Team Building Game

Instructions for Participants

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Game assumptions and goals

An important issue in building teams is the selection of people in terms of competences and expectations, as well as the compatibility of participants. The game is to allow participants to grasp the complex network of dependencies that occur when creating teams.

The game consists of several phases.

In the first phase, participants reflect, discuss, and then create a list of 30 key competences in the area of EdTech Innovations (i.e. modern technologies, education, social skills, management, and business). The proposal in this game is that 6 competences should be provided, concerning skills and knowledge in 4 areas: business, substantive, soft skills (social) and personality.

In the second phase, teams are created. This phase is the most extensive and largely technical. It will be discussed later.

In the third phase, ordinary members of individual teams assess how accurately they were assigned to the team, how they feel about such assignment, what contribution can be expected from them. In turn, managers wonder to what extent they managed to meet expectations, whether they see other, undisclosed potential among the members of their teams.

The course of the second phase

Managers are drawn. The remaining participants of the game are Candidates.

A list of 4 projects is presented to the public (list of proposals attached).

Managers are randomly assigned one project. Candidates cannot know which project belongs to which candidate.

Managers select 5 competencies from the list of competencies in order from the most important (weight 5) to the least important (weight 1) in terms of usefulness for their project.

Independently of them and without mutual communication, Candidates determine their competencies from the most important (weight 5) to the least important (weight 1) in terms of usefulness for the project they would like to participate in.

Participants write down their choices and pass them on to the leader, who enters their data into the participants.csv file.

```
1   Name,Manager,Comp1,Comp2,Comp3,Comp4,Comp5
2   John,YES,B1,M2,S1,P3,B3
3   Jane,NO,M1,S2,P1,B2,S3
4   Alice,NO,S1,P3,B1,M2,S2
5   Bob,YES,P1,S3,M1,B2,S2
6   Chris,NO,B1,M1,S1,S2,P2
7   Emily,YES,M2,B2,S3,P1,B1
8   Michael,NO,S2,P3,M1,B3,B2
9   Lucy,NO,P1,M3,S2,B1,S1
10  George,YES,B1,B2,S2,P3,M1
11  Henry,NO,B2,M1,S3,P2,B1
12  Sophia,NO,S3,P1,M2,S2,B3
13  Oliver,NO,M3,B2,S2,P3,S1
14  Emma,NO,B3,P1,S2,B1,M2
15  Liam,NO,S1,M1,P2,B2,S3
16  Noah,NO,M2,S3,P1,B1,S1
17  Ava,NO,P1,B2,S1,M2,P3
```

Figure: Example 'participants.csv' file.

The leader runs a program or script that assigns Candidates to teams. The method of assignment is as follows:
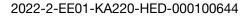
The program randomly selects the order of projects in each round of assigning Candidates to Projects.

In each round of assignments, the program calculates the Candidates' suitability levels for Projects in such a way that for each candidate the sum of the products of the weights of the competencies selected by him/her by the competency weight is calculated; the total number is the Candidate's Suitability Level.

The Candidate who scored the most points is a member of the Team. If at least two candidates score the same (tie), one of them is drawn.

The result of the calculations in the form of a final report is available in a pdf file.

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Round 1 - Project Order: Project B, Project D, Project A, Project C

Round 2 - Project Order: Project A, Project D, Project C, Project B

Round 3 - Project Order: Project C, Project D, Project A, Project B

Project A (Manager: John)

Manager's preferences: B3, P3, S1, M2, B1

Candidate: Ava, Score: 37/55 (67.27%)

Candidate: Sophia, Score: 31/55 (56.36%)

Candidate: Lucy, Score: 19/55 (34.55%)

Competency	Number of Team Members
B1	1
M2	2
S1	2
P3	1
B3	1

Candidates not chosen due to tie-breaking:
Oliver

EdTech Innovations project topics

1. Adaptive Learning Platforms with AI Integration

Description: Development of an educational platform that dynamically adapts content, pace of learning, and presentation style of the material depending on the needs and progress of students. Artificial intelligence algorithms analyze student results and propose personalized learning paths.

Goal: Increase teaching effectiveness by individualizing the learning process.

2. Gamified Education to Increase Engagement

Description: Creation of an educational application based on gamification elements (e.g. levels, achievements, points), which aims to increase students' motivation and engagement in learning.

Goal: Increase student engagement and improve educational outcomes through motivational elements.

3. VR/AR for Interactive Science Lessons

Description: Development of a platform using virtual (VR) and augmented reality (AR) to conduct interactive lessons in natural sciences, such as biology, chemistry, and physics. Goal: To facilitate the understanding of complex scientific concepts through 3D visualizations and interaction with digital objects.

4. Blockchain-Based Credential Verification System

Description: To develop a platform using blockchain technology to securely store and verify educational certificates, diplomas and student results.

Goal: To enable easy and fast verification of educational achievements by institutions and employers, eliminating fake certificates.

5. AI-Powered Virtual Tutors and Chatbots

Description: To create virtual tutors or chatbots that help students solve problems and answer questions in real time. They can be used to support learning languages, mathematics or

programming.

Goal: To provide immediate support to students, improve learning efficiency outside of schoo

hours.

6. Learning Analytics Dashboard for Personalized Feedback

Description: To develop an analytical platform that collects and processes data on student progress, offering teachers and students personalized feedback on learning efficiency and areas for improvement.

Goal: Optimize the learning process by providing precise analytical data that helps identify student strengths and weaknesses.

List of 30 key competencies in the area of EdTech Innovations

1. Modern Technologies Competencies

M1. Artificial Intelligence (AI): Ability to apply AI techniques in personalized learning, automation, and educational tools.

M2. Data Science & Analytics: Skills in analyzing educational data to derive insights for improving teaching and learning outcomes.

M3. Virtual Reality (VR) & Augmented Reality (AR): Expertise in creating immersive learning experiences using VR and AR technologies.

M4. Software Development: Proficiency in designing, developing, and deploying educational software solutions.

M5. Blockchain Technology: Understanding of using blockchain for credential verification and securing educational data.

M6. Cloud Computing: Competence in managing and utilizing cloud-based platforms for scalable, accessible education solutions.

2. Education Competencies

E1. Instructional Design: The ability to create effective and engaging learning experiences using various teaching methods and technologies.

E2. E-Learning Pedagogy: Knowledge of online learning methodologies and best practices for delivering digital education.

E3. Curriculum Development: Expertise in designing curricula that integrate modern technology with learning objectives.

E4. Learning Management Systems (LMS): Proficiency in managing and optimizing LMS platforms for delivering digital education.

E5. Assessment & Evaluation: Skills in designing effective assessment strategies to measure student progress in tech-driven environments.

E6. Digital Literacy: Understanding of digital tools and how to integrate them effectively into the classroom.

3. Social Skills Competencies

S1. Communication & Collaboration: Ability to work effectively with diverse teams and stakeholders in an educational tech environment.

S2. Adaptability & Flexibility: Willingness and ability to adapt to new educational technologies and methodologies.

S3. Problem-Solving & Critical Thinking: Ability to identify challenges in education and develop innovative technological solutions.

S4. Empathy in Education: Understanding the diverse needs of learners and creating inclusive, supportive educational experiences.

S5. Cultural Awareness & Sensitivity: Awareness of cultural differences and adapting educational technologies to various global contexts.

S6. Leadership in Innovation: Leading and inspiring teams to embrace new technologies and drive educational innovation.

4. Management Competencies

MG1. Project Management: Ability to manage EdTech projects from conception to implementation, ensuring timelines and goals are met.

MG2. Strategic Planning: Skills in developing long-term strategies for integrating technology into educational institutions.

MG3. Change Management: Expertise in leading teams through transitions involving new technologies and innovative educational approaches.

MG4. Team Leadership: Capacity to manage cross-functional teams in developing and implementing EdTech solutions.

MG5. Financial Management: Understanding of budgeting, cost analysis, and funding for EdTech projects.

MG6. Risk Management: Skills in identifying and mitigating risks associated with the implementation of new educational technologies.

5. Business Competencies

B1. Market Research & Analysis: Ability to analyze the EdTech market, identify trends, and apply them to product development and strategy.

B2. Product Development: Skills in designing, developing, and launching EdTech products that meet the needs of educational institutions.

B3. Entrepreneurship in EdTech: Knowledge of how to create and grow startups in the educational technology sector.

B4. Sales & Marketing: Expertise in promoting EdTech products and solutions to schools, universities, and other educational organizations.

B5. Client Relationship Management: Skills in building and maintaining relationships with stakeholders, including educational institutions and corporate partners.

B6. Regulatory Compliance: Understanding of educational laws, data privacy regulations (e.g., GDPR), and compliance in EdTech solutions.