show a positive baseline comprehension, but with about a third of users signalling uncertainty.

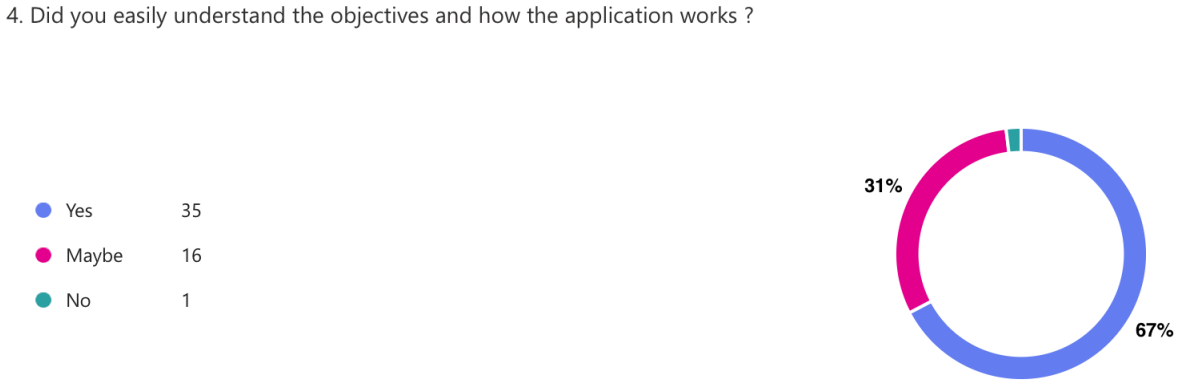

Figure 38. Results of question understanding objetives and application flow..

This uncertainty points to a need to strengthen onboarding and early wayfinding. A concise “Company Brief” at the start should frame goals, constraints, and key stakeholders; a 90–120-second interactive walkthrough can model the first critical actions; and context-sensitive help—tooltips, inline hints, and a persistent help panel—can reduce ambiguity during the first session. Language should remain plain and actions should be progressively disclosed to avoid cognitive overload. From an analysis perspective, it would be useful to segment Q4 by prior project-management experience and study level to test whether “Maybe” responses are concentrated among novices; if so, the tutorial depth and examples can be tuned accordingly.

Visual appearance (Figure 39) is a clear strength. With 35 promoters (66.0%), 10 passives (18.9%), and 8 detractors (15.1%) out of 53 responses, the Net Promoter Score for this dimension is approximately +51, indicating a strong positive tilt in how the interface looks. The central tendency reinforces this: a mean score of 8.57 and a median of 9 suggest most respondents rated the visuals highly, with only a small tail of lower scores pulling the average down slightly from the median.

5. Visual appearance (design, visual attractiveness)

Promoters	35
Passives	10
Detractors	8

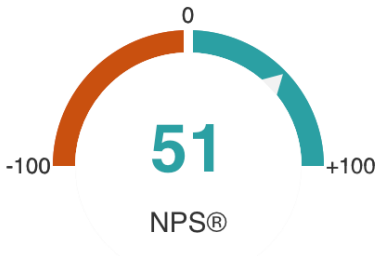

Figure 39. Results of question about appearance.

Interpreting this distribution, the product's visual language is resonating with the majority of users, likely contributing to perceived professionalism and trust. At the same time, the presence of 15% detractors implies a non-trivial segment that finds the appearance lacking or inconsistent. These users may be sensitive to clarity of visual hierarchy, colour contrast, iconography legibility, or the coherence between aesthetics and function.

The design implication is to double down on what works while addressing pockets of dissatisfaction. Maintaining the current aesthetic direction makes sense, complemented by targeted refinements such as clearer hierarchy, more consistent iconography, and careful contrast checks for accessibility. Where feasible, light theming or brand alignment options can satisfy expectations for variety without fragmenting the core design. A quick A/B of icon sets or typography scales with detractor-flagged users will help validate which tweaks most effectively convert passives and detractors into promoters.

Accessibility, interpreted here as clarity and ease of navigation, lands in a "good but not great" zone (Figure 40). With 17 promoters, 27 passives, and 9 detractors out of 53 responses, the approximate NPS is +15, which signals more advocates than critics but also a large neutral middle. The central tendency supports this reading: a mean of 7.79 and a median of 8 suggest broadly positive perceptions tempered by recurring friction points that keep many respondents from strong endorsement.

6. Accessibility (clarity, navigation, etc.)

Promoters	17
Passives	27
Detractors	9

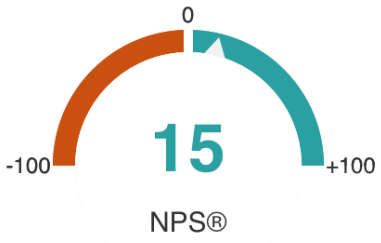

Figure 40. Results of question about accesibility.

The shape of these results typically reflects small but cumulative wayfinding issues: labels that aren't immediately clear, inconsistent selection behaviours, limited feedback on what is clickable, or weak signposting of "what to do next." In practice, passives often indicate they can complete tasks but

expend extra effort to do so, while detractors may encounter dead ends or miss key actions due to low affordance.

Design implications are straightforward: retain the current structure but sharpen clarity. Priorities include standardising interaction patterns (especially room/square selection), enlarging interactive hit areas, and ensuring robust hover, focus, and active states. Introduce persistent orientation aids—an always-visible task list with progress, a breadcrumb, and contextual hints—to reduce decision fatigue. From an accessibility standpoint, audit contrast, typography scale, and keyboard/focus order to improve perceivability and operability. A short first-run walkthrough, coupled with contextual tooltips, can smooth the initial learning curve. Finally, validate improvements with quick usability tests focused on task success and time-on-task, aiming to convert passives into promoters without adding complexity.

eGame Experience

User experience, understood as fluidity and ergonomics, sits in a moderately positive range (Figure 42). With 18 promoters, 24 passives and 11 detractors out of 53 responses, the approximate NPS is +13, indicating more advocates than critics but a substantial neutral segment. The mean of 7.72 and median of 8 suggest that most participants found the experience acceptable to good, yet friction persists often enough to cap enthusiasm.

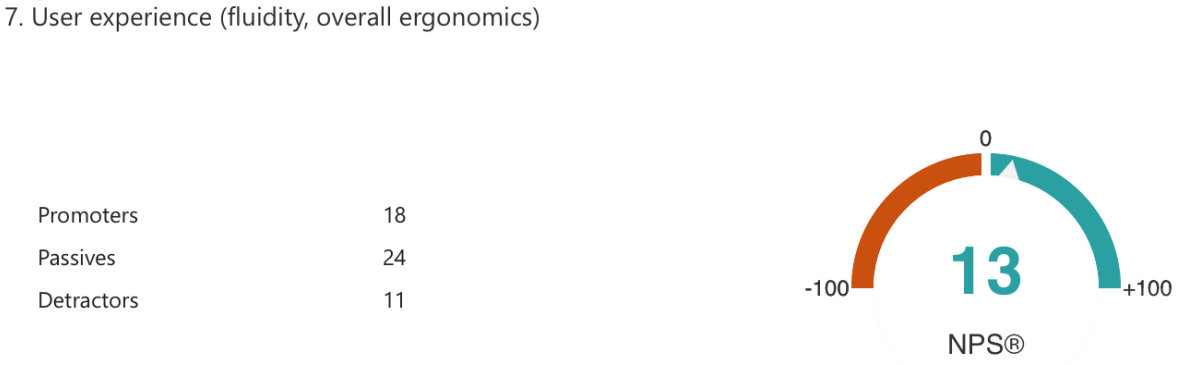

Figure 41. Results of question about user experience.

The distribution points to small but frequent interruptions to flow: moments of uncertainty about what happens next, minor delays or abrupt transitions, interactions that require extra clicks, or auto-advancing states that outpace user intent. Passives typically manage to complete tasks but feel the experience could be smoother; detractors likely encounter stutters such as missed taps/clicks, unclear feedback after actions, or awkward navigation loops that force backtracking.

Design and engineering priorities should focus on smoothing the pacing and tightening feedback. Replace or tame auto-advance with explicit “Next step” controls; ensure consistent, immediate confirmation after actions; and introduce graceful loading and transition states (progress indicators or skeletons) to mask latency. Optimise input ergonomics by enlarging touch/click targets, standardising hover/focus/active states, and reducing required pointer travel for common tasks. Review animation timing to avoid sluggishness, debounce expensive interactions, and audit responsiveness across viewports and devices. Provide lightweight undo/back affordances to support error recovery without penalty. Finally, validate changes with focused usability tests using task

completion time, error rate and perceived effort as KPIs, and segment by device type and prior PM experience to ensure improvements lift both novices and experienced users.

Feature richness is viewed positively overall (Figure 42). With 23 promoters, 23 passives and 6 detractors out of 52 valid responses, the approximate NPS is +33, signalling that the current set of capabilities is attractive to many while leaving a sizeable middle unconvinced. The mean of 8.12 and median of 8 indicate that respondents generally rate the breadth of features as good, though not yet outstanding. This pattern typically reflects a product that covers the core needs but could either go deeper in key areas or make existing depth more discoverable. Passives often imply “there’s enough here to be useful, but I’m not seeing the power I expected,” while detractors may experience gaps for their specific use cases or struggle to find advanced options.

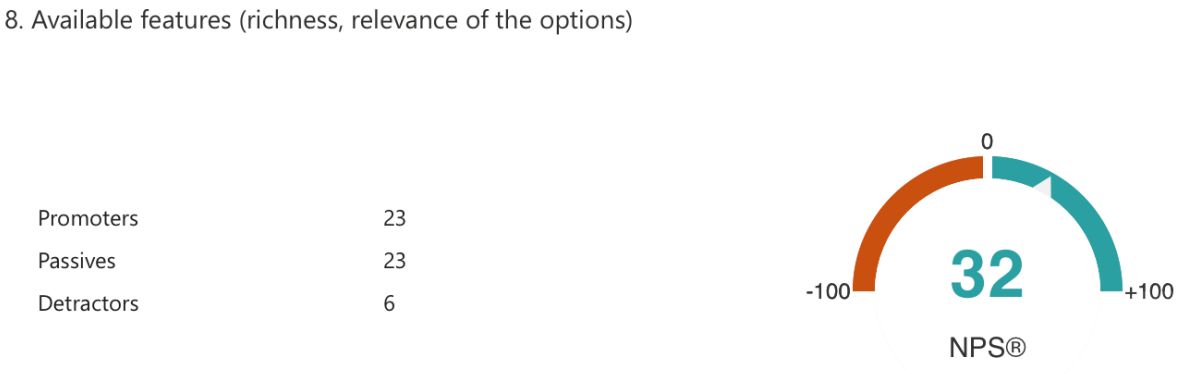

Figure 42. Results of question about features.

The design implication is to enrich without overwhelming. Expanding decision branches with clearer trade-offs and consequences, offering an optional sandbox or portfolio-level view, and enabling a turn-based multiplayer mode for comparative learning would raise perceived breadth for advanced users. At the same time, progressive disclosure is essential so that newcomers are not confronted with complexity too early: keep the default path streamlined, reveal advanced controls contextually, and use succinct explanations and tooltips to teach features in situ. Improving the discoverability of what already exists—through better labelling, in-flow prompts, and a short guided tour—may convert a portion of passives into promoters even before new functionality ships. From an evaluation perspective, segmenting by prior experience can confirm whether calls for additional features cluster among intermediate and advanced users, helping to prioritise depth where it will have the greatest impact.

Intuitiveness, interpreted as ease of use, emerges as the weakest of the scored dimensions (Figure 43), with 15 promoters, 26 passives and 12 detractors out of 53 responses, yielding an approximate NPS of +6. The mean of 7.51 alongside a median of 8 indicates broadly acceptable perceptions, yet the large passive segment and a non-trivial detractor base suggest that many users can complete tasks but need to think harder than they should, while a smaller group encounters genuine friction. In practice, this pattern points to unclear affordances, inconsistent selection behaviours, weak signposting of the “next step”, and occasional ambiguity in terminology.

9. Intuitiveness (ease of use, understanding of mechanics)

Promoters	15
Passives	26
Detractors	12

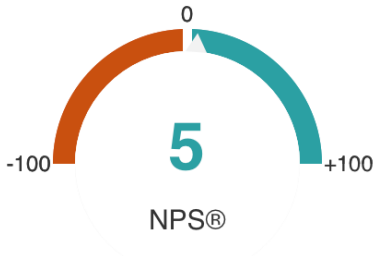

Figure 43. Results of question about intuitiveness.

Addressing this requires tightening both first-run understanding and moment-to-moment wayfinding. A concise, interactive walkthrough that demonstrates one core scenario, coupled with an upfront Company Brief, will set expectations and reduce early uncertainty. Within the interface, standardising room/square selection, enlarging hit areas, and ensuring robust hover, focus and active states will make clickability obvious. Clearer labels, progressive disclosure of advanced controls, and context-sensitive tooltips or inline hints can maintain simplicity while keeping support close at hand. Empty states should explain what the user can do next rather than merely showing whitespace, and critical alerts should appear centrally with unmissable language. Consistency across terms and patterns, basic keyboard/focus order checks, and contrast/legibility audits will further lower cognitive load.

To confirm impact and guide iteration, measure task success and time-to-first-decision for new users, track first-click success on key actions, and monitor help-panel deflection rates. Segmenting these metrics by prior project-management experience will reveal whether intuitiveness gaps are concentrated among novices; if so, deepen early guidance while keeping the main path uncluttered for returning or advanced users. The objective is to convert a meaningful share of passives into promoters without adding complexity—making the “right next action” self-evident at every step.

Perceived usefulness stands out as the strongest signal (Figure 44). With 39 promoters, 11 passives and 3 detractors out of 53 responses, the approximate NPS is +68, and the central tendency is equally emphatic: a mean of 9.04 and a median of 10 indicate that most participants see clear value in the tool. This profile typically reflects a product whose core proposition resonates—authentic scenarios, visible consequences for decisions and tangible links to real project-management practice—while a small minority remain unconvinced, often due to peripheral issues such as onboarding, pacing or discoverability rather than the underlying concept.

10. Perceived usefulness of the application (for learning, management, etc.)

Promoters	39
Passives	11
Detractors	3

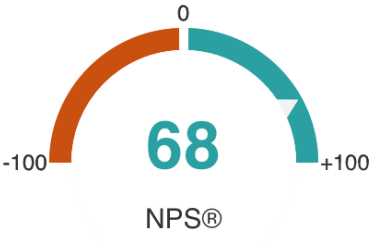

Figure 44. Results of question about eGame useful to learn.

The design implication is to protect this strength while removing the frictions that dampen enthusiasm for some users. The primary objective should be to keep the learning value front and centre—retain realistic scenarios, explicit trade-offs and meaningful feedback loops—while smoothing the path to that value through clearer wayfinding, concise first-run guidance and more transparent indicators. Making advanced options progressively discoverable will allow experienced users to extract even more benefit without overwhelming newcomers. From a validation perspective, it is worth tracking whether improvements to intuitiveness and flow convert passives into promoters on this dimension; if perceived usefulness remains high while detractor counts shrink, the product will have consolidated its strongest advantage and increased the likelihood of repeat use and recommendation.

The end-state confidence question shows a strong affirmative outlook (Figure 45). Out of 53 responses, 38 participants (71.7%) answered “Yes”, 14 (26.4%) selected “Maybe”, and only 1 (1.9%) chose “No”. Using simple binomial 95% confidence intervals, these proportions are approximately 71.7% ± 12.1 percentage points for “Yes”, 26.4% ± 11.7 for “Maybe”, and 1.9% ± 3.7 for “No”. Even allowing for sampling error, the pattern is clear: most respondents believe the tool will be useful and effective once complete, while roughly a quarter reserve judgement pending improvements.

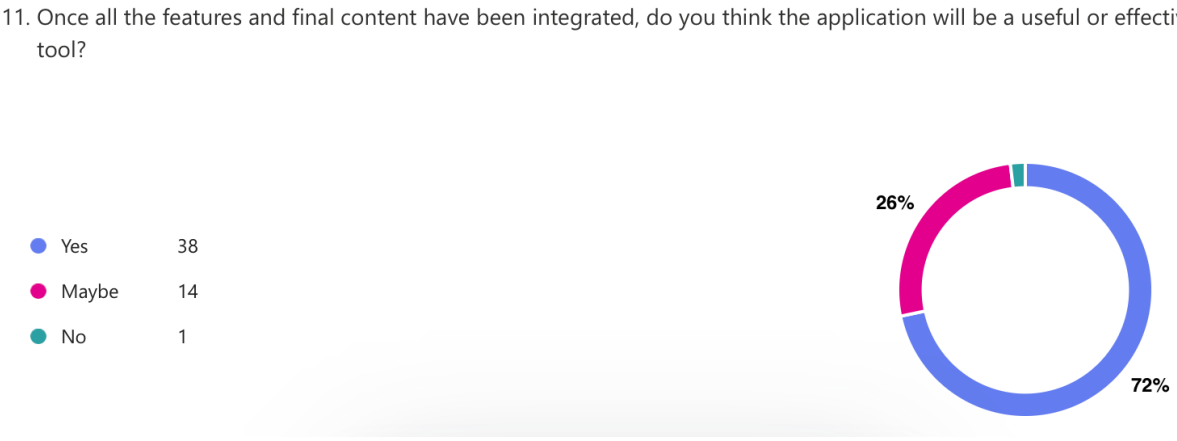

Figure 45. Results of question about final content (EAS courses, project results, etc.).

The implication is that there is a credible product–market fit to be realised through polish and guidance. To convert “Maybe” into “Yes”, the focus should be on removing early friction and making value immediately accessible. A concise first-run walkthrough, an upfront Company Brief to frame goals and constraints, and strengthened wayfinding through clearer labels, breadcrumbs, and a persistent task list will address uncertainty without adding complexity. Enhancing feedback—central alerts for critical events, a notifications history, and explanatory tooltips for indicators—will reduce moments of doubt during play. As these usability and guidance improvements land, track movement from “Maybe” to “Yes” in follow-up pulses; a declining “Maybe” rate alongside a stable or shrinking “No” segment would signal that the product is consolidating its fit and becoming reliably effective for its intended audience.

Feedback

Responses

Listed below are the survey responses that included a comment in the comment field. The responses shown are all responses, even those not directly related to the application.

- It would be good to adapt the game's aesthetics to the service the company offers.
- Overall, it looks very efficient regarding the main objective, but at first sight I would suggest it to be a little bit more intuitive when selecting different squares (offices / classrooms etc).
- More color in combination.
- Strengths: The application is intuitive, easy to navigate, and has a clear design. It allows for a good understanding of the functions and facilitates access to information. Areas for improvement: More advanced options for project tracking could be integrated, customization options could be added, and the visual interface could be slightly modernized. It would also be useful to incorporate tutorials or short guides within the platform to further improve the user experience.
- I think it's advantageous, and it integrates real-life conflicts that are happening right now in the usual day-to-day of an office. It could include an Android version.
- It simulates real situations that could happen in real life, could improve in terms of design of the environments.
- I believe that the alerts for solve some situations could be shown in a message alert that appears in the center of the screen, in the small message alert is hard to see.
- I think the stengths of the application are the accessibility and fluidity of the user experience
- The mainly strengh is the concept, it has the itself target. The design is clean, but I am not.sure if is completly functional
- I think it’s an interesting tool to practice leadership. At the beginning of the game, you could provide more information about the company, such as its goals, budget, and clients. One suggestion is to allow two players to play at the same time to see who finishes with the best result
- They could put more options for problem solving.
- In my opinion, the main strength of the application is its attractive design. However, it could be improved in terms of intuitiveness and ease of navigation.
- The app can be very useful for acquiring soft skills and incorporating them into a team or a particular role within a company. As a recommendation, regarding the images and instructions, and as an idea, it would be good to be able to adapt it to a specific company or industry.
- While some improvements are needed to the game's fluidity, the objective is adequate and it presents situations very well.
- Really useful. I think the indicators could be improved, perhaps with a box that appears when the mouse hovers over the indicator.
- I miss more fluidity, let me explain. Perhaps instead of time passing automatically, a button that takes us to the next step would be more convenient.
- Good game, maybe the option to have a full company running would be more useful.
- I really liked that, even though these are multiple-choice questions, the fact that you can visually see a company makes it much easier to put yourself in the project manager's shoes.
- I think it would be better have a "help" section to provide clues.
- Low intuition
- Good idea, well designed.
- Difficult to progress
- I think, the application must be more simulation oriented and less text based.
- good idea to learn project management, perhaps if the game is more close to the subject contents, the game would be more useful

- I think a written book or activity guide will be useful to understand the game

Analysis

Participants largely favour the core concept—a realistic, leadership-focused simulation. Respondents consider it useful for developing soft skills and appreciate the visual workplace, which helps them step into the project manager's role. At the same time, the experience needs to be more intuitive, more visually customisable, and better guided for first-time users. Players also ask for greater agency—richer choices, a company-wide view, optional multiplayer, a smoother flow—and broader access (for example, on Android). These findings align well with WP4's current architecture (scenario creation, gameplay, and teacher results), so most requests are realistic extensions rather than pivots.

The interface should remove ambiguity in core interactions. Standardise how rooms and squares are selected, enlarge hit areas, and introduce clear hover and active states. Provide an always-visible task list with progress steps and a breadcrumb so players always know what comes next. Rebalance early-game difficulty and introduce early success loops to reduce friction and avoid the sense of it being "difficult to progress".

Begin each session with a concise Company Brief outlining goals, budget, clients and constraints to frame decision-making. Include a 90–120-second interactive tutorial that walks players through a core scenario. Maintain a persistent Help/Clues panel and contextual "?" tooltips on key UI elements. Complement in-game support with a student quick-start and a teacher activity guide, hosted within the WP4-R3 manual.

Modernise the visual language by refreshing colour, typography and iconography, and introduce hover cards for indicators to clarify their meaning. Improve environment tiles and room visuals for better legibility and affordance. Enable brand and industry theming—palette, logo and icon pack—so organisations can "see themselves" in each scenario.

Increase player agency with richer decision branches that surface trade-offs, mitigations and consequences. Add a full-company sandbox mode spanning multiple departments with portfolio-level constraints. Offer an optional turn-based multiplayer mode for classes and workshops that compares end-of-run KPIs. Replace long text blocks with micro-interactions and concise dialogue to sustain engagement.

Give players control over pacing by replacing or augmenting auto-advance with a "Next step" control and support for pause/resume. Surface critical events with central modal alerts and retain a notifications tray for history. Enhance indicators with hover tooltips explaining definitions and formulae, add trend arrows, and provide brief rationales for "why it changed".

Provide industry-specific scenario templates with configurable goals, constraints, resources and risks, leveraging the existing scenario-creation flow. Offer theming presets and structured content slots for organisation-specific data such as names, roles and policies, enabling rapid contextualisation.

Deliver advanced project tracking for educators, including decision logs, a timeline view and KPI deltas by choice, with options to export to CSV. Enable cohort comparisons for single- and multiplayer sessions and visualise friction points with heat maps to guide tuning. Map observable choices to competence areas (e.g., leadership, communication) to support structured feedback.

Improve responsiveness by shortening load times through asset compression and lazy loading, smoothing transitions and auditing behaviour across viewports. Provide Android access via a mobile-optimised PWA, with the option to package for store distribution if required.

Next Steps

The next phase will convert the user evidence gathered in WP4-R3 into targeted changes to the e-simulation game and its teacher environment, with the single aim of making classroom adoption smooth and learning outcomes easier to observe. User comments point to five immediate priorities: faster, clearer onboarding; explicit control over pacing; clearer indicators and feedback; greater player agency through richer decision paths and optional modes; and broader reach through performance improvements and Android access. Alongside these, teachers asked for analytics that explain *why* key performance indicators (KPIs) move, allow cohort comparisons, and export evidence for grading and reflection. These needs are consolidated in the WP4-R3 analysis and "Next Steps" section and provide a concrete, user-validated backlog for development.

Work will begin with the student experience. New sessions should open with a concise company brief that states goals, constraints, and the meaning of the primary indicators. A short interactive tutorial—kept under two minutes—will introduce the board, decisions, and consequences. Contextual help will remain accessible throughout the session so students can check definitions without leaving flow. These adjustments directly address survey feedback about orientation and perceived difficulty at the start of play.

Flow control will be made explicit. Instead of relying on auto-advance, the game will present an explicit "next step" action and allow pausing, so students can think and teachers can debrief synchronously. Critical events will surface in a central alert while a notifications tray preserves the history, ensuring that important shifts are visible but not overwhelming. The combination of deliberate pacing and visible change history responds to repeated requests for time to reflect and for clarity about what just changed and why it changed.

Feedback and indicators will become more transparent. Each metric will include a hover tooltip that defines the indicator and, where appropriate, shows its formula or drivers. Trend arrows and short rationales will be shown when a value changes, connecting the player's choice to the resulting movement in KPIs. This is intended to support both self-explanation by students and evidence-based debriefing by teachers, as called for in the WP4-R3 survey analysis.

Player agency will be expanded in two dimensions. First, core scenarios will include deeper decision branches that surface trade-offs, mitigations, and consequences, reducing the sense of linearity some users reported. Second, optional modes will be piloted: a full-company sandbox that spans multiple departments under portfolio constraints, and a turn-based multiplayer mode for workshops where teams can compare end-of-run KPIs. These additions answer requests for more freedom, collaboration, and competitive comparison during classroom use.

Visual design and theming will be modernised to improve legibility and contextual relevance. Updated colours, typography, icons, and more legible room tiles will make the interface easier to parse.

Theming presets—palette, logo, and icon packs—will let institutions or courses “see themselves” in the scenario, improving engagement without altering the pedagogical structure.

Teacher-facing capabilities will grow in parallel. A decision-aware analytics view will align game events with KPI deltas so instructors can pinpoint teachable moments. Cohort-level comparisons will help teachers contrast classes and modalities (single vs. multiplayer), while heat maps of friction points will guide both tuning and teaching emphasis. CSV exports will support local grading and reporting. Where possible, observable choices will be mapped to competence areas—such as leadership and communication—to structure debriefs and align with assessment rubrics. These additions operationalise the survey request for “explainable” analytics and portable evidence.

To broaden access and reliability, the build will be profiled for faster loading and smoother transitions, with asset compression and lazy loading as standard. A mobile-optimised Progressive Web App will extend access to Android devices and can be packaged for stores if institutional policies require it. These technical measures answer explicit calls for improved performance and mobile availability in pilots.

All changes will be documented for teachers and students in the WP4 user manual and linked forward to the WP5 Guidebook so that adoption materials remain aligned. In the Guidebook, quick-start sheets and short practical guides will act as the entry points for new users, while deeper packs will cover configuration, facilitation, and evaluation, ensuring that improvements to the tool are matched with improvements to the documentation.

Finally, progress will be governed under the project’s quality and risk routines. Each feature will be gated by clear acceptance criteria and evidence (pilot notes, analytics screenshots, and exports), and tracked against the Results List, so that classroom-relevant value is delivered and auditable. This keeps the iteration cycle aligned with the Quality & Management Plan and mitigates common risks such as scope creep around optional modes.

Conclusions

This task 3 of the work package 4 has demonstrated that the eGame and the teacher dashboard can support responsible-leadership learning in higher education by blending scenario-based decisions with observable performance indicators and teacher-facing evidence. The user manual and walkthroughs clarify the two-sided design so lecturers can configure companies, craft scenarios, and review rich result reports without ambiguity. This dual perspective underpins both independent study and facilitated classroom sessions, and it is already supported by version-locking in reports to preserve assessment integrity when scenarios evolve.

On dissemination, the project website remains the canonical entry point for the eGame: it hosts the release page, quick starts for teachers, a short student view, and a contact form for queries. Keeping this hub on an institutional domain ensures continuity and discoverability while giving HEIs a single, stable source of truth. This structure also streamlines evidence capture for future reporting and reuse across partner channels.

The user-intervention design (form, fieldwork and analysis) has yielded clear signals. Students and lecturers value stronger onboarding, explicit pacing, clearer indicator definitions and rationales, and

analytics that connect choices to KPI movements. These insights have been translated into the “Next Steps” backlog so that product improvements, teacher analytics, and adoption materials move together rather than in isolation. The result is a pragmatic, classroom-ready roadmap that links gameplay changes with pedagogy and evaluation. In short, the eGame has progressed from description and outreach to evidence-based refinement. The eGame is positioned as a flexible, explainable tool for teaching responsible leadership; the dissemination pathway is defined; and the improvement agenda is anchored in user data.