Social
Seducement

Intellectual Output 01

Guide for developing the game and its environment

Control Sheet

Project title	*Social Seducement*
Programme	*Erasmus+*
Project n°	
Intellectual Output	*01*
Authors	**Stefania Aceto, Daniel Burgos, Daniel Parente**
Contact details	
Contributors	*TIHR, LE MAT, REVES, COOMPANION, UNIR, ECOBYTE*
Date of Delivery	*30.09.2015*
Abstract	*This document deals with the main features of the game design workflow and with a first issue of the funtctional analysis of the Social Seducement game as emerging from the research and develpoment activities carried out by partners.*
Approval Status:	
Dissemination level	*PUBLIC*
Available at :	
Peer Reviewer (date)	*Kerstin Junge 05.08.2015*

Document Log

Version	Date	Comments	Author(s)
Part 2 0.1	*15.05.2015*	*The game workflow design (Part 2)*	*Daniel Parente*
Part 2 0.2	*25.06.2015*	*An updated version of the game workflow design based on partners'comments (Part 2 version 2)*	*Daniel Parente*
Part 1 0.1	*30.06.2015*	*Analysis of the results of research activites on games (Part 1)*	*Stefania Aceto*
Part 1 0.2	*15.07.2015*	*Part 1 version 2 based on comments from peer reviewers*	*Stefania Aceto*
Part 1 0.3	*30.07.2015*	*Part 1 version 3 based on comments from peer reviewers*	*Stefania Aceto*
Part 3 0.1	*30.07.2015*	*Functional analysis (part 3)*	*Matteo Marucci*
Part 3 0.2	*08.09.2015*	*Part 3 version 2 (based on comments by peer reviewers and UNIR*	*Matteo Marucci,*
Final version	*30.09.2015*	*Assembled version of the IO, final*	*Stefania Aceto, Daniel Burgos, Daniel Parente, Matteo Marucci,*

About Social Seducement

The Social Seducement project is co-funded by the European Commission in the frame of the Erasmus plus programme and running for 3 years (September 2014 to August 2017). It aims to develop the key competences and skills of adults with disadvantages, and in particular unemployed adults, to help them start up a collaborative enterprise.

Our approach is to set up an educational process which mobilises unknown or hidden capacities via an empowering learning process.

We will do this by:
   Designing an online role-play game *to develop, enhance and promote social entrepreneurial skills*
   Enhancing collaboration among training centres, employment agencies, social economy enterprises *to test the Social Seducement online roleplay game*
   Establishing a European network of facilitators *who will have the mission to a) guide unemployed learners through the social seducement game, supporting and mediating their learning process and b) promote the use of the Social Seducement game in Europe to foster the acquisition of social entrepreneurship skills in an innovative way.*

With Social Seducement we aim to strengthen the cooperation between education and training, work and the social economy, non-profit and voluntary sectors, in a EU dimension, Social Seducement to maximise impact on individuals and our game.

To know more about the project please visit our website: www. socialseducement.net

Background

Today's disadvantaged groups face particularly high risks of being marginalised in the labour market. Lack of education and training traps people in low-skilled and low-wage work with no prospects of upward mobility.[1] The recession that has gripped EU member states for the last years makes it harder to achieve the labour market inclusion of disabled people.[2] In all but one EU member state (the UK), migrants tend to have lower employment rates than non-migrants, with a particular challenge being the labour market inclusion of migrants with tertiary education.[3]

Yet, unemployment is one of the main factors both creating and perpetuating social and economic disadvantages for individuals in today's EU.[4] Today some 26 million EU residents are unemployed and actively seeking work, representing 10,7% of the labour force. There are discouraged workers that have given up looking for jobs and people outside the labour market, who may welcome new working opportunities [EUROSTAT 2012]. The deep crisis Europe is facing since 2008 is not only economical but also ecological, social and cultural. In 2011, 24% of EU population was at risk of social exclusion.

One promising area to address these problems is the promotion of business creation by people who are disadvantaged in entrepreneurship and self-employment. In the last years the employment losses were concentrated among temporary and permanent employees and overall there was job-creation among the self-employed[5]. A great example is represented by cooperative enterprises. According to the ILO an increase of cooperative start-ups has been noticed[6], showing resilience over the last 165 years, adapting to different political regimes, continuously integrating new needs and aspirations linked to the deep social and economic transformation through democratically controlled enterprises[7].

Role play games are more and more often used as tools to support education programme at all levels, for business-plan developments, also for instilling entrepreneurial skills or

---

[1] *The Work Foundation (2015) The Bottom 10 million,* http://www.theworkfoundation.com/Research/Socio-Economic/Labour-Market-Disadvantage/Bottom-Ten-Million

[2] *Greve, B (2009) The labour market situation of disabled people in European countries and implementation of employment policies: a summary of evidence from country reports and research studies* http://www.disability-europe.net/content/aned/media/ANED%20Task%206%20final%20report%20-%20final%20version%2017-04-09.pdf

[3] *Stirling, A (2015) Migrant employment otucomes in European Labour Markets, MIGRANT EMPLOYMENT OUTCOMES IN EUROPEAN LABOUR MARKETS, London: IPPR,* http://www.ippr.org/files/publications/pdf/migrant-employment-outcomes-in-europe-labour-markets_April2015.pdf?noredirect=1

[4] *Corluy, V and Vandenbroucke, F (2012) Individual Employment, Household Employment and Risk of Poverty in the EU. A Decomposition Analysis, University of Antwerp: Herman Deleeck Centre for Social Policy,* http://www.centrumvoorsociaalbeleid.be/sites/default/files/CSB%20Working%20Paper%2012%2006_Juni%202012.pdf

[5] *EU Employment Observatory Review, 2010*

[6] *EACB 2010*

[7] *2014, Resilience of the Cooperative Business Model in Times of Crisis,ILO*

even for simulating businesses start up[8] or to support existing entrepreneurs to enhance resilience or business competences, also in social entrepreneurship[9]. As further explored in this report, evidence suggests[10] that "the use of digital games and gaming is starting to show potential in addressing issues of policy concern including wellness and ageing, education and employability of poor learners, improved quality of training, skills development and civic participation".

In this context, **Social Seducement intends to identify and use the potential of on-line game to facilitate the access to training for unemployed adults, to increase productivity through fun, while allowing the shift from costly and infrastructure-heavy training and development programmes to more flexible contextual learning models that allow people to develop emerging new skills showing how the gaming experience can fulfil the function of incubator***.*

---

[8] *see http://www.onlinecolleges.net/2009/08/17/50-great-sites-for-serious-educational-games/ and http://www.thesmallbusinessgame.co.uk),*
[9] *LLP-LdV/TOI419, EU Social Ent. &Opportunities for Soft Skill Development Using ORPG*
[10] *J. Stewart et al. (2013) The potential of Digital Games for Empowerment and Social Inclusion of Groups at risk of Social and Economic Exclusion: Evidence and Opportunity for Policy" IPTS JRC Scientific and Policy Reports*

Introduction

This document represents the first Intellectual Output of the Social Seducement project. The project, developed in the frame of the Erasmus + Programme (Strategic partneships for adult education) aims to contribute to improve the level of key competences and skills of unemployed adults that are potential or actual self-employers, through strengthened cooperation between education and training, work and the social economy, non-profit and voluntary sectors, in a EU dimension. Operationally this will be achieved by developing and testing an Online Roleplay game platform designed to discover, enhance and promote entrepreneurial skills.

The document summarises the examination of the factors that can:
* *influence how pedagogically effective and usable a game-based learning application might be;*
* *support active learning, enhancing engagement and keeping players immersed;*
* *provide safe and playful environments in which failure is an accepted part of the game dynamic, and learning through mistake-making is the norm, where the re-assessment strategies are included; and*
* *provide a place for players to have fun, relax and release tension and typically provide environments that are safe from external consequences.*

*The **"pillars"** on which the Social Seducement project is being developed are the following:*
* ***diverse experience of the consortium** members being considered as a richness for the project*
* ***need to involve stakeholders in the design of the game** since the beginning (i.e.: game designers, game players, trainers working with the identified target group)*
* ***choice to focus on unemployed adults** as the main target group of the game*
* ***choice** to use an on-line **game for training on how** to become social entrepreneurs*
* ***choice to take inspiration from** – without replicating – **the Co-opolis board game**, developed about 15 years ago by experienced social entrepreneurs with the supervision of the disability and the cooperative branches of the ILO Genevra and the International Training Centre of the ILO in Turin. The game was aimed to provide the knowledge and skills to develop social cooperatives.*

The development of the Guidelines for the ORPG that Social Seducement will produce and test constitutes one of the key building blocks of the project. Given the nature and features of the project, this "design" phase is not isolated from, but strongly interdependent with, other phases and Intellectual Outputs, particularly IO2 – Report on target needs' analysis - aimed at identifying the learning needs of the target groups addressed by Social Seducement; IO3 (the pedagogical model of the game and associated training material) as well as IO4 (related to the technical development and implementation of the game and of the connected learning path). The guide includes both an overview on the general context within which the game will be developed (in Part 1) and technical specifications on how the game should be designed (in Part 2) and developed (in Part 3).

The guidelines for the game design presented in this report are therefore intended to help the partnership to design and use on-line role-play games and exercises for training sessions dedicated to disadvantaged groups (with specific reference to unemployed adults aged 18+).

The document results from the activities carried out in the frame of the Social Seducement project, with specific reference to Intellectual Output 1, i.e.:

- *Activity 1 (O1/A1): Collecting and analysing Serious online role play game practices.*
- *Activity 2 (O1/A2): Designing the Social Seducement RPG concept and workflow.*
- *Activity 3 (O1/A3): Identifying the Business Model to be used in the Social Seducement ORPG.*
- *Activity 4 (O1/A4): Defining topics and principles of Social Seducement ORPG.*

The document is articulated in three parts, that can be consulted subsequently or independently according to the specific interests of the readers, i.e.:

Part 1 – **Setting the scene for the game concept design** *illustrates all the preparatory work carried out by the partnership to enable a proper game workflow design. This part contains the following chapters:*

- *Chapter 1 –* **ORPGs: trends and practices** *presents the approach adopted for the analysis of ongoing trends and practices in online gaming (relevant to the scope of Social Seducement), the results of the desk and field research conducted and the implications for the design of the Social Seducement game*
- *Chapter 2 –* **The framework for the development of the Social Seducement Game** *presents information about the context in which and for which the game is developed (social economy) and the main features of the game as emerging from the research and consultation activities conducted and from experience in previously developed games in the same field.*
- *Chapter 3 –* **Towards game design: topics and principles of the game** *presents an overview of the key topics to be considered in relation to the context where the game is developed (social economy) and to the learning features of the game.*
- **Chapter 4 – Conclusions** *presents an overview of the key elements emerging that are further explored and developed in the Game workflow design (Part 2 of the report***).**
- *Annex 1 presents the grid utilised for the analysis of games and projects relevant to the scope of Social Seducement.*
- *Annex 2 presents the set of 20 games and projects analysed in depth by the Consortium.*

Part 2 – Game concept *presents the Social Seducement game concept and workflow, articulated as follows:*

- *Chapter 1 presents the* **Game Concept***, highlighting the scope of the game, its visuals, the role of avatars in the game.*

- *Chapter 2 presents the **Game objectives** highlighting the key role played by storytelling in the Social Seducement game and the game progression dynamics.*
- *Chapter 3 presents the **Game Flow,** i.e the articulation of the game.*
- *Chapter 4 presents the Game mechanics: the role of players and facilitators in the game; how simulation will work; the learning component of the game.*
- *Chapter 5 presents the **Game architecture** and explains the solution technically found to make of Social Seducement a learning game.*
- *Chapter 6 provides information about the **Technologies** to be used in the development of the game.*
- *Chapter 7 provides an **Example of a storyboard** useful for the next functional analysis phase as outlined in Part 3.*
- *Chapter 8 provides the **Summary** of the game workflow and its **implications** in terms of game development.*

Part 3 – **Functional analysis of the Social Seducement game** *presents a functional analysis of the technical features of the Social Seducement game (that will be further developed and explored in IO4 – Online Social Seducement Roleplay Game). In particular:*
- *Chapter 1 – **Introduction** explais the relation between part 2 and part 3 of this report.*
- *Chapter 2 provides information about the **Functional requirements** of the game.*
- *Chapter 3 describes the main features of the **Game.***
- *Chapter 4 describes the main requirements of **the Back office.***
- *Chapter 5 provides details about the necessary **Infrastructure** to support the game.*
- *Chapter 6 presents some considerations for the further development of the game.*

Executive Summary

PART 1 – Setting the scene for the game concept design

Methodological approach

In order to set the framework for the guidelines, both desk and field research were carried out, with O1 activities focusing mainly on the review of trends and practices of online gaming for learning (and specifically for the acquisition of skills relevant to social entrepreneurship) and O2 activities focusing on the needs of the target group of the game (including learning needs).

As concerns the work carried out in relation to games, the following activities were developed:

- **Desk research** *(review of publications, articles, grey literature, web sites and portals etc) aimed to investigate on current trends in gaming for learning with specific reference to online gaming and pedagogical aspects and challenges linked to the use of games for learning.*
- **Online review of 60 relevant games and projects** *in the field aimed to highlight good practices (at the organisational, technological, pedagogical level) that could be of help in developing the Social Seducement ORPG..*
- **Field research** *(survey, interviews and focus group)[11]. aimed to consult relevant stakeholders in their needs and concerns so to steer the design of the game both from a technical, organisation and pedagogical perspective.*

Analysis of trends and practices in games for learning

The results of desk research about trends in online games for learning suggest that **Social Seducement is addressing an area** *(social economy and social entrepreneurship skills development)* **still covered to a limited extent***, in that most of the analysed studies and practices cover areas mainly related to formal education and corporate training. In addition, it suggests that* **using games to support learning processes has a strong potential to support motivation and engagement much more than traditional training would, provided that the game is so designed to immerse the player in a fascinating environment, where s/he can experiment virtually real life situations, with a new digital identity (avatar) and can make mistakes as this will not have any implication in real life***. Enhancing the* **social dimension in the game** *(through interaction and team work) is also key, and a particular effort will have to be placed on* **the way the game and the learning content interact** *so that the player/learners is aware of the fact that s/he is*

---

[11] *The Description of Work of the project foresees the organisation of two focus group and the consultation of game experts via interviews. At the time this report is being written, one focus group was carried out and the survey of O1 was merged with the survey of O2 given the overlapping of the respondents addressed. It was agreed that the second focus group and the interviews will be carried out once the prototype of the game is being developed so to get a technical feedback from game developers (through the second focus group and interviews)*

learning, but is motivated to do so as the game keeps her/his engagement high untile the game is over (and learning is completed).

The above statements are coherent and complementary with the game design approach briefly outlined in the **Description of Work of Social Seducement***, where the following commitments were taken for the realisation of the game:*

- **Integration with LMS platform***: the game should lean on an LMS platform (as further explored in Part 2 of this report), preferably Moodle.*
- **Learning path associated with the game***: The game should be the "attractive window" for learners to join a training path helping them to become social entrepreneurs. Thus, learning content of the game is key, but it is also very important to design the game in such a way to keep motivation and engagement high.*
- *The* **main target** *group of the game is "Disadvantaged groups", within which we decided to focus on* **unemployed adults aged 18+.**
- *Building on the experience of the Co-opolis game[12], developed by the ILO some 15 years ago,* **facilitators will have a key role** *in mediating the learning process of players while they are playing the game.*

The results of desk research on practices (projects and online games for learning relevant to the social economy field) also provide some interesting inputs for the design of the game concept, as shown in 1.3, particularly with reference to: **the use of storytelling as a strategy to support learning processes while using the game; the suggestion to adopt incremental learning processes to match the learning needs associated with the training path and the technical needs of the game; the use of random events to keep players active and motivation high in standby situations** *(see Part 2);* **the key role played by the facilitator, that will be the "game master"** *and support and mediate the learning process of learners, both at individual and at group level.* **Further elements** *emerging from the analysis of cases can be summarised as follows:*

Table a: Interesting elements emerging from practice analysis

---

[12] *Co-opolis is a training tool expressly designed to support, promote and replicate on a large scale the social and entrepreneurial efforts of an innovative cooperative movement emerging often spontaneously in Africa, Latin America, Australia, Europe and elsewhere. Co-opolis contains training materials, information and a game that can be used by those who want to learn more about how to set up a social cooperative or how to inspire others to do so. It builds on the experiences and lessons learnt across the globe by men and women with disabilities, or otherwise disadvantaged in society, who started local development initiatives in their own communities. These initiatives were generally carried out collectively, as the protagonists wanted not only to help themselves but also to contribute towards the social and economic development of their local communities, both rural and urban. They wanted to create an alternative to poverty, social injustice, and crime, while at the same time building a future for themselves. Co-opolis applies problem-solving strategies to simulated real-life scenarios in order to enhance the entrepreneurial capacities of the trainees. The Co-opolis training method alternates between practical application followed by theoretical knowledge followed again by practical application. By providing regular doses of new knowledge and ideas, the players of the game are encouraged to be creative and search for realistic and workable solutions.*

Level of analysis	Good practices emerging from case analysis	Eventual implications for Social Seducement game
Pedagogical level	*Providing immediate feedback enhances engagement*	*The game will be so designed to ensure that – when appropriate – the player is provided with immediate feedback. However, also random events will be introduced so that when the player makes a mistake s/he has the illusion to continue playing while in fact s/he is in a standby situation. This will allow the player to be led to take the right decision at the end of the process, with a less frustrating perception about its failure.*
	Link to real communities and stories enhances motivation and facilitates the continuous switch between the game and learning dimensions	*Real stories of successful social entrepreneurs will be adapted to the game to make the learning experience more realistic. However, only partial information will be provided to players so that they can find their way to the right solution.*
	Often games allow to choose for scenarios where to locate the learning /gaming experience and the players' role in the game context.	*This will be implemented in the Social Seducement game, with a pre-defined set of stories where social entrepreneurs have to develop different kinds of social cooperatives (in tourism, agriculture, etc) and can choose which role they play in the organisation (admin, marketing, etc).*
Technological level	*The more immersive the experience (3D), the more the game is engaging*	*Given the available resources, it will not be possible to implement a 3D game. However, work will focus on a captivating , but simple, graphical layout.*
Organisational level	*The main differences at the organisational level are dictated first by the kind of action analysed: a game as such or a game developed in the frame of a project. In the latter case (which is also our case) stakeholders and users are consulted in the game design phase (through surveys and focus groups).*	*Social seducement foresees consultation with stakeholders and users. In this first phase of design, a focus group with stakeholders and a survey addressing the needs of target group have been organised. Once the functional document about the technical specifications of the game is completed with the game rules, a further consultation phase with game developers and potential facilitators will be developed. In the piloting phase, a sample of final users will be involved in the game testing.*

	There are differences also in terms of sustainability: games promoted by communities or foundations or sponsored by private investor have a higher survivor rate than games developed in the frame of publicly funded projects.	Sustainability of the game will be a key issue to start focusing on as soon as the pilot phase starts.

Substantial input in terms of suggestions for the game design came also from field research, and particularly from consultation with stakeholders through the focus group, interviews to game designers and the survey on target group's needs.

Stakeholders taking part in the Perugia focus group *(mostly social entrepreneurs, trainers or members of social enterprises promoting the social economy)* **confirmed the key role of facilitators** *in mediating the learning process and facilitating participation in the game. Also, they suggested that* **facilitators could be a lever for the game sustainability** *(as it could be promoted throughout relevant organisations that could make use of it by the network of facilitators that will be established by Social Seducement). In relation to the technical specifications of the game, although agreeing with the need for a captivating graphical layout, they said the* **game should be promoted for its learning aspect, and not compete with the game industry.** *They stressed the need for a training package for facilitators and finally highlighted the need to take into consideration gender issues when designing the game. They agreed with the idea to use stories as a basis for the learning game and suggested that these are developed in the frame of* **different sectors of the social economy** *(tourism, agriculture, etc.).*

Stakeholders participating in the Suvey *on the Target group needs carried out by the project gave interesting inputs in operational terms, suggesting that the game is played for no longer than 1 month and that a blended approach is adopted, mixing up if possible online and face to face meetings, and counting on intermediaries (such as employment agencies) for the recruitment of players.*

Interviewed game designers confirmed the importance of a captivating layout for the game to ensure engagement and hihglighted the incresing use of games for learning.

Contextualising Social Seducement in the social economy

The Social Seducement game will be developed in the context (and for the benefit of) the Social Economy. It will be aimed to enhance social entrepreneurship skills in long term unemployed adults aged 18+ willing to establish a social cooperative to help others and support social inclusion of disadvantaged categories of workers.

Given the need to focus on a specific type of enterprise and to work on cases that are more or less comparable in all Social Seducement partner countries (Belgium, Italy, Spain, Sweden, UK) **Social Seducement will focus on the social economy (meaning thus also collective entrepreneurship) and, more specifically, on developing a training path (supported by an online game) for the establishment of social**

cooperatives *(forms of enterprises that a cooperative might take differ from country to country, but at least main values and principles -also of functioning- are the same).*

It has been agreed that the **game and the learning path will be articulated around the chunks that compose the "Business model canvas", a tool developed for entrepreneurs to support them in the development of their business model and business plan***.*

According to I. Burkett[13] the differences between a Business Plan and a Business Model lies in the purpose and substance: a Business Model helps in the design and articulation of how a business could work, and how innovation can be performed inside the business. In the case of a social enterprise this would ultimately be about how the enterprise will generate both financial and social value, and what the relationship is between the two types of value in the enterprise.

A Business Plan is a detailed document setting out the goals of a business and how they are to be achieved. As stated by C.Smith[14] "The business plan provides the details of the business. It takes the focus of the business model and builds upon it. It explains the equipment and staff needed to meet the details of the business model. It also explains the marketing strategy of the business, or how the business will attract and retain customers, and deal with the competition. Furthermore, the business plan explains the financial stability of the business at a particular point in time, as well as in the forecasted future. Overall, the business plan supports the business model and explains the steps needed to achieve the goals of that model".

It goes without saying that the Business Model canvas and the related business plan will have to be re-adapted to the needs of Social Seducement and more in general to the features and requirements typical of the Social Economy, taking into consideration the fact that a Social Enterprise must:

- *Be driven by a social mission (i.e., abstain from distributing profit to shareholders);*
- *Generate for positive externalities (spillovers) for society;*
- *Recognize the centrality of the entrepreneurial function;*
- *Achieve competitiveness on markets through effective planning and management.*

The following key topics and principles will be considered for the design of the training material related to the game:

Table b: Social economy related Topics and Principles

---

[13] *Using the Business model Canvas for social Enterpise design, retrieved from knode.com.au*

[14] *C. Smith "The difference between a business model and a business plan" retrieved from http://smallbusiness.chron.com/differences-between-business-plan-business-model-4744.html.*

TOPICS	PRINCIPLES
The Social Economy	• *Active citizenship and self employment* • *Responsibility towards the community* • *Collective Entrepreneurship* • *New inclusive services for the community* • *Using the local resources in a more innovative and sustainable way* • *Participation of final beneficiaries and of the local community in the development of the social enterprise as a kind of community enterprise* • *Creating a practice that can be replicated*
Collective social enterprises	• *Voluntary membership, open to all* • *Democratic self-management and Member control* • *Members' economic participation* • *Autonomy and independence (empowering people)* • *Education, training and information* • *Community focus* • *To self-help against unemployment, exclusion and poverty* • *To develop community and self-responsibility* • *To learn solidarity, democracy* • *To grow self esteem and capabilities, competencies and skills* • *To plan and decide together* • *To empower as single people and as a group* • *Stories from other social cooperatives*

PART 2 – Game concept

The Game objectives

Due the focus on the game mission to develop social entrepreneurship skills to establish social cooperatives, the game objectives will be tied in with generating and growing successful businesses within the game.

The game objectives will be based on true stories of Social Entrepreneurs across Europe that the player will have to revisit to take critical decisions, as to replicate the success of the real person, in critical moments and help moving the story forward.

The game will blend interactive storytelling with business simulation as to define different lines of actions or different quantifications of events that will allow players to move forward through the story with more success, or through different lines of action that could be taking them to negative/critical situations. In the latter case, players will be supported by a facilitator (more information about the facilitator roles and responsibilities is available in IO2).

The game will act as an enabler and progress indicator of the associated training program, and for this purpose, actions in the game will be linked to progress triggers In the learning content as to guarantee the correct synching of both aspects of the training.

The game features

*   **Interactive Storytelling**. *The player will follow the story of a real social entrepreneur and will have to take - while progressing through the story - decisions that will move the story forward in the right track or potentially to failed situation where the player progress can be checked and compared with what the real entrepreneur was achieving during the same period. This would help the player to get immersed in the story and to be motivated to be more active in taking the right decisions.*
    To further increase the immersion, the system may allow a multiple story virtual branching that will merge again into the real story allowing the player to explore new possibilities to the original story or to explore different business decisions.
*   **Business Event Simulation**. *All business stories are based on applying the correct information to take the correct decision in critical moments. To allow the creation of the story turning points, the game will use business simulation mechanics that will generate different possibilities along the storyline, that the player will have to solve correctly as to keep in the right track of the game and reach the correct success ending, even if during the course of the game, wrong decisions are taken. The parameters of the event simulation will have to be defined based on the stories identified, and could be related with any entrepreneurial activity present in the daily routine of business managers, from marketing, to funding, to negotiation, communication, etc.…. These events will be based on random choices over a predefined set of alternative storylines defined with the same focus and boundaries of the story that will be unfold by the player.*

- **Learning results**. *If the player has progressed correctly and to reinforce the positive feedback, his/her outcomes during the period/phase can be tracked and compared with the real social entrepreneur, as to allow the trainee to directly compare what s/he has been doing to what the real reference model was able to achieve. The retro-alimentation mechanic will help the player to get motivated in keep studying and progressing in the game independently of the difficulties and the results being achieved in the game.*

Associated with the structure, the outcomes of the event simulation can take the player forward with different possibilities that will drive the game to make further actions to match the player ability and learning activities:

1) *The players are taking the right decisions with the right results (parameters), which will lead them to follow the right course of action, and to reach the objectives initially set by the game.*
2) *The players are taking the right decisions but with slightly different results, consequently of using different parameters that will affect the expected results of the action. Depending on the difference of outcomes, the facilitator could be triggered or not to contact the trainee and help him/her understanding the decision process as to make modifications if needed.*
3) *The players are taking the wrong decision which will lead them into different storylines or with insufficient results that will trigger the facilitator to reach in an assist the player in reassessing the decision process and the learning results up to that point as to correct the situation and set back the trainee on the right process.*

To create a real immersive environment where one can feel as living a real situation, the game needs to create different storylines that, although leading to only one correct ending (Successful or Unsuccessful), will have to include several different possibilities that could lead to different wrong endings as to provide the game with different interactive tools that can challenge the player in overcoming them while performing the learning activities.

The implementation of these storylines will be created using a tree & branch structure that will create different paths between the beginning of the game and its conclusion where, in each node, different types of game mechanics will drive players to select a new course of action through the storyline.
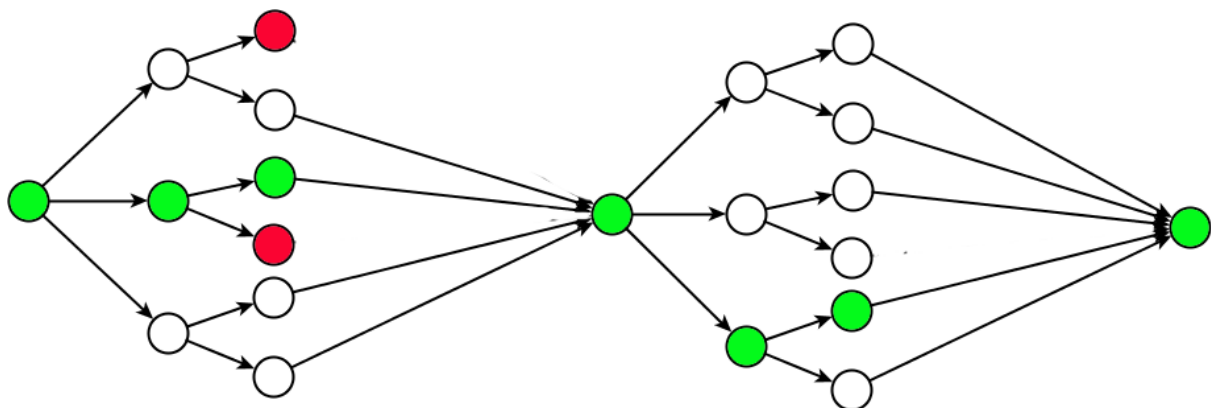
Figure a: Example of narrative tree

In figure a, the green nodes identify the correct path through the narrative tree and that represents the right series of actions/decisions to reach the objective. The red nodes identifies dead-end nodes where the player was led by approaching in an inadequate way the simulations happening in the nodes and which led them to reach a wrong objective.

Each story is represented in Figure a, by the branch linking nodes, and each node represents and action requested to the player or an event simulation used to generate randomness in the game as explained below.

The role of facilitators

A key role will be played by facilitators in the game, the so-called "game masters": s/he will follow the evolution of players and engage the students in moving forward with the learning activities, the facilitator in this model is key to help the player achieve the optimum knowledge from the training, as the player will constantly be applying it, and moving either in the right direction with the game, or in the wrong direction based on insufficient or incorrect knowledge that can be linked directly to the level of freedom the player should have before being corrected by the facilitator.

The facilitator will have also a clear indication of where players start, which situations they have solved, in how much time, and with which amount of correct choices. Based on that, s/he will be able to decide whether to engage with the player as to help him/her addressing current issues, or expected ones, as there is already a clear understanding on whether the player will be able to reach the next phase smoothly (without having a problem that will require him /her to go back), or whether s/he will need the help of the facilitator to better understand the nature of the problem faced and to revisit her/his decisions.

The Game progression

Based on the game structure proposed, the game progression will be based on the following elements.

- **Linear storytelling branch**, *which moves the player forward in the game, history and learning activities, as they can happen in parallel with the progression within the game.*
- **Action Nodes/Business Events** *where the player has to interactively perform an action or choose elements that will define the next progression by the player towards the completion of the game.*
  - o **Value**, *the player needs to calibrate the value of an input that is needed to move forward the action. For example the amount of a loan, or a public funding, that could turn out to be enough or insufficient to fulfill the objectives associated with the mission.*
  - o **Decisions**, *the players need to take a decision that will move the game toward a predefined branch of the story that can be successful, neutral (the player will move back later on to the correct branch) or unsuccessful by causing the player to reach a point where the game comes to a dead end with no other actions and that will force the player to go back to a predefined saved point. This situation*

can be used to trigger a direct contact with the facilitator and provide the player with a very important learning activity, as mistake is one of the most successful learning tools.

- o **Random events**, *which will call the player for action*
- o **Interaction** *with another player or with facilitator*

The difficulty of the game as to increase or decrease the difficulty of the progressing through the game can be implemented by increasing the amount of possible actions in the nodes, or by increasing the amounts of available branches from each node, which will result in bigger or smaller narrative tree and directly a harder or easier game difficulty.

The level of ranking in the game would be based on the overall social entrepreneurship calculated using the above attributes, and would be used to allow the players to move to other types of business, move to bigger areas in the city, or get more competitors for its business.

The game is set to be integrated with Moodle Learning Management Systems as to allow to follow from the LMS the progression of the student and to put specific evaluations to the competencies learned.

Online	Game	Game	Security
Moodle			
Databases (Mysql)			
Server infrastructure			
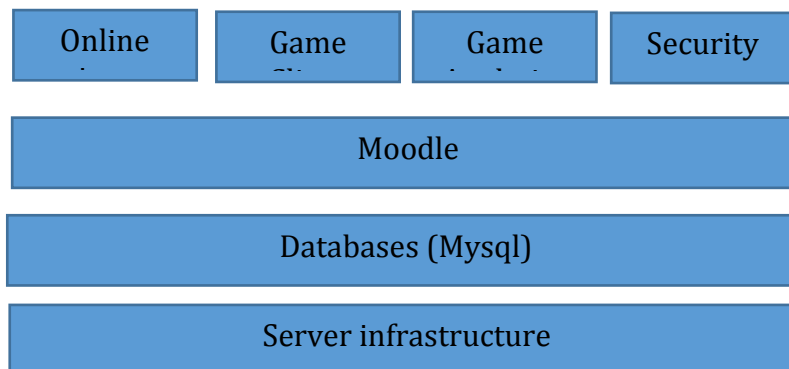
PART 3 – Functional analysis

The components of the solution

The solution is composed of four important parts:

- - **Interactive Storytelling Manager**, *which creates the tools to define the different storylines, links it to the learning outcomes in the LMS, introduces randomness as to make the experience more challenging, and allows the facilitator to manage the progress of students/players across the story.*
- - **Interactive Story creation**, *based on the previous element, allows an easy creation of new stories associated with interactive elements choices, and integration with the LMS.*

- **LMS integration** *maps the interactive stories of the game entirely on the LMS both with the contents, users roles and communication tools made available by the LMS.*
- **Score system** *that takes into account the users/players acquisition of skills.*

The interactive StoryTelling Manager *must implement a graph model that, once the conditions associated with learning progress and information required to the player is entered, will transform into a Finite State Machine that will control the flow of the player through the resulting graph, allowing to experience a game situation. One of the core challenges is to define the rules that govern the system and the reactions that the system will take in response to the players choices. Another core challenge is to define the rules and the system reaction to the random events.*

One of the key elements with the system is the possibility to create interactive stories that create different branches of possibilities associated with the objectives of the learning, and associated with putting in practice what has been learned.

For these reasons, the **Interactive Story Editor***, must allow an integrated and consistent story creation that will allow entering the different storylines and the actions associated to the story that need to be checked as to define progression to the next phase. In parallel, the system must allow an easy and consistent mechanism to associate the storyline with the learning outcomes with the LMS as well as if the system will enable for the node random events or not, or a direct intervention of the Facilitator. Since Random Events can be seen as Random Storylines or succession of Random storylines, this component will also be responsible for the definition and creation of all the random events that will be made available for the story that will be used in the game[15].*

Moodle 2.9 is going to be used as LMS*, because it is the most used LMS system and it counts on the largest peer community of developers that could help in case of need during the technical implementation phase.*

The functionalities that will be analyzed and configured are:
- *The rule of Users management, provided by Moodle*
- *The rule of Site Administrator, the main figure that manages the System*
- *The rule of Course Creator, the figure that create a course and choose the training materials and the functionality provided by the course*
- *The rule of Teacher/Facilitator, the figure that helps the player to gain the goal*
- *The rule of Student/Player, that approachs the course/game, that play the game, and gain the evaluation at every step of the game*
- *Course Management: every storytelling is matched with a specific course activated on Moodle with all the related activities and materials*
- *Lessons guided by facilitators*
- *Quiz, with closed or oper answers*
- *Chat, for communication between the players and the facilitators*
- *Training content management (tests, images, videos, quizzes, …)*

---

[15] *For more information about the Random events please consult Part 2 of this report.*

- *Grades management, as some activities are linked to some specific contents and they produce grade linked to the singolar players*

The game will be integrated with the LMS Moodle as concerns:
- **Authentication***: every user logs in only one of the two System (in Moodle or in the game web application) and can move between the two Systems without the need to insert again the credentials*
- **Content:** *every story is mapped on a specific course on Moodle, the related contents (tests, images, videos, quiz, …) are found directly in Moodle*
- **Grades management***: some choices taken by players in relation with the game or with the contents can generate a quantitative evaluation*

Technical features of the solution

The solution is composed of three web applications:

- **A Moodle 2.9 Installation** *with web service creation, based on REST architecture, with preshared key authentication on Moodle and Game application.*

  Every type of activity on the platform will perform a set of action (like "read" and "write" actions) and some specific actions for users score updates.

  - *Authentication: for the single login sign-on and the subsequent recovery of all users and user roles data*
  - *Content: to regain all the contents associated to users and to save the choices related to the past steps*
  - *Score: linked on Moodle*

- **Game Web Application***, with the following application layers*
  - *Presentation Layer, realized with Microsoft ASP.NET MVC with html5, css3 and javascript framework*
  - *Business Layer, for the management of application functionality*
  - *Data Access Layer: in this case to permit the interfacing with StoryTelling Manager Database, at the moment we can foresee the use of a content database (Mongo DB o Raven DB) and the use of REST services by Moodle*

- **Back-office application***, with the following application layers:*
  - *Presentation Layer, realized with Microsoft ASP.NET MVC with html5, css3 and javascript framework*
  - *Business Layer, for the management of application functionality*
  - *Data Access Layer: in this case to permit the interfacing with StoryTelling Manager Database, at the moment we can foresee the use of a content database (Mongo DB o Raven DB) and the use of REST services by Moodle*

PART 1 – SETTING THE SCENE FOR THE GAME CONCEPT DESIGN

Authors: Stefania Aceto, Daniel Burgos, Daniel R. Parente (UNIR)

Contributors:
Kerstin Junge, Silvia Francario, Cristina Castellanos (TIHR)
Erdmuthe Klaer, Luigi Martignetti (REVES)
Joachim Keim (Coompanion)
Renate Goergen (Le Mat)

1.   Online   roleplay   games   for entrepreneurship: trends and practices

1.1 Methodology and Definition of Key terms

In order to set the framework for the guidelines, both desk and field research were carried out, with O1 activities focusing mainly on the review of trends and practices of online gaming for learning (and specifically for the acquisition of skills relevant to social entrepreneurship) and O2 activities focusing on the needs of the target group of the game (including learning needs).

As concerns the work carried out in relation to games, the following activities were developed:

- **Desk research** *(review of publications, articles, grey literature, web sites and portals etc) aimed to investigate on current trends in gaming for learning with specific reference to online gaming and pedagogical aspects and challenges linked to the use of games for learning. The desk research fed the analysis on ongoing trends in the field of games for learning, as presented in 1.2 below.*
- **Online review of relevant games and projects** *in the field aimed to highlight good practices (at the organisational, technological, pedagogical level) that could be of help in developing the Social Seducement ORPG. The screening of relevant online games led to the analysis presented in 1.3 and Annex 1 and 2 below.*
- **Field research** *(survey and focus group)[16]. aimed to consult relevant stakeholders in their needs and concerns so to steer the design of the game both from a technical, organisation and pedagogical perspective. The Survey, conducted jointly between O1 and O2, was focused on the needs of the target group of the game both in terms of learning and playing and also gathered relevant information about the intermediary agencies that shall help the project in the outreach to the target group and in the hosting of the piloting phase. The key results of the survey as relevant to this report are presented below in 1.3 whereas the full analysis is available in IO2. As concerns the focus group, this was organised in Perugia (Italy) in June 2015 and the key input gathered for the game design is presented in 1.3 below.*

The work was led by UNIR and carried out with the collaboration of all partners, respecting the foreseen task allocation of the Description of Work.

Before proceeding with the presentation of our research results it is useful to present some **key definitions** *relevant to the sphere of action and development of Social Seducement with specific reference to game design:*

---

[16] *The Description of Work of the project foresees the organisation of two focus group and the consultation of game experts via interviews. At the time this report is being written, one focus group was carried out for IO1 and the survey of O1 was merged with the survey of O2 given the overlapping of the respondents addressed. A second focus group will be carried out to user test training material and a game prototype.*

Definition of key terms

Gamification *is the use of game mechanics and experience design to digitally engage and motivate people to achieve their goals*[17]

Serious gaming[18] *- within the research community there is no fixed definition of a serious game. Although the majority view serious games as: having a learning model embedded, the content is integrated into the game so learning is intrinsic to play, and the assessment of learning may be integral to the game or occur through mediation around the game. These variations could cause confusion amongst educators, trainers and policy makers when trying to identify what digital game can be successfully used to achieve a learning goal. The Social Seducement partnership has decided to adopt the view of Futurelab, which considers them as:"digital games (including simulations and edutainment) with the intention of teaching specific predefined skills or knowledge.*

An online **role-playing game**[19] *is an online game in which players assume the roles of characters in a fictional setting. Players take responsibility for acting out these roles within a narrative, either through literal acting or through a process of structured decision-making or character development. Actions taken within many games succeed or fail according to a formal system of rules and guidelines. Role play games are considered to be a form of interactive and collaborative storytelling. Events, characters, and narrative structure give a sense of a narrative experience, and the game need not have a strongly-defined storyline. Interactivity is the crucial difference between role-playing games and traditional fiction. Whereas a viewer of a television show is a passive observer, a player in a role-playing game makes choices that affect the story.*

Learning Management System[20] *A Learning Management System (or LMS) is a software package, usually on a large scale (that scale is decreasing rapidly), that enables the management and delivery of learning content and resources to students. Most LMS systems are web-based to facilitate "anytime, anywhere" access to learning content and administration. At a minimum, the LMS usually allows for student registration, the delivery and tracking of e-learning courses and content, and testing, and may also allow for the management of instructor-led training classes. In the most comprehensive of LMSs, one may find tools such as competency management, skills-gap analysis, succession planning, certifications, virtual live classes, and resource allocation (venues, rooms, textbooks, instructors, etc.). Most systems allow for learner self-service, facilitating self-enrollment, and access to courses. Some LMS vendors do not distinguish between LMS and LCMS, preferring to refer to both under the term "LMS", but there is a difference. The LCMS, which stands for "Learning Content Management System", facilitates organization*

---

[17] *Gartner,* http://blogs.gartner.com/brian_burke/2014/04/04/gartner-redefines-gamification/
[18] *Futurelab: Games in education: Serious Games, retrieved from* http://media.futurelab.org.uk/resources/documents/lit_reviews/Serious-Games_Review.pdf *on 07.07.2015.*
[19] *Retrieved and adapted from Wikipedia on 7.7.2015.*
[20] http://trainingforce.com/kb/what-is-a-lms/

of content from authoring tools, and presentation of this content to students via the LMS.

Disadvantaged groups *include in general youth, women, seniors, immigrants, disabled people, ex-offenders, unemployed). In the framework of Social Seducement, given the different learning needs and attitudes of each subgroup of this category, we decided to focus on* **unemployed adults aged 18+ who have not been working in the last 2-3 years** *(being mindful that within these groups other disadvantaged, some of which not mentioned above, will be found).* **These include also people who have lost their job and are trying to reconvert in order to re-enter the labour market**[21].

Social economy[22] *is defined through seven key principles:*
1) the primacy of the individual and the social objective over capital;
2) voluntary and open membership;
3) democratic control by the membership;
4) the combination of the interests of members/users and/or the general interest;
5) the defense and application of the principle of solidarity and responsibility;
6) autonomous management and independence from public authorities;
7) the essential surplus is used to carry out sustainable development objectives, services of interest to members or of general interest.[23]

Social Enterprise. *"A social enterprise is an operator in the social economy whose main objective is to have a social impact rather than make a profit for their owners or shareholders. It operates by providing goods and services for the market in an entrepreneurial and innovative fashion and uses its profits primarily to achieve social objectives. It is managed in an open and responsible manner and, in particular, involve employees, consumers and stakeholders affected by its commercial activities."*[24]

A possible legal form of social enterprises is that of **Cooperatives,** *which are "primarily groups of persons or legal entities with particular operating principles that are different from those of other economic agents. These include the principles of democratic structure and control and the distribution of the net profit for the financial year on an equitable basis".*[25]

---

[21] *for an in depth analysis of the target group addressed please refer to IO2.*
[22] http://www.socialeconomy.eu.org
[23] *Charter Social Economy Europe*
[24] *COM (2011) 682 final: p. 2*
[25] *European Economic and Social Committee: The Social Economy in the European Union. EU 2012*

1.2 Current trends in online games for learning and implications for Social Seducement

*One of the key trends affecting innovation processes in education and training systems is related to the **increasing use of games for learning purposes**. Both the Horizon reports on K-12 and Higher Education (2013 and 2015 editions)[26] and other relevant reports such as the MATEL Study[27] have highlighted the strong potential of games for learning.*

Provided that games as such involve in any case a learning process (that might be simply learning how to play the game), it cannot be given for granted that putting educational content into a game will make it a game for learning.

*According to BinSubaih et al (2009)[28] there have been **three generations of educational games** defined by their underlying pedagogies.*

- *The first is based heavily on **behaviourism**. Learning occurs through conditioning with the game element typically being a reward for the correct response to the stimuli.*
- *The second generation is based on **cognitivism** (learner at the centre acquiring knowledge through a wide variety of stimuli enabling him/her to identify and analyse problems and to apply past learning) and **constructivisms** (learning by making through immersive experiences in a virtual environment allowing acquisition and application of knowledge as well as social interaction with peers).*
- *The third generation, the one that we are experiencing at the moment, is related to **constructionism** (where learning happens by having to explain it) and implies the development of situated experiential learning with simulations often referring to the real world so that transfer and application of knowledge is made easier.*

*The above evolution suggests a strong potential of games for learning and for the acquisition of skills, so it is interesting to analyse **to which extent such pontential has been assessed and what strenghts and weaknesses** have emerged.*

The Pearson Research Report "A literature review of Gaming in Education"[29] analyses critically the hopes and claims related to the use of on-line games for education in relation specifically to the following aspects: i) the soundness of learning principles lying behind games; ii) the capacity of games to provide personalised learning opportunities; iii) the capacity of games to provide more learners' engagement with respect to traditional forms of educaton; iv) the capacity of games to teach 21st century learning skills and v) the possibility that games provide an authentic and relevant assessment of learning.

The results of the report suggest that games for learning are in fact addressing all the above challenges and highlight some specific features that give games a strong potential

---

[26] http://www.nmc.org/publication/

[27] *S. Aceto et al, 2014, Mapping and Analysing prospective technologies for learning, JRC Scientific and Policy report*

[28] *BinSubaih, A., Maddock, S. & romano, D., 2009. Serious Games for the Police: Opportunities and Challenges.*

[29] *K. Larsy McClarty et al. (2012) A literature review of games in education, Pearson Research Report*

in supporting learning processes, such as the **immediate feedback, the possibility to experiment risky situations and fail without dramatic consequences, the low level of frustration** *(compared to traditional education) in case of failure, the* **possibility to learn from mistakes, the enhancement of more learners' engagement and motivation** *(again in comparison to traditional learning processes)* **thanks to clear goals, reinforcing feedback and increasing challenges**. *Evidence emerges also on the* **capacity of games to foster the development of 21st century skills such as problem solving, innovation and decision-making.** *As concerns assessment, the great potential of games in supporting formative assessment is highlighted, though research is still needed on how to incorporate and structure such an assessment within existing evaluation frameworks.*

*The same concern is shown by Futurelab in its report "Games in Education: Serious Games"[30] : "***One of the major concerns identified about using digital games in education is the difficulty in assessing effectiveness at achieving the learning goals***. How does a player of Civilisation, for example, demonstrate that they know the seven wonders of the ancient world rather than merely acquiring stars? As Jeffery Chin and colleagues' state: "Designing ways to collect data on student learning in simulation and gaming is particularly difficult because of the open-ended nature of these activities" (Chin et al. 2009)". In order to address this challenge, Futurelab focuses on the* **key role of the teacher in making explicit what has been learnt and mediate the learning process. In other words, learning is stimulated by the game but occurs outside and the teacher (or trainer, or facilitator) has a key role in mediating and leading the learning process.**

Considering the aims of objectives of Social Seducement, the above analysis suggests that **the ORPG that the project wishes to develop might have a pontential in transferring to learners the skills and knowledge related to social economy, social entrepreneurship and social cooperatives, provided that situated, experiential learning is promoted, that particular focus in placed on the assessment of the learning occurred through the game, and that the intermediaries involved in the game are properly trained to guide and mediate the process of learning of players***.*

One of the key distinguishing features of Social Seducement is the target group addressed, i.e: unemployed adults aged 18+, falling into the wider category of "disadvantaged". The majority of available studies addressing the analysis of pontential or actual contribution of games to learning are developed either in the frame of the corporate sector or in the frame of formal education, with specific reference to K-12 and Higher Education. While in formal education games are still used to a limited extent, the use in the corporate sector is dramatically rising. The same applies to formal informal learning enviroment linke for instance to health issues. **Little evidence exists on the extent to which on-line games (or digital games) can be successfully used to address social inclusion**. *JRC-IPTS has dealt with this theme in its report "The potential of Digital Games for Empowerment and Social Inclusion of Groups at risk of Social and Economic Exclusion: Evidence and Opportunity for Policy"[31].*

---

[30] http://media.futurelab.org.uk/resources/documents/lit_reviews/Serious-Games_Review.pdf
[31] *J. Stewart et al. (2013) The potential of Digital Games for Empowerment and Social Inclusion of Groups at risk of Social and Economic Exclusion: Evidence and Opportunity for Policy" IPTS JRC Scientific and Policy Reports.*

The evidence collected in the report shows that **digital game-based approaches provide adaptable, motivating and engaging techniques that can be used to empower individuals and enhance social inclusion**. *The report shows three key areas of intervention addressed by digital games:*

1. *supporting disengaged and disadvantaged learners (helping them to re-enter education or increasing their employability potential)*
2. *Promoting health and well-being (addressing people affected by specific illnesses or raising awareness about phisical and mental illnesses or promoting health and well being through prevention*
3. *Fostering of civic participation, awareness and community building (raising awareness about political and government topics and enhancing civic participation)*

Out of the three above categories, 1 and 3 seem to be particularly relevant to Social Seducement as they (also) address adult learners with the aim to increase their employability potential and their social and civic role in society. In fact, the theme of Social entrepreneurship is part of group 3 above as per the categorisation proposed by IPTS.

According to the report, "the use of digital games and gaming is starting to show potential in addressing issues of policy concern including wellness and ageing, education and employability of poor learners, improved quality of training, skills development and civic participation".

Digital game based practices have therefore a key role to play at the macro-level, where they are recognised as possible enhancers of employment and growth, social cohesion and effective provision of services meeting public policy goals. **At the meso level**, *the game practices analysed in the study suggest that* **digital games can facilitate learning, and enhance 21st century skills**. *They do so by increasing engagement in learning, supporting experiential and social learning, and by providing a safe environment for experimentation.*

As concerns the impact of digital games for learning in terms of acquired skills, *practices analysed in the IPTS study seem to suggest that both core skills such as* **literacy and math and transversal skills such as personal empowerment, self confidence and self efficacy are acquired, notwithstanding the technical compenteces necessary to play the digital game**. *The* **role of "intermediaries and professionals working in the field of social inclusion**" *is put forward by IPTS as key in making the potential of digital game for social inclusion a widespread reality. The same applies in our view also to teachers, trainers and learning facilitators that actually support digital game learners at the micro level.*

The following recommendations emerge from a review on games for learning conducted by Futurelab[32], that are relevant for the development of the Social Seducement ORPG:

---

[32] , J. Kirriemuir et al, Literature Review in Games and Learning Futurlab Series, Report 8 http://www2.futurelab.org.uk/resources/documents/lit_reviews/Games_Review.pdf

- **the activity should be structured so that the player can increase or decrease the level of challenges** *faced, in order to match exactly personal skills with the requirements for action;*
- **it should be easy to isolate the activity, at least at the perceptual level***, from other stimuli, external or internal, which might interfere with involvement in it;*
- **there should be clear criteria for performance***; a player should be able to evaluate how well or how poorly (s)he is doing at any time;*
- **the activity should provide concrete feedback to the player***, so that (s)he can tell how well (s)he is meeting the criteria of performance;*
- **the activity ought to have a broad range of challenges, and possibly several qualitatively different ranges of challenge***, so that the player may obtain increasingly complex information about different aspects of her/himself.*

Last but not least, I. Voulgari et al. (2009)[33] have identified the following key aspects enhancing learning through games (to be considered in the design of the Social Seducement game):

- **Fantasy and Background Story***: endogenous fantasy (linked to the learning content of the game) and the narrative environment support the motivation of players, in that they provide an environment where the player can replicate (or not) real aspects of his/her life.*
- **Graphic Representation***: providing an immersive enviroment allows external representation of a problem or task that in turn facilitates problem solving activities by the players.*
- **Virtual Character Design***: the representation of players via avatars increases motivation to play, influences the role of players in the game and within the team and is a source of pride for players (beside providing the possibility for a virtual identity different from the real one).*
- **Design of Quests***: the good design of quests (tasks and components of the game narrative) affects the emotional engagement of the players. Taking up quests is strongly dependent on the related rewards.*
- **Rewards***: immediate rewarding is a key motivational lever to play the game.*
- **Flexibility and Adaptability of the Environment***: the more the game environment offers choices of action, the more the learner will experience a sense of freedom and control.*
- **Social Relationships***: virtual interaction among players allows for strong emotional experiences and often results in friendship extending to real life.*

---

[33] *Iro Voulgari, Vassilis Komis (2009) Collaborative Learning in Massively Multiplayer Online Games: A Review of Social, Cognitive and Motivational Perspectives*
Department of Educational Sciences and Early Childhood Education, University of Patras, Rion, Greece

1.3 Practices around online games for learning and implications for Social Seducement

In Section 1.2 above, we discussed about key trends and challenges related to the use of online games for learning and about their implications for the design of the Social Seducement ORPG. Our desk research findings suggest that we are on the right track in addressing training for disadvantaged categories via online gaming. In fact, this is an increasingly used practice (although still rather unexplored in the social economy field) and it is demonstrated (see 1.2) that – with the right design – online game for learning can be an effective tool for engaging learners in a training path in an unconventional way.

A further preparatory activity for the design of the Social Seducement game concept consisted in the **analysis of relevant practices***, i.e.: online games or projects aimed to develop online games for learning.*

The **keywords for search** *of such initiatives were the following: online game, ORPG, entrepreneurship, social entrepreneurship, social economy, games for good, games for learning, unemployed, adults, learning, e-learning.*

Although the Social Seducement game acts in the field of social economy and is aimed to develop social entrepreneurship related skills, it was quite clear since the beginning that restricting the search to such area would not allow to find a sufficient number of initiatives. Therefore, it was agreed that the **criteria for search would be extended to the general context of learning and training in relation to the acquisition of skills somehow relevant to social entrepreneurship through online games (not necessarily being ORPGs).**

The consequent research allowed finding **60 potential interesting cases***, some of them retrieved from available studies and research reports, and some others found directly by project partners. These are displayed in table 1 below. The image below is a graphic representation of the types of games included in this first wave research. It shows the wide ranges of sectors covered, but the clear focus of the analysis on online games that are simuations, are designed for educational purposes and cover business topics.*
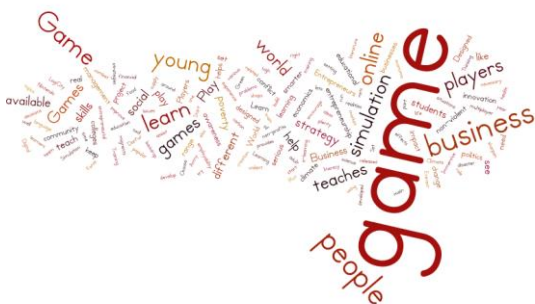
Figure 1: Wordle of first stage games aanalysed

Table 1: Full list of cases initially considered.

Report/study	n. of analysed cases	List of games and projects scanned
JRC-IPTS - The Potential of Digital Games for Empowerment and Social inclusion of groups at risk of economic exclusion: evidence and opportunity for policy	*10*	• **In-living**. *Game for housing associations helping teach young people about being a good tenant.* • **Rock'n'high roller.** *Game for financial planning addressing people aged 18-24* • **Footfall**. *A Facebook game to help young people learn financial responsibility and issues involved in setting up a small business.* • **TARDIS project**. *To improve interview skills of young people with low employability* • **No credit, Game over**. *Training young people on debt* • **Winterfest**. *Digital game for adult litaracy* • **iChance** *Digital game for adult litaracy using Nintendo* • **eSmart** *Training tool for MC Donald employees developed on Nintendo* • **Thuis in the Netherlands** *supporting migrants in the preparation of the naturalisaiton exam* • **Mixopolis**. *Vocational orientation and participation for young migrants.*
Futurelab – Games in Education: Serious Games	*2*	• **Simventure** *is a business simulation game, designed for 14-30 year olds who are learning about the realities of setting up a business* • **Climate challenge game -** *Climate Challenge is an online sandbox-style strategy game developed by red redemption. it was released in 2007 with the aim of engaging young professionals aged 20-35 in the realities of climate change and measures that can be taken to decrease carbon dioxide emissions*
R.Jensen, 50 great sites for serious educational games, Online Colleges.net	*34*	• **EVE Online**. *Practice running the most powerful company in the world so you can sharpen your skills for management in the real world.* • **Informatists**. *This popular business simulation game helps you learn and polish business skills. Whether you are a practiced business professional, an entrepreneur getting your feet wet, or in online colleges for business administration, this game will help you practice strategies and learn to succeed without a high risk of failure.* • **Gazillionaire Deluxe**. *Used in colleges to teach business, math, and economics, this game teaches about supply and demand.* • **Ports of Call**. *This old classic has a 3D face lift. Play this game to build your shipping fleet wisely and learn plenty about economics while you play.* • **Fistful of Dollars**. *Set against a space backdrop, this game teaches players about managing working*

capital.
- **Robo Rush**. *Start out selling your robots door-to-door, then upgrade to a storefront and a factory.*
- **The EIS Simulation**. *Designed at the Center for Advanced Learning Technologies, this game challenges players to become a part of a team that will introduce an innovation and convince 22 members of the management team to accept the innovation.*
- **Innov8**. *This simulation game from IBM provides players a chance to sharpen their business acumen with three different scenarios focusing on smarter traffic, smarter customer service, and smarter supply chains.*
- **America's Army**. *Used as a recruitment and training tool by the US Army, this game lets players try out virtual missions.*
- **CyberCIEGE**. *Designed by the US Navy, this game teaches about network security. Players purchase and configure workstations, servers, operating systems, and more, then try to keep it all secure while also balancing budget and productivity factors.*
- **Triage Trainer**. *This game from Blitz Game Studios helps train those who respond to emergencies learn to set protocols and prioritize casualties.*
- **A Force More Powerful**. *Only available on DVD, this game is a non-violent strategy game that teaches players how to use non-violent tactics to disarm potentially violent situations, possible even useful as conflict resolution at online colleges for social work.*
- **Darfur is Dying**. *Players must keep their refugee camp going despite the threat of the militia in this game that teaches about the plight of the 2.5 million refugees in the Darfur region of Sudan.*
- **Food Force**. *Inspired and designed by the same people who created FreeRice, this game helps teach about feeding the hungry. While it is aimed at high school students, it has caught on as a popular game for adults as well. It is available in English as well as 16 other languages.*
- **3rd World Farmer**. *Run a farm in Africa against the backdrop of poverty and conflict. Developed by IT students in Copenhagen in 2005, the game continues to undergo development to keep it current. A Spanish language version was released late last year.*
- **LogiCity**. *Designed to help young people under 25 learn to reduce their carbon footprint, LogiCity lets players experiment with various actions to see the effects on the world.*
- **Deliver the Net**. *This game is part of the Nothing But Nets program that provides mosquito nets to help combat malaria. Play this game and help deliver the nets virtually and in reality.*
- **Karma Tycoon**. *Learn to build non-profits through loans and grants, providing the non-profits with basics, and saving lives. This strategy game is non-violent and promotes learning about both business and community.*

- **Stop Disasters**. *Hurricanes, tsunamis, floods, wildfires, and earthquakes are happening and you need to prevent disaster from striking. Just like in real life, there is no right answer, so your game will be different each time you play.*
- **McDonald's Video Game**. *Choose your language, then dive into this game that teaches about the harmful effects of fast food with a heavy dose of irony.*
- **A Tale in the Desert 4**. *Set in ancient Egypt, this massively multiplayer online role playing game has a focus on economic and community development. This game is one of the few MMORPGs that includes no combat at all.*
- **World Without Oil**. *Play this game to get a feel for what life might be like during the first 32 weeks of a global oil crisis. With an eye on economic, climate, and quality-of-life issues, this game raises awareness of the unhealthy dependency on oil.*
- **Democracy 2**. *Learn politics with this strategy game that has players making decisions such as implementing green policies, raising or lowering taxes, creating harmonious foreign relations, and more.*
- **President Forever 2008**. *Run for president in this game where you'll learn about primaries, general elections, and more. Play 2008 or one of the past elections, including Bush-Gore 2000, Regan-Carter 1980, Nixon-Kennedy 1960, or US 2012.*
- **Ars Regendi**. *Learn politics and economics in this multiplayer game. Reign over your own state, form alliances with other countries, and more as you learn the intricacies of ruling a country.*
- **The ReDistricting Game**. *This 3D game teaches about the impact of districting on politics. Redraw your districts and see the impact, learn how it works, and see how abuse happens with The ReDistricting Game.*
- **Peacemaker**. *Play this game to see what the balance of power feels like. Choose the right path and you will bring peace to the Middle East or make the wrong choices and create a violent disaster.*
- **Sites with Multiple Games**
- *These sites offer plenty of serious and educational games that touch on a variety of topics from literature to social awareness.*
- **Nobel Prize Educational Games**. *From treating a diabetic dog to blood typing to Lord of the Flies, these games run the gamut from literature to science and everywhere in between.*
- **Thinking Worlds**. *Try the demo games here for a sample of the educational games available through Thinking World.*
- **Super Smart Games**. *The games here range from academic to health and fitness to social awareness and are available on multiple platforms and for all different age groups.*

		• **Filament Games***. The games here are dedicated to teaching concepts and subjects in a hands-on manner. Topics range from science to civics and challenge players to think through problems and have fun at the same time.*
Games found by the Social Seducement Consortium	*14*	• **The New Heroes** *tells the dramatic stories of 14 daring people from all corners of the globe who, against all odds, are successfully alleviating poverty and illness, combating unemployment and violence, and bringing education, light, opportunity and freedom to poor and marginalized people around the world.* • **Evoke** *is an online 'serious game' designed to empower people all over the world to start solving urgent social problems like hunger, poverty, disease, conflict, climate change, sustainable energy, health care, education, and human rights. It is meant to encourage people to collaborate with each other, across the world, to develop real world ideas to address these challenges* • **YENTELS***-Young European Entrepreneurs e-learning Suite .The main objective of the project is to encourage entrepreneurship of young people to improve employability, competitiveness and innovation developing a simulation/computer gaming based e-learning suite of training materials which will assist them in acquiring the entrepreneurial skills necessary to set up & run their own businesses* • **Entre Explorer - Serious Game for Immersive Entrepreneurs -** *The main purpose of the Project ENTRExplorer "Serious Game for Immersive Entrepreneurs" is to develop a 3D online serious game related to entrepreneurship theme where the users\learners can have access to learning contents that will assist them in acquisition of entrepreneurial skills necessary to manage their own businesses in the future. This project has also the ambition of stimulate innovative ideas, drive and prepare learners to set up their own occupation and creation of new jobs.* • **Cisco Aspire –** *simulation game for CISCO network associates around entrepreneurship and management* • **Everest V2** *- Team-based simulation using the dramatic context of a Mount Everest climb to teach group dynamics and leadership with an updated user experience* • **The Start Up Game** *- In this simulation, students play the role of different stakeholders in a market full of early-stage startups. They gain an understanding of decision-making under uncertainty, the variations in strategy among individuals, and experience with common trade-offs resulting from different strategies and decisions* • **Hot Shot Business** *- is an online business simulation game. Players pick various businesses to start and play to win. Sample online business range from pet shops to skate parks, and comic book shops.*

		SPENT - *an online game about surviving poverty and homelessness, whose mission "is to provide food, clothing, shelter and supportive services to neighbours in need".* **Go Venture Any Business** - *Creates a business simulation for ANY product, _ANY industry, and ANY market.* **Games for change -** *Founded in 2004, Games for Change facilitates the creation and distribution of social impact games that serve as critical tools in humanitarian and educational efforts.* **Business Simulations For Executive Education and Business Learning** - *Simulation putting the students in front of situations related with the topics they need to train as enable the decision taking process.* **Green community -** *Establishment, in the province of Sassari, (Italy) of a technological instrument (available via web and Mobile) that supports knowledge of the "Green Economy" among young people between 14 and 20 years.*

Following on from this, aA further selection was then therefore made based in the following relevance criteria:

- **Game supporting the development of one or more skills** *potentially relevant to* **social entrepreneurship**
- *Game presenting interesting features concerning the* **mechanisms of (learning) support to gamers**
- **Technologically relevant game** *(i.e.: presenting techological features or addressing technological challenges relevant to the case of Social Seducement)*
- **Graphically relevant game** *(i.e.: presenting graphical features or addressing graphical challenges relevant to the case of Social Seducement)*

Such selection led to the identification of **20 practices** *(see Annex 1 for the case study grid and annex 2 for the analysis of cases).*

Reviewing these cases along a number of key criteria, the following key messages emerge[34]:

- **In terms of game objectives** *we can find thre broad types among the 20 practices analysed: pure entertainment; delivering a social message; and training hard and / or soft skills in running a (social) enterprise. In the latter category we find games that either focus completely on technical skills (e.g. specific management techniques), only soft skills (e.g. team dynamics) or genarl (social) entrepreneurial skills.*
- **Tools used to achieve the project goals***. These objectives are taught through simulating relevant scenarios or stories, requiring the learning to either take on the personality of a particular role or navigate as themselves the challenges that present themselves.*
- **Target groups***. Four of the games analysed specifically target people with disadvantages or wanting to set up their own business. Others are open to anyone who wants to play, young people, students and / or managers.*
- **Methodologies applied / underpinning learning model***. The vast majorty of the games analysed are to be played by individuals as individuals. Only four are either excplicitly designed as group games or allow groups / teams to play as a unit. Interestingly, these tend to be the games that also use facilitators. The vast majority of the games analysed are simulations, and as such the learning model is one of experiential learning (constructivist learning model). In several cases the experientlai learning comes not only from simulated situations / scenarios that need to be tackeld by also from playing a particular role or learning to operate in a group. There are also some games that integrate experiential / social learning with cognitive learning, by providing information / subject knowledge (e.g. via pop ups or by simulating a classroom setting). One game consciously mixes methods with which facts are thought (visual, text based) in order to appeal to different learning styles.*
- **Indicators of Success.(assessment).** *There are three broad ways in which the games analyse assess success. In some games, assessment is completely automated: the system generates information, scores and rankings which the player can access. In asmall number of games, assessment happens through progress through the level. In an even smaller number of cases, the facilitator has a role in assessing players'*

---

[34] *In our research on those 20 games it was not possible to gather information on the development costs of these games.*

progress. The one explicitly team based game (Everest V2) ultimate team success depends on the ability to effectively evaluate and exchange information.

- **Art work**. *The 20 games analysed via our grid use a range of visuals, from 3D computer animated drawing making people look quite life-like over more traditional cartoon drawings to the use of photographs. There is no recognisable difference between the groups targeted in the way art work is used, with a potential execption of the game aimed at tweens where the artwork is very colourful and designed to appeal to children. This lets us conclude that there is no one best way to design the graphical interface for a game but that budget, audience and purpose of the game are all factors that matter when designing the game artwork.*

Based on this in-depth analysis of such practices allowed identifying a further restricted group of cases, particularly relevant to Social Seducement as explored in the table below:

Table 2: Key practices considered

Name of the game/project	Reasons for relevance
KARMA TYCOON	*As in the case of Social Seducement (inspired by the ILO board game Co-opolis), Karma Tycoon is the conversion online of a board game focused on social entrepreneurship.*
THE NEW HEROES	*The game deals with social entrepreneurship in 3° world countries and is interesting for the effective use of real stories for inspiration and learning. Story telling and transposition of real life experiences could be used in the Social Seducement game.*
EVEREST V2	*The game is a team-based simulation about Mount Everest climbing for team building and leadership training. It is interesting and relevant as it uses simulation and F2F virtual discussion among a group. It also uses incremental (learning and playing) steps based on decision taken jointly and leading to success (or not). This strategy could be well adopted by Social Seducement for collaborative, incremental learning through the game.*
THE START UP GAME	*The game is relevant for the topic, the group discussion and cooperation required; the clear set of roles foreseen; the short duration.*
SPENT	*online game about surviving poverty – relevant for: possibility of asking support to friends; advice messages in case wrong turns are taken.*
SIMVENTURE	*This simulation on business start up is relevant for: availability of individual and group playing; availability of virtual tutor and presentation of videos. The game includes ready made scenarios and a save and load function and it can be used to run active case studies where people face up the consequences of the business decisions they take.*
GO VENTURE ANY BUSINESS.	*Relevant for: the presence of the instructor (some sort of facilitation will be needed in Social Seducement); Team Evaluation possibility; Competency Quiz personalized for each student. Interesting Infographic; Possibility to create new case-studies; Possibility of Individuals and team palying at the same time; availability of Synchronous and asynchronous messaging; coaching opportunities*
THE GREEN COMMUNITY	*Relevant for: presence of virtual facilitators; possibility to monitor progress of players, different elements built in to remind participants of the 'game character' of the initiative and let them also have 'fun' in learning*

Key elements emerging as successful practices in the analysed games can be summarised as follows:

- **Storytelling** *based on real cases is a key enhancer of motivation and engagement and a quite used strategy in the few games found on social entrepreneurship and/or social economy.*
- **Step-by-step incremental learning** *is a good solution to merge the learning needs and the technical design needs of the game: building the learning process through steps/stages will allow the player to pass from one level to the next only when the knowledge and skills associated with the prior level are demonstrated.*
- **The role of the game master** *is very important in mediating among players of the game. In Social Seducement, this role will be covered by a* **virtual facilitator** *whose main mission will be to mediate and accompany the learning process at individual and team level.*
- *Another strategy to enhance learning and continuous engagement will be to introduce* **random events**, *i.e.: events that (as in real life) come unexpectedly and completely change the situation of the player (with no real consequence on the next steps of the game, but providing the player with the illusion that there might actually be consequences).*

1.4 Input of desk and field research to game concept design

The results of desk research about trends in online games for learning suggest that **Social Seducement is addressing an area** *(social economy and social entrepreneurship skills development)* **still covered to a limited extent**, *in that most of the analysed studies and practices cover areas mainly related to formal education and corporate training. In addition, it suggests that* **using games to support learning processes has a strong potential to support motivation and engagement much more than traditional training would, provided that the game is so designed to immerse the player in a fascinating environment, where s/he can experiment virtually real life situations, with a new digital identity (avatar) and can make mistakes as this will not have any implication in real life**. *Enhancing the* **social dimension in the game** *(through interaction and team work) is also key, and a particular effort will have to be placed on* **the way the game and the learning content interact** *so that the player/learners is aware of the fact that s/he is learning, but is motivated to do so as the game keeps her/his engagement high untile the game is over (and learning is completed).*

The above statements are coherent and complementary with the game design approach briefly outlined in the **Description of Work of Social Seducement**, *where the following commitments were taken for the realisation of the game:*

- **Integration with LMS platform**: *the game should lean on an LMS platform (as further explored in Part 2 of this report), preferably Moodle.*
- **Learning path associated with the game**: *The game should be the "attractive window" for learners to join a training path helping them to become social*

entrepreneurs. Thus, learning content of the game is key, but it is also very important to design the game in such a way to keep motivation and engagement high.

- *The **main target** group of the game is "Disadvantaged groups", within which we decided to focus on **unemployed adults aged 18+.***
- *Building on the experience of the Co-opolis game[35], developed by the ILO some 15 years ago, **facilitators will have a key role** in mediating the learning process of players while they are playing the game.*

The results of desk research on practices (projects and online games for learning relevant to the social economy field) also provide some interesting inputs for the design of the game concept, as shown in 1.3, particularly with reference to: **the use of storytelling as a strategy to support learning processes while using the game; the suggestion to adopt incremental learning processes to match the learning needs associated with the training path and the technical needs of the game; the use of random events to keep players active and motivation high in standby situations** *(see Part 2);* **the key role played by the facilitator, that will be the "game master"** *and support and mediate the learning process of learners, both at individual and at group level.* **Further elements** *emerging from the analysis of cases can be summarised as follows:*

Table 3: Interesting elements emerging from practice analysis

Level of analysis	Good practices emerging from case analysis	Eventual implications for Social Seducement game
Pedagogical level	*Providing immediate feedback enhances engagement*	*The game will be so designed to ensure that – when appropriate – the player is provided with immediate feedback. However, also random events will be introduced so that when the player makes a mistake s/he has the illusion to continue playing while in fact s/he is in a standby situation. This will allow the player to be led to take the right decision at the end of the process, with a less frustrating perception about its failure.*
	Link to real communities and stories enhances motivation and facilitates the continuous switch	*Real stories of successful social entrepreneurs will be adapted to the game to make the learning experience*

---

[35] *Co-opolis is a training tool expressly designed to support, promote and replicate on a large scale the social and entrepreneurial efforts of an innovative cooperative movement emerging often spontaneously in Africa, Latin America, Australia, Europe and elsewhere. Co-opolis contains training materials, information and a game that can be used by those who want to learn more about how to set up a social cooperative or how to inspire others to do so. It builds on the experiences and lessons learnt across the globe by men and women with disabilities, or otherwise disadvantaged in society, who started local development initiatives in their own communities. These initiatives were generally carried out collectively, as the protagonists wanted not only to help themselves but also to contribute towards the social and economic development of their local communities, both rural and urban. They wanted to create an alternative to poverty, social injustice, and crime, while at the same time building a future for themselves. Co-opolis applies problem-solving strategies to simulated real-life scenarios in order to enhance the entrepreneurial capacities of the trainees. The Co-opolis training method alternates between practical application followed by theoretical knowledge followed again by practical application. By providing regular doses of new knowledge and ideas, the players of the game are encouraged to be creative and search for realistic and workable solutions.*

	between the game and learning dimensions	*more realistic. However, only partial information will be provided to players so that they can find their way to the right solution.*
	Often games allow to choose for scenarios where to locate the learning /gaming experience and the players' role in the game context.	*This will be implemented in the Social Seducement game, with a pre-defined set of stories where social entrepreneurs have to develop different kinds of social cooperatives (in tourism, agriculture, etc) and can choose which role they play in the organisation (admin, marketing, etc).*
Technological level	*The more immersive the experience (3D), the more the game is engaging*	*Given the available resources, it will not be possible to implement a 3D game. However, work will focus on a captivating , but simple, graphical layout.*
Organisational level	*The main differences at the organisational level are dictated first by the kind of action analysed: a game as such or a game developed in the frame of a project. In the latter case (which is also our case) stakeholders and users are consulted in the game design phase (through surveys and focus groups).*	*Social seducement foresees consultation with stakeholders and users. In this first phase of design, a focus group with stakeholders and a survey addressing the needs of target group have been organised. Once the functional document about the technical specifications of the game is completed with the game rules, a further consultation phase with game developers and potential facilitators will be developed. In the piloting phase, a sample of final users will be involved in the game testing.*
	There are differences also in terms of sustainability: games promoted by communities or foundations or sponsored by private investor have a higher survivor rate than games developed in the frame of publicly funded projects.	*Sustainability of the game will be a key issue to start focusing on as soon as the pilot phase starts.*

As said already, substantial input in terms of suggestions for the game design came also from field research, and particularly from consultation with stakeholders through the focus group held in Perugia in June 2015 and the survey on target group needs.

Stakeholders taking part in the Perugia focus group *(mostly social entrepreneurs, trainers or members of social enterprises promoting the social economy)* **confirmed the key role of facilitators** *in mediating the learning process and facilitating participation in the game. Also, they suggested that* **facilitators could be a lever for the game sustainability** *(as it could be promoted throughout relevant organisations that could make use of it by the network of facilitators that will be established by Social Seducement). In relation to the technical specifications of the game, although agreeing with the need for a captivating graphical layout, they said the* **game should be promoted for its learning**

aspect, and not compete with the game industry. *They stressed the need for a training package for facilitators and finally highlighted the need to take into consideration gender issues when designing the game. They agreed with the idea to use stories as a basis for the learning game and suggested that these are developed in the frame of* **different sectors of the social economy** *(tourism, agriculture, etc.).*

*The survey "***Training needs of unemployed people becoming social entrepreneurs***" developed in the frame of IO2 addressed relevant actors for the design and implementation of the project, namely, training organisations, organisation working with unemployed people, organisation supporting entrepreneurial process, social economy organisations and others, such as regional bodies and research centres.*

The survey addressed the key elements relevant to design the project game at pedagogical, technological and organisational level according to the specific needs of long term unemployed people who may be trained to become social entrepreneurs. The purpose was to complement the current available information on social economy competences and training needs to the very specific context of the project.[36].
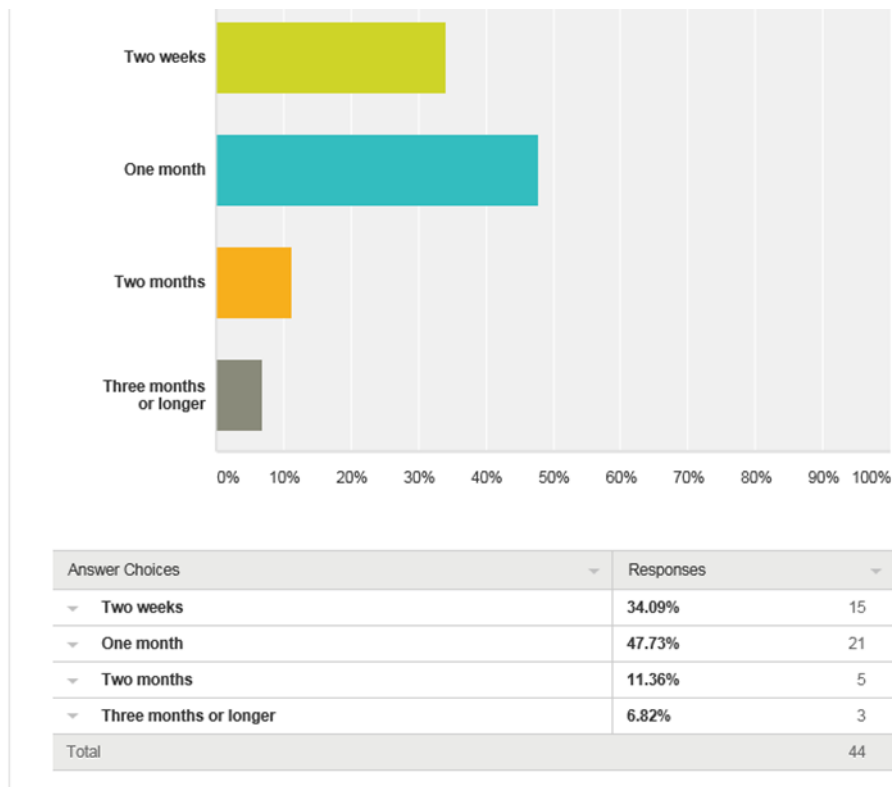
The survey has provided the following inputs to game design and needs of the target groups to be addressed:

Regarding the very concept of the game, the survey has shown the innovative aspect of the game proposed, as only 4.9% of respondents or their organisations have used serious online games for entrepreneurship training of unemployed people. So the project is covering a gap existing in the social entrepreneurial training provision across the EU.

The main implications for the **game design** *are related to the timeframe, the specific relevant content and the key factors to engage the final users, i.e. the prospective social entrepreneurs.*

The optimal length of the game is **one month** *for one out of two respondents, or even shorter (two weeks) for one out of four. Only about 20% would recommend delivering an online serious game which lasts two months or longer.*

Answer Choices	Responses	
Two weeks	34.09%	15
One month	47.73%	21
Two months	11.36%	5
Three months or longer	6.82%	3
Total		44

Weekly face-to-face meetings *to play together with the group and the facilitator are suggested as the most convenient by half of the respondents. 21% recommend less frequency (once or twice a month) and 25% 2 or 3 times a week.*

Regarding the **online meetings** *to play together, one out of two recommend* **two or three times a week***, showing how the online aspect provides room for a further social engagement though the online serious game.*

Both aspects are slightly influenced by contextual aspects, so the design game may consider this to be able to be adaptable somehow, with shorter and more intense meetings or longer total length but less frequent meetings, according to the particular groups or contexts.

In any case, both aspects taking together are relevant to design the **number of sessions** *or lessons in the game in which the whole group should do together, both virtually and/or face-to-face. A range between* **two to six face-to-face meetings** *to create the group and sustain the social aspect of the training and* **four to twelve virtual meetings** *could be seem as an optimal range according to the respondents. Thus, the game design would need to consider the number of group and individual situations which may be feasible, to prioritise the key collective elements of training paths in the game design.*

Regarding the **content of the game**[37]*, these are the social entrepreneurial competences seen as the most relevant but less provided at local level at the same time: planning and*

---

[37] *See Report on targets' needs analysis for further details.*

goal setting, problem solving, strategic thinking, ability to make decisions and understanding social entrepreneurship principles. Regarding transversal competences, interpersonal skills, ability to organise and understanding and monitoring the business environment are those considered key but with a low degree of local provision.

Regarding **how to engage final users***, both technical and organisational aspects must be considered. 57% of the respondents agree that the direct recommendation from the organisation supporting people's job searching, training or entrepreneurial process is a key aspect to engage unemployed people in the training. So, the organisational aspects of the project implementation, and not only the game design, will be essential aspects [38]. Nevertheless, game design can affect notably too.*

Almost one out of two respondents point out two particular characteristics of the game as key to engage the users: **user-friendliness** *of the game and the existence of a* **facilitator** *or moderator to help people play the game.*

Figure 2: Factors engaging people into the game
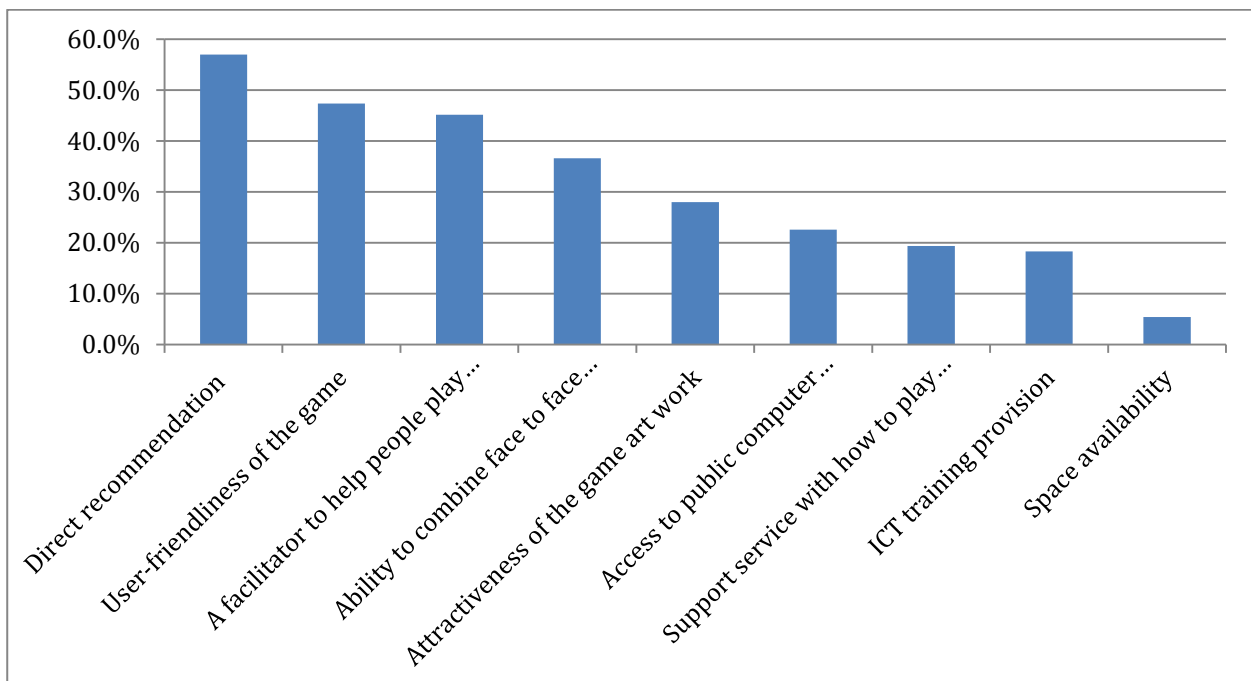
In any case, the degree of appeal of the whole training provision, the lack of social commitment and the art work are considered as factors that can increase the risk of drop-out once the users have started the game according to about half of the respondents, so they are very significant for the game design.

Ability to **combine face to face and online interaction** *is considered relevant by 37%, which may give room for different ways of implementation of the game. and the*

---

[38] *More details on the organisational aspects are developed in IO2.*

attractiveness of the **game art work** *is chosen by 28%, showing that although important is not the key aspect for the training success.*

*The support service helping with understanding how to play the game, ICT training provision or space availability are not considered especially relevant***.**

In terms of drop-out factors, it is important to note that the user-friendliness of the game features highly. The attractiveness of the game art work, whilst mentioned as a top three drop out factor by around a third of survey respondnets, is in last place of all the factors we asked about.

Figure 3: Drop out factors
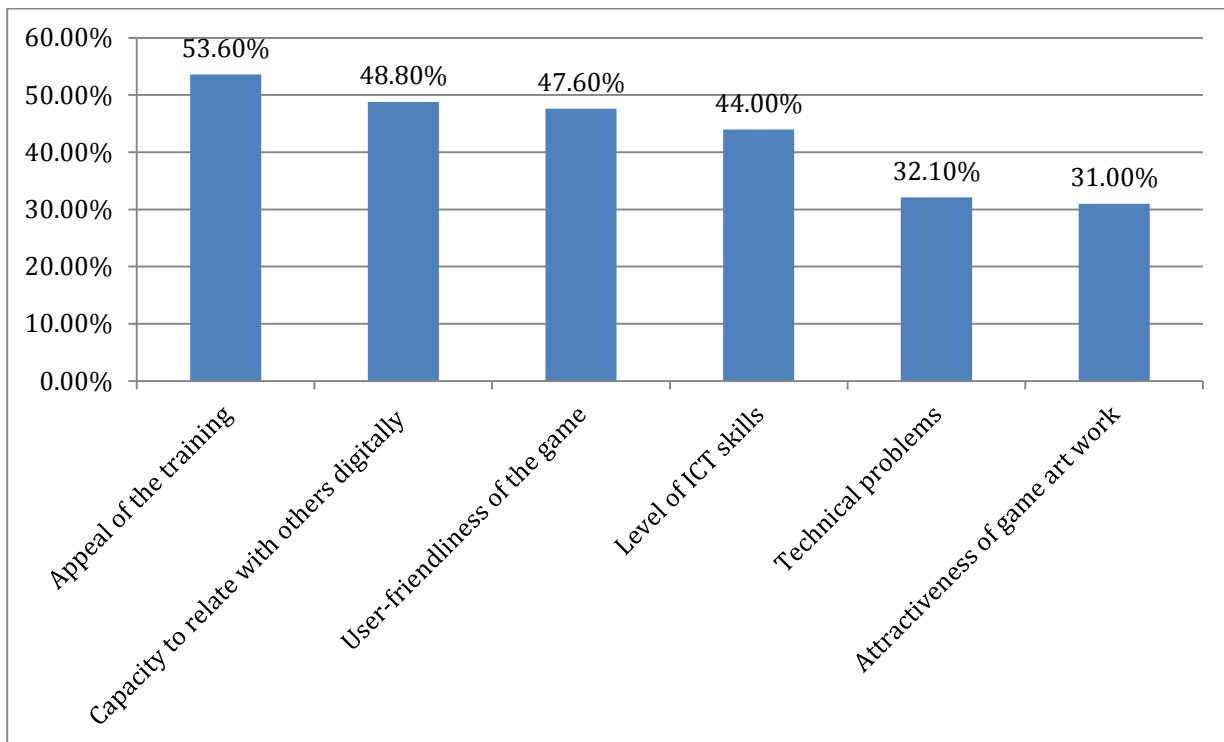
2. The framework for the development of the Social Seducement Game

2.1 Social Seducement and the Social Economy

The Social Seducement game will be developed in the context (and for the benefit of) the Social Economy.

It will be aimed to enhance social entrepreneurship skills in long term unemployed adults aged 18+ willing to establish a social cooperative to help others and support social inclusion of disadvantaged categories of workers.

Key definitions related to the concepts of social economy and social enterprise are provided in chapter 1 above and explored in IO2, together with the possible legal forms that social enterprises might take.

Given the need to focus on a specific type of enterprise and to work on cases that are more or less comparable in all Social Seducement partner countries (Belgium, Italy, Spain, Sweden, UK) **Social Seducement will focus on the social economy (meaning thus also collective entrepreneurship) and, more specifically, on developing a training path (supported by an online game) for the establishment of social cooperatives** *(forms of enterprises that a cooperative might take differ from country to country, but at least main values and principles -also of functioning- are the same).*

The following section provides an overview of existing business models for the social economy as well as some initial thoughts on the key elements to be considered for business planning. As a matter of fact, business planning will be the subject around which the training path of Social Seducement will be developed. The information provided here will be further detailed and explored in IO3.

2.2 Business models for the social economy

Andrea Ovans writes in What is a Business model[39] "In The New, New Thing, Michael Lewis refers to the phrase business model as "a term of art." And like art itself, it's one of those things many people feel they can recognize when they see it (especially a particularly clever or terrible one) but can't quite define."

Lewis than has the simplest of definitions "All it really meant was how you planned to make money"[40].

---

[39] https://hbr.org/2015/01/what-is-a-business-model , Ovens, Jnanyary 23, 2015
[40] http://www.amazon.com/The-New-Thing-Silicon-Valley/dp/0393347818

According to management expert Peter Drucker, a business model answers the following questions: Who is your customer, what does the customer value, and how do you deliver value at an appropriate cost?[41]

In "Business Model Canvas" Osterwalder states: "A Business model describes the rationale of how an organization creates, delivers and captures value"[42].

As we can see there are very similar descriptions of what a Businees model is. The difference lies in the level of details and how general they are.

Going forward an important question is whether there is a difference between a Business Model for a "for profit" enterprise and a "social economy enterprise".

For profit enterprises has the goal to capture value as in money (see Lewis earlier). The consequence is that work on developing the Business Model has the goal to maximize the financial profit.

Under Paragraph 2.1 we outlined the seven key principles from Social Economy Europe that defines social economy and social enterprises. Adering to these principles makes it possible to fullfill social values, which in another word is to create impact.

The difference can be summarized as making money or creating impact.

Based on experience though, most social enterprises are not operating on the far end end of these extremes. There is in almost all cases some kind of trade being done that creates revenue streams. This means that there are two models operating at the same time, in the same enterpsie and with different goals.

This is something that is mentioned as hybridization and is discussed by W. Grassl in Business Models of Social Enterprise: A Design Approach to Hybridity,[43] or as described by Julie Battilana, associate professor of business administration at the Harvard Business School: Hybrid organizations transcend the boundaries between typical for-profit and not-for-profit organizations: They pursue a social mission while engaging in commercial activities in order to generate revenue to sustain their operations.[44]

Business Model and Business Plan. Why we should differentiate them?

At this stage it is relevant to define the difference between a business plan and a Business model since by experience that are easly and often mixed as being the same.

---

[41] http://whatis.techtarget.com/definition/business-model, *Ivy Wigmore, December 2013*
[42] *Osterwalder & Pigneur, Business Model Canvas, 2004*

[43] *Business Models of Social Enterprise: A Design Approach to Hybridity, Grassl, ACRN Journal of Entrepreneurship Perspectives Vol. 1, Issue 1, p. 37 – 60, Feb. 2012*

[44] *Research finds rising numbers of 'hybrid organizations' across sectors, Amanda Gibson, 24 June, 2013, https://www.devex.com/news/research-finds-rising-numbers-of-hybrid-organizations-across-sectors-81297*

According to I. Burkett[45] the differences between a Business Plan and a Business Model lies in the purpose and substance: a Business Model helps in the design and articulation of how a business could work, and how innovation can be performed inside the business. In the case of a social enterprise this would ultimately be about how the enterprise will generate both financial and social value, and what the relationship is between the two types of value in the enterprise.

A Business Plan is a detailed document setting out the goals of a business and how they are to be achieved. As stated by C.Smith[46] "The business plan provides the details of the business. It takes the focus of the business model and builds upon it. It explains the equipment and staff needed to meet the details of the business model. It also explains the marketing strategy of the business, or how the business will attract and retain customers, and deal with the competition. Furthermore, the business plan explains the financial stability of the business at a particular point in time, as well as in the forecasted future. Overall, the business plan supports the business model and explains the steps needed to achieve the goals of that model".

Having defined what a Business Model is and the purpose of social enterprise versus for-profit enterprises there is a need for the Social Seducement game to have a framework that is easy to understand, generic and where a hybrid model can be described independent of industry or sector.

When looking at Enterprises, be it traditional or social, it´s clear that there are several different Business Models in operation. For each business idea, in every context there are unique dependencies with impact on the choosen Business Model. Therefore we will not choose one universal Business Model to be used in the game. Developing a Business Model as part of the Business Plan is one essential task for each team forming a new enterprise. Hence what we are looking for is a framework, which within Business Models can be developed and detailed.

Grassl´s[47] conclusion is that there are more similarities than differences between social enterprises and traditional enterprises. He concludes that here are four conditions necessary in order to form a potentially promising Social enterprise. These conditions need to be taken into consideration when developing the Business Model and further on the Business Plan.

A Social Enterprise must:

- *Be driven by a social mission (i.e., abstain from distributing profit to shareholders);*
- *Generate for positive externalities (spillovers) for society;*
- *Recognize the centrality of the entrepreneurial function;*
- *Achieve competitiveness on markets through effective planning and management.*

---

[45] *Using the Business model Canvas for social Enterpise design, retrieved from knode.com.au*

[46] *C. Smith "The difference between a business model and a business plan" retrieved from http://smallbusiness.chron.com/differences-between-business-plan-business-model-4744.html.*

[47] *Business Models of Social Enterprise: A Design Approach to Hybridity, Grassl*

In the search for frameworks for business models we have found a couple different approaches. W. Grassl[48] suggests 9 different Business Models. These models are very limited in detailing the enterprise different parts, which makes his approach not generic. Since lacking details of different parts of an enterprise it´s hard to get an oversight, which we from experience beleive is a great disadvantage from a learning perspective.

The same models turns up on http://www.4lenses.org and therefore has the same drawbacks.

A commonly used and popular tool for describing and developing Business Models is the Business Model Canvas by Alexander Osterwalder and Yves Pigneur, presented in the late 2000´s. It is a strategic management and entrepreneurial tool. It allows describing, designing, challenging, inventing, and pivoting the developed Business Model.

It consists of nine buidling blocks that every enterprise is made up of. Each block is dependant on each other and changes made in one will have implications in on or more of the other.
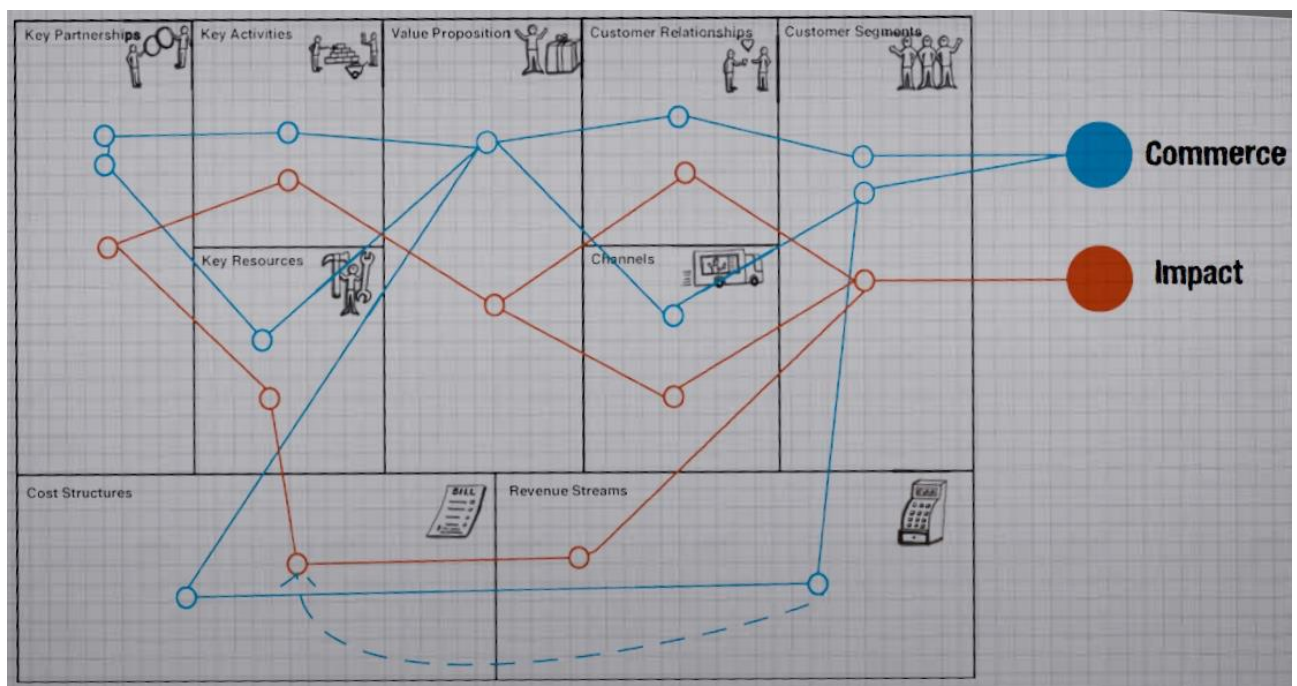
Figure 4: The Business model canvas

---
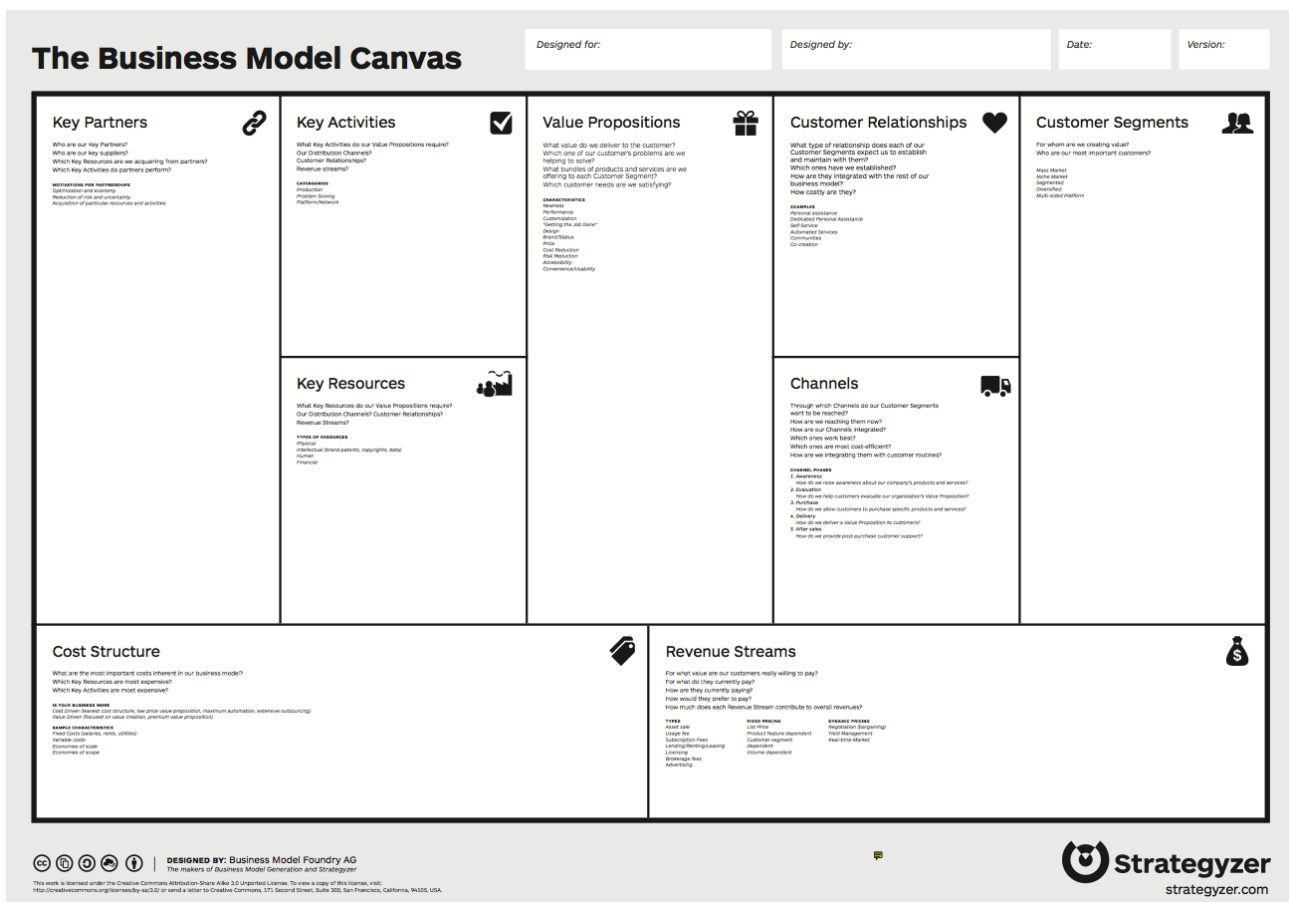
48 *Business Models of Social Enterprise: A Design Approach to Hybridity, Grassl, http://www.acrn.eu/resources/Journals/JoE012012/Grassl_SE-Hybridity.pdf*

The drawback of the original model is that it only takes into account the commercial aspect o feach of the Business Model.

One attempt to tackle this dilemma has been made by Social Innovation Lab, http://www.socialbusinessmodelcanvas.com. They have made some additions and adaptions to the original canvas in order to describe the impact parts of a social economy enterprise. The drawback is that their work is not that coherent and the thinking behind it is not that well described.

Yet another attempt has been made by I. Burkett at Knode (http://knode.com.au). Here thinking is that there are two sides of each of the nine building blocks in a hybrid business model – one commercial and one impact-related. Based on experience, this is a good way to visualice the business model. It makes it easier to discuss and balance commercial aspects vs impact aspects. Further it gives great oversight.

Burkett also has developed a material where the impact aspects are described and discussed as a good addition the original work in Business Model Generation by Osterwalder and Pigneur. Burketts work is found in "Business model canvas for social enterprise design"[49].

We believe that the original Canvas adapted with Burketts work will be a very helpfull tool for the entrepreneurs playing the game when it comes to developing their social economy enterprise.

The business model is a great tool to visualise for the trainers how the business will work. This will also make it easier to adapt a common understanding and have a shared language when talking about both the business model and the business plan. The ability to

---

[49] *http://knode.com.au/wp-content/uploads/Knode_BusModCanv4SocEntDesign_E1LR_30p.pdf*

describe the business on one page gives great oversight and will potentially make it easier to understand for the entrepreneurs.

The Business Model canvas will have a key role in supporting potential social entrepreneurs in successfully establishing their business. In fact, the training path developed by Social Seducement and lying behind the game will be built around the different building blocks of the business model canvas. The training material related to the development of the business plan is presented in detail in IO3. Among this training material there will be questions regarding each building blocks, and touching both commercial and impact –related aspects.

3 Towards game design: Topics and principles of the game

Based on all the considerations and findings explored so far, **the game we want to develop is finalised to help the so called disadvantaged people** *(disadvantaged because unemployed and frequently without a high education because they abandoned early the school and live in exclusion end even discrimination) to take over their life and to set up their own work and income, a kind of socially useful and sustainable enterprise with the aim of self-help and integration to the community – a social enterprise!*

The game is developed to respond to the increasing social needs generated by the deep economic and financial crisis affecting Europe since 2008. It focuses in particular on enhancing self-entrepreneurship as a means to fight unemployment *through empowerment and it addresses in particular socially disadvantaged groups, in line with the policies and initiatives launched by the European Commission in the field, such as the Entrepreneurship 2020 Action Plan[50].*

The game wants to make it easier and less boring to learn what a business plan is and how to write it on your own. Our experience – and that of other game developers – has shown that entrepreneurship and entrepreneurial culture can be learnt even by those that are excluded or unemployed. And in order to set up and bring further a successful social enterprise some entrepreneurial culture and capabilities are needed.

We are convinced that in recent times too often unemployed people are forced to start their own business without being provided with the capacity to plan and to control the performance and development of their business their economic relationships, collaborations and competitions. And as a consequence too often the unexperienced entrepreneur fails, frequently without understanding why. And that means a social damage.
Therefore, planning the entrepreneurial activity with detail is important, although it seems to be complex, sometimes very boring and frequently too long because there seems to be no time and no capabilities. So the planning activity is given to an expert and the business plan may become a perfectly written paper to be used for funders and banks but the risk is that the entrepreneurs aren't able to use it as their handbook and their tool to control if everything works well or has to be changed.

The Social Seducement game wants to help the planning, to find taste and pleasure in planning and discovering - before starting - what can function and what is too risky. *The game wants to train people to use an entrepreneurial approach by searching*

---

[50] *COM (2012) 795 final. The "Entrepreneurship 2020 Action plan – re-igniting the intrepreneurial spirit in Europe" is an important part of the policies against unemployment and contains many important raccomandations to favour the development of new enterprises. The Action Plan sets out a renewed vision and a number of actions to be taken at both EU and Member States' level to support entrepreneurship in Europe. It is based on three pillars: developing entrepreneurial education and training; creating the right business environment; role models and reaching out to specific groups.*

solutions, simulating sustainability and inspiration and getting inspirations from other entrepreneurs.

In addition to the centrality of the business plan and the self-planning activity, we believe that it is important **to undertake the career a social entrepreneur, in a collaborative way, as a group**.[51] *That's why the game wants to stimulate and support group-building processes and actions. Making decisions as a group may seem more difficult and requires, maybe, more social skills, but a social entrepreneur needs strong social skills to succeed in her/his intention! We think that these skills will be enhanced through the game by exercising collective entrepreneurial planning and decision-making, step by step.*

The examples from real life to discuss (the stories), the problems to solve, the research to be done to complete the business plan, the group work, the conflicts etc, all this with the help, the stimulation and the support of the facilitator can help the persons to overcome their doubts, fragilities and difficulties by finding in the group the necessary strength and confidence, the entrepreneurial identity and methodology.

Unemployed and excluded people generally have a lack of self-confidence due to a lot of experienced failures. They need to experience that each person is fragile and strong at the same time. It depends on the situation and the interactions. As resulting from the survey conducted by the project on the training needs of the unemployed (see IO2 – Trainng Needs Analysis Report), in a game the different abilities, passions and skills can more easily emerge, weaknesses or diversities don't represent an immediate danger. People can learn how to trust and rely on the ability/diversity of another person in a certain circumstance, a person who in other circumstances may seem unreliable. As a result the collaboration capabilities grow but in addition also the self-estimation increases, step by step and by exercising confidence, trust, reliance. The world outside – represented in the game by clients, suppliers, banks, the community, the laws and rules – becomes less threatening and bargaining skills become negotiating competencies.[52]

Who does what, the division of tasks and responsibilities, the organisational structure of the simulated enterprise no longer seem an unreachable goal, a task to delegate to the "chief", reasons to leave the enterprise, to run away from the group, to hate each other, to invent enemies or at least to boycott and sabotage the whole intent. The game teaches to appreciate diversity, ingenuity, leadership but also the ability to perform and to work humbly in the background. A good enterprise needs all the talents and is able to invest these in the best way in order to realize the added value and the social added value.

The game is finalized to increase social entrepreneurship *(as a way to exit from social exclusion and stigmatization, as a way to feel useful in the community and to create a meaningful work!),* **to help the people to understand what they can undertake as social entrepreneurs in their community and how amazing can it be to produce social added value, not only for the single entrepreneur's profit but for a more sustainable and inclusive community for all***.*

---

[51] *The 2011 CICOPA report (http://www.cicopa.coop/IMG/pdf/raport_cicopa_2012_en_v06.pdf) shows that in terms of economic performance, the employment and enterprise survival rate for worker and social cooperatives is better compared to conventional enterprises as well. Also the ILO studies confirm this reality http://www.ilo.org/global/about-the-ilo/newsroom/features/WCMS_105073/lang--en/index.htm*
[52] *See some research on cooperative learning processes http://serc.carleton.edu/introgeo/cooperative/whyuse.html*

As concerns the way Social Seducement is situated in the wider framework of Social Economy, the following key topics and principles will be considered for the design of the training material related to the game:

Table 4: Social economy related Topics and Principles

TOPICS	PRINCIPLES
The Social Economy	• *Active citizenship and self employment* • *Responsibility towards the community* • *Collective Entrepreneurship* • *New inclusive services for the community* • *Using the local resources in a more innovative and sustainable way* • *Participation of final beneficiaries and of the local community in the development of the social enterprise as a kind of community enterprise* • *Creating a practice that can be replicated*
Collective social enterprises	• *Voluntary membership, open to all* • *Democratic self-management and Member control* • *Members' economic participation* • *Autonomy and independence (empowering people)* • *Education, training and information* • *Community focus* • *To self-help against unemployment, exclusion and poverty* • *To develop community and self-responsibility* • *To learn solidarity, democracy* • *To grow self esteem and capabilities, competencies and skills* • *To plan and decide together* • *To empower as single people and as a group* • *Stories from other social cooperatives*

The training material that will be provided to learners who are playing the game will be developed around the conceptualisation and realisation of a business plan for the social cooperative trainees want to develop, and will focus on:

Table 5: Key training subjects for the development of the Social Seducement training material

TOPICS	PRINCIPLES
The Business Plan	*Business idea and who are the entrepreneurs (why, for what and who wants to set up the cooperative)* *The organizational structure of the cooperative and the various roles and tasks;* *The productive organization and tasks of all the members;* *local conditions for social entrepreneurs, social cooperatives and the specific market branch of the business idea* *Market research;* *Access to credit or grants;* *Investments;* *Preparing and revising the budget;* *Decision making processes;* *Daily management of the following areas:* *Clients* *Suppliers, retailers and banks* *Equipment* *Relationship with the local community* *Working partners, members, workers* *Marketing* *Being part of a word wide movement*

The following is the initial list of competences that trainees will develop by playing the game and finalising their training path (the final version of the list being provided in IO3):

Table 6: Initial list of competences of to-be social entrepreneurs

TOPICS	PRINCIPLES
Social Inclusion and Empowerment	• *Exercising during the training sections that everybody has something important to contribute* • *Learning to respect diversity* • *Experiencing success and increasing problem solving capacities* • *Addressing the planning to the whole community and finding inclusive and sustainable solutions* • *Increasing knowledge by research, by learning from other examples, widening the horizon, feeling part of a global movement* • *Increasing self – estimation and leading capacities* • *Learning to ICT competencies, writing competencies, calculating competencies etc*
Group – work	• *Respect of different opinions and points of views* • *To listen and to argue* • *Esteem* • *Confidence* • *Learning evaluation* • *Correct mistakes* • *Increase risk capacities* • *Manage conflicts* • *Sharing work and responsabilities*

Last but not least, below the intial list of competences and tasks for the "game masters" who will be also facilitators from a learning point of view is presented below. This is further elaborated in IO2 where a competence portfolio of prospective social entreprenerus is developed.

Table 7: Initial list of competences and tasks of facilitators (and game masters)

TOPICS	PRINCIPLES
Facilitators' features and competences	• *Expert in group work,* • *Used to work with unemployed,* • *Used to act as a business or social network trainer, a facilitator, mentor, tutor, coach or at least a social entrepreneur,* • *Has a leading personality and experienced leadership,* • *Knows about empowerment processes and collective decision making,*

	• *Is able to motivate in case of fear and despair during the game,* • *Respects different opinions and points of views,* • *Is able to listen and to argue,* • *Is able to communicate esteem and confidence,* • *Has some background in learning evaluation* • *Is able to correct mistakes without blaming* • *Knows how to increase risk capacities and how to manage conflicts* • *Appreciates to share work and responsabilities* • *Has a personal experience in social enterprise stories and masters storytelling*
Facilitators' ICT Skills	• *Knowing and using social network environments such as facebook, twitter, youtube, slideshare or other smaller networks;* • *Using skype discussions* • *Using whatsapp or other apps able to* • *Having used distance learning* • *Knows what is a blog* • *Enjoys games, learning processes, social networks and digital tools*
Specific tasks and responsibilities of facilitators	*The social seducement facilitator will have to work with an already structured game and with people who want and need to set up a social enterprise. She/he will have the following responsibilities:* • *Remain neutral on content;* • *Draw out participation;* • *Ensure balanced participation;* • *Encourage dialogue among participants;* • *Provide structure and processes for group work;* • *Listen actively and ask others to do the same;* • *Encourage different points of view;* • *Record, organize, and summarize input from group members;* • *Move group through stages of group decision making and consensus;* • *Encourage the group to evaluate its own progress and development;* • *Capitalize on differences among group members for the common good;* • *Protect group members and their ideas from attack or from being ignored;* • *Emphasize that the group is a reservoir of knowledge, experience, and creativity and that these group competencies fit very well to the game and to the result they want to achieve.*

4. Conclusions

This part of the Guide for developing the game and its environment presented the results of the research and consultation activities carried out by the Social Seducement consortium to gather input, from available literature and experiences in the field of game for learning and from relevant stakeholders, on the key features that the game should have in order to respond to the needs of the target group addressed. It did so by focusing on pedagogical, technological and organisational aspects and providing an overview of all the issues and elements to be considered for the game to be designed and implemented successfully.

The game workflow design presented in Part 2 of this report was therefore built considering the following requirements:

- *Being developed in the frame of the Social economy and aimed to develop social entrepreneurship-related skills,* **the Social Seducement game will address long term unemployed adults aged 18+ with the aim to make them social entrepreneurs and help them starting up, through a collaborative and collective exercise, a social cooperative**.
- **The Social Seducement game is a learning game, it does not want to compete with the game industry** *(nor has the resources to do so). The game will be the "window" through which learners/players will be engaged in a learning process in a motivating way.*
- *In order to allow experiential learning and at the same time ensure engagement,* **the game will be designed around stories of real social entrepreneurs** *that the players will have to revisit, taking their own decisions and responsibilities to reach success.*
- **The stories will be so designed and articulated to let players learn how to build a business plan** *for a social cooperative.*
- **Players/learners** *will not be alone in playing the game: they* **will be supported by a virtual facilitator (and game master)** *who will mediate their learning process and help them achieve their learning goals.*
- *The facilitator will virtually support players, as the game will be played online.* **Players will play individually and mostly in groups as the collaborative and collective dimension is key in the social economy** *and in the learning processes associated to becoming a social entrepreneur.*
- *Although it is proven that the more immersive is the experience, the more chances the game has to be successful, in Social Seducement it will not be possible to develop a 3D environment with the available resources. However, taking inspiration from similar successful games in the field,* **a captivating graphical layout will be used to depict the different situations that the players will have to face within the stories**.
- **Players will have the possibility to choose an avatar and their role** *within the social enteerprise they want to set up.*
- **Players will be stimulated to work together** *to achieve the goals of the game.*
- **Random events will be introduced in the game** *to be used when the player gets in a standby situation determined by its incapacity to choose the right answer. This will give*

players the illusion to keep on playing and facilitators the possibility to drive players to the correct choice.

- **Step-by-step incremental learning** *is a good solution to merge the learning needs and the technical design needs of the game: building the learning process through steps/stages will allow the player to pass from one level to the next only when the knowledge and skills associated with the prior level are demonstrated.*
- **The game will lean on a LMS platform (Moodle) through which all training activities will be performed** *and facilitators will be able to manage and monitor the learning progress of players.*
- *Given the specific nature and needs of the Social Seducement action, the game will be* **played locally, although virtually, at least in the piloting phase**. *This depends on the need to train learners on specific legislations related to social cooperatives that differ from one country to the other.*
- *The majority of stakeholders agree that a* **game lasting about one month** *would be optimal, with a range of flexibility on the length according to the frequency of face-to-face and/or virtual meetings of the group with the facilitator.*
- *The game is expected to include* **group sessions***, which could range from a minimum of two to six game meetings (including virtual and potential face-to-face) to a maximum of about twelve to eighteen. Different stories may include different numbers and kinds of group sessions to be more adaptable to different contexts.*
- **User-friendliness of the game and the facilitator to help people play the game are considered the most important elements to engage the users**, *while the combination of face to face and online interaction is considered relevant less extensively, which may give room for different ways of implementation of the game according to specific circumstances.*

PART 2 – GAME CONCEPT

Authors: Daniel Burgos, Daniel Parente (UNIR)

1. Game Concept

1.1 Scope

Social Seducement (SocSed) is an online roleplaying game developed in the frame of the Social Seducement project. It consists in a serious game focused on developing social entrepreneurship skills and competencies and addressing unemployed adults across Europe.
Based on the specifications of the game, and as to create a challenging game, some simulation mechanics should be included as to create different challenges to the business and decision skills of the trainees.
The game must include an in-game economy that will allow the players to buy and sell goods and make their businesses grow ensuring social impact.
Game must be single and multiplayer as the specifications requires for the possibility of players working together to achieve collective goals and learn collaboration skills.
The game is linked with learning contents that are to be kept into a Learning Management System (LMS) that for the purpose of this document and based on documentation available for the project, and technical meeting with developer ECOBYTE, could will be the opensource MOODLE system.

1.2 Platforms

The game is set to be playable via Web, which will allow it to be played on PC, MAC, Linux and tablets with browsers supporting HTML 5 specifications.
The game will be mapped over the eLearning platform Moodle as to allow the integration of the learning contents, used within the framework of the game, mapped in the Moodle learning database, as well as its community and communication tools to create the learning community around SocEd and its teams.
If native support for IOS and ANDROID is to be given, a new set of technologies will have to be used to build the client builds.

1.3 Game Visuals

Based on available budget resources to develop art for the game, the visuals are to be simplified to the maximum as to use digitally processed pictures of real social entrepreneurs and places across Europe, depicting real social entrepreneurship success stories.
The amount is insufficient to generate 3D assets or complex 2D assets, but could be used to generated still representations of the storylines to be used within the game

and will allow the player to have the correct level of immersive experience while playing the game.

Avatar creator

Due to budget and time constraints the game will not include and avatar generator, as the complexities of the system, would increase the existing delay and cost overrun.
However, it will allow players to upload a picture or to choose from a predefined set of pictures preloaded in the system and created with the reference of the success stories used to create the Role Playing experiences, and implemented with the Moodle profiles tools.

Avatar

The avatar used in the system will be split in two separated avatars: the first one to be used within the Social Seducement platform as a learning content system; the second to be used within the storyline associated with the game and chosen by the trainee from a predefined set of Avatars associated with the storylines defined in the game.
The player profile picture to be used by the player will be based on the picture s/he must upload to setup is player profile + a nickname that will define her/his avatar and will be managed by the Moodle platform.

2. Game Objectives

Due the focus on the game mission to develop social entrepreneurship skills to establish social cooperatives, the game objectives will be tied in with generating and growing successful businesses within the game.

The game objectives will be based on true stories of Social Entrepreneurs across Europe that the player will have to revisit to take critical decisions, as to replicate the success of the real person, in critical moments and help moving the story forward.

The game will blend interactive storytelling with business simulation as to define different lines of actions or different quantifications of events that will allow players to move forward through the story with more success, or through different lines of action that could be taking them to negative/critical situations. In the latter case, players will be supported by a facilitator (more information about the facilitator roles and responsibilities is available in IO2). Facilitator purposed role within the boundaries of the game is provided below in this document in point 4.4.1 to address the situation pointing them to more information about the subject, or helping them revisit the point where the wrong decision was taken, allowing players to better understand the impact and consequences of previous decisions. This method should help the trainee assimilate in a more straightforward manner the competences needed applying them in real life situations.

The game will act as an enabler and progress indicator of the associated training program, and for this purpose, actions in the game will be linked to progress triggers In the learning content as to guarantee the correct synching of both aspects of the training.

2.1 Mission structures

The mission structures will consist on a mix of two main mechanics that will allow the player to move forward in the game, while at the same time learning and evaluating its progress:

- **Interactive Storytelling**. *The player will follow the story of a real social entrepreneur and will have to take - while progressing through the story - decisions that will move the story forward in the right track or potentially to failed situation where the player progress can be checked and compared with what the real entreèèèp'''pìììipreneur was achieving during the same period. This would help the player to get immersed in the story and to be motivated to be more active in taking the right decisions.*
  To further increase the immersion, the system may allow a multiple story virtual branching that will merge again into the real story allowing the player to explore new possibilities to the original story or to explore different business decisions.
- **Business Event Simulation**. *All business stories are based on applying the correct information to take the correct decision in critical moments. To allow the creation of the story turning points, the game will use business simulation mechanics that will generate different possibilities along the storyline, that the*

player will have to solve correctly as to keep in the right track of the game and reach the correct success ending, even if during the course of the game, wrong decisions are taken. The parameters of the event simulation will have to be defined based on the stories identified, and could be related with any entrepreneurial activity present in the daily routine of business managers, from marketing, to funding, to negotiation, communication, etc.… These events will be based on random choices over a predefined set of alternative storylines defined with the same focus and boundaries of the story that will be unfold by the player.

- **Learning results***. If the player has progressed correctly and to reinforce the positive feedback, his/her outcomes during the period/phase can be tracked and compared with the real social entrepreneur, as to allow the trainee to directly compare what s/he has been doing to what the real reference model was able to achieve. The retro-alimentation mechanic will help the player to get motivated in keep studying and progressing in the game independently of the difficulties and the results being achieved in the game.*

Associated with the structure, the outcomes of the event simulation can take the player forward with different possibilities that will drive the game to make further actions to match the player ability and learning activities:

4) *The players are taking the right decisions with the right results (parameters), which will lead them to follow the right course of action, and to reach the objectives initially set by the game.*
5) *The players are taking the right decisions but with slightly different results, consequently of using different parameters that will affect the expected results of the action. Depending on the difference of outcomes, the facilitator could be triggered or not to contact the trainee and help him/her understanding the decision process as to make modifications if needed.*
6) *The players are taking the wrong decision which will lead them into different storylines or with insufficient results that will trigger the facilitator to reach in an assist the player in reassessing the decision process and the learning results up to that point as to correct the situation and set back the trainee on the right process.*

2.2 Attributes

Some of the possible learning skills attributes to be stimulated and challenged by the game, and linked to the learning outcomes of the educational contents linked to the game, could be defined as in the below list, and that are generally associated with entrepreneurial qualities/attributes of successful people: .

- *Resistance to failure*
- *Negotiation*
- *Business development*
- *Empathy*
- *Technological*

- *Sector Knowledge*
- *Operations*
- *Etc.…*

2.3 Storylines

To create a real immersive environment where one can feel as living a real situation, the game needs to create different storylines that, although leading to only one correct ending (Successful or Unsuccessful), will have to include several different possibilities that could lead to different wrong endings as to provide the game with different interactive tools that can challenge the player in overcoming them while performing the learning activities.

The implementation of these storylines will be created using a tree & branch structure that will create different paths between the beginning of the game and its conclusion where, in each node, different types of game mechanics will drive players to select a new course of action through the storyline.

Figure 5: Example of narrative tree

In figure 1, the green nodes identify the correct path through the narrative tree and that represents the right series of actions/decisions to reach the objective. The red nodes identifies dead-end nodes where the player was led by approaching in an inadequate way the simulations happening in the nodes and which led them to reach a wrong objective.

Each story is represented in Figure 1, by the branch linking nodes, and each node represents and action requested to the player or an event simulation used to generate randomness in the game as explained below.

2.4 Populating the stories

The best learning happens from the best storytellers, and a potential way to create a real challenging and thrilling game would be to populate the right path through the narrative tree with real examples from successful or unsuccessful social

entrepreneurs across Europe, and then creating a series of automated branches mechanisms based on the activity to be developed in each node that will transform the storyline in a narrative tree filled with nodes where the player will have to perform activities based on the real experience of the social entrepreneur in which the game would have been created.

The principle is very similar to the ones used by MBAs with the case method, where the students must solve some real situations inspired by case studies performed around real entrepreneurs or business people.

For this version of the game, the format to be used is Text and Images, but in future versions, the stories can be populated with Multimedia contents like sound, video or interactive HTML5 contents.

2.5 Game Progression

Based on the game structure proposed, the game progression will be based on the following elements.

- **Linear storytelling branch***, which moves the player forward in the game, history and learning activities, as they can happen in parallel with the progression within the game.*
- **Action Nodes/Business Events** *where the player has to interactively perform an action or choose elements that will define the next progression by the player towards the completion of the game.*
  - **Value***, the player needs to calibrate the value of an input that is needed to move forward the action. For example the amount of a loan, or a public funding, that could turn out to be enough or insufficient to fulfill the objectives associated with the mission.*
  - **Decisions***, the players need to take a decision that will move the game toward a predefined branch of the story that can be successful, neutral (the player will move back later on to the correct branch) or unsuccessful by causing the player to reach a point where the game comes to a dead end with no other actions and that will force the player to go back to a predefined saved point. This situation can be used to trigger a direct contact with the facilitator and provide the player with a very important learning activity, as mistake is one of the most successful learning tools.*
  - **Random events***, which will call the player for action*
  - **Interaction** *with another player or with facilitator*

The difficulty of the game as to increase or decrease the difficulty of the progressing through the game can be implemented by increasing the amount of possible actions in the nodes, or by increasing the amounts of available branches from each node, which will result in bigger or smaller narrative tree and directly a harder or easier game difficulty.

The level of ranking in the game would be based on the overall social entrepreneurship calculated using the above attributes, and would be used to allow the players to move to other types of business, move to bigger areas in the city, or get more competitors for its business.
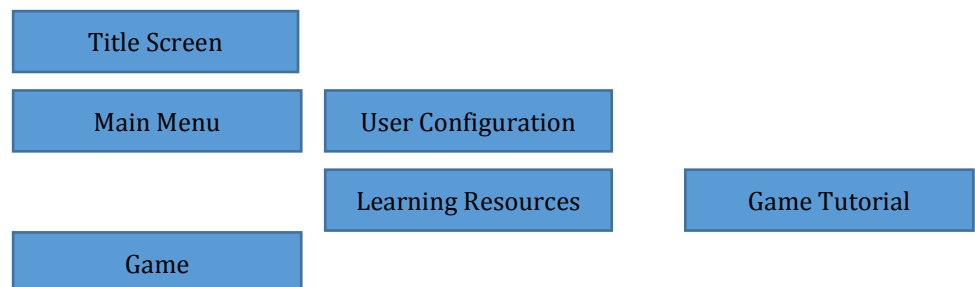
3. Game Flow

In order to allow players adaptation to the game, the gameflow will be divided in two flows, one for the first time that they will run the game, where they will be prompted for user configuration and game tutorial that will allow them to understand how the game works and how they are to interact with it. A normal flow, where the player can directly load the game and continue to play, or access if wanted to specific contents or settings parts.

a) *First Time Run*

Title Screen
User Configuration
Main Menu
Game Tutorial
Game

b) *Following Runs*

Title Screen		
Main Menu	User Configuration	
	Learning Resources	Game Tutorial
Game		

4. Game mechanics

The main focus on the game is to help generating entrepreneurs in the social economy (see Part 1 of this report for the definition of social economy and social economy enterprises).

The player(s) will take the role of entrepreneurs characters that are set to create or operate businesses in the social scope, and that will request him to define paths of actions, face challenging situations pìthat will request business decisions to be taken as to progress forward correctly.

The main mechanic will be set on storylines that will request for the player for inputs and decisions that will chose the next story branch in the overall story that the player needs to follow until to complete correctly the objectives for the game and for the learning contents associated with the game.

In order to cope with variety of situations and the need to link progress in the game and progress in the learning contents associated with the game, the game includes random actions/stories that will be able to create the illusion of randomness to the player.

4.1 Player

Player is a wannabe social entrepreneur that wants to create and lead successfully a cooperative business within the boundaries of social economy.

Player information is divided in two categories:

- *Players as entrepreneurs and their skills/reputation/branding*
- *Players and their company/business, which operates and needs to be fulfilling objectives too.*

Player will have two different set of attributes based on the same parameters:

- **Learning,** *the learning attributes will track the amount of information that the player has received from the training part of the game. This level will be taken in consideration as to allow the player or not to access new game challenges.*
- **Professional***, the professional levels are the ones the player is able to develop after unlocking new challenges due to the fact that s/he has been able to learn the required skills.*

The players start with attributes set to minimum level, which forces them to move first to the learning path as to gather the correct level of the game as to start playing.

4.2 Simulation

The action part of the game must create an interaction between the game and the player through predefined requests to the player needed to advance the game, or special random events and situations. Those will affect the entrepreneurs as to drive them to take decisions about business and to discover lack of knowledge that needs to be addressed by taking the correct training.

The simulation will take the form of inputs required by the system, with a range of different values allowed to provide the trainee with a wider range of possibilities, on which receiving feedback afterwards. In case the outcomes of the decision are not the correct ones, or have taken the trainee to a wrong branch in the main storyline, this will trigger the facilitator to reach in and help the student reassessing the situation, as illustrated below in the facilitator role.The simulation will be both quantitative, with the trainees having to specify clearly target values associated with the decision process, or qualitative, with the trainees to choose a specific decision based on qualitative parameters with a strong intrinsic value for them.

These events will be placed on the nodes of the narrative tree associated with the game, and as seen above be of the following types:

- **Value** *(text or numeric), the player needs to calibrate the value of an input that is needed to move forward the action. For example the amount of a loan, or a public funding, that could reveal enough or insufficient to fulfill the objectives associated with the mission.*

- **Decisions***, the players need to take a decision that will move the game toward a predefined branch of the story that can be successful, neutral (the player will move back later on to the correct branch) or unsuccessful by causing the player to reach a point where the game reaches a dead end with no other actions, and that will force the player to go back to a predefined saved point. This situation can be used to trigger a direct contact with the facilitator and provide the player with a very important learning activity, as mistake is one of the most successful learning tools.*

- **Random events***, which will call the player for action. Random Events are built based on a set of possible hazards or actions that could be required to the player and are associated with a set of possible storylines branches as to make the game progress forward, or to loop in a recursive state until the right answer has been entered, or the right level of training has been reached by the player as to progress in the game.*

- **Interaction with another player or with facilitator** *- The outcome of the node will choose a different branch in the narrative tree that will guide the player to the next steps of the game, or generate a value that will measure the ability of the player to progress through the remaining of the storyline.*
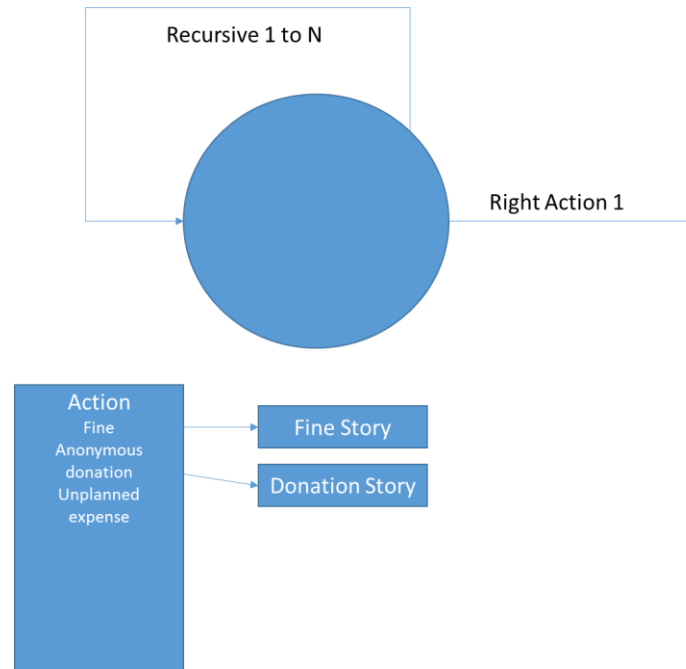
Figure 6: Random node and its recursive form

4.3 Learning Game

The evolution of the player will not be only driven by the game but also by the learning activities the player needs to take in order to fulfill mission objectives with the game. The learning process will be quests or secondary missions that the player will have to solve correctly as to be able to progress in the game with its company.

The learning process can be linked with the difficulty level of the game that will increase as the player increases the level of knowledge. As the players progress with the game, they will be advised to take a new learning module.

If the player has not fulfilled the needed learning activities, the progress in the game will be put on hold (or driven by random events) until the player has reached the right level of learning.

This is needed as to ensure that the player is acquiring the right level of competences and skills needed to perform the actions within the role-playing game.
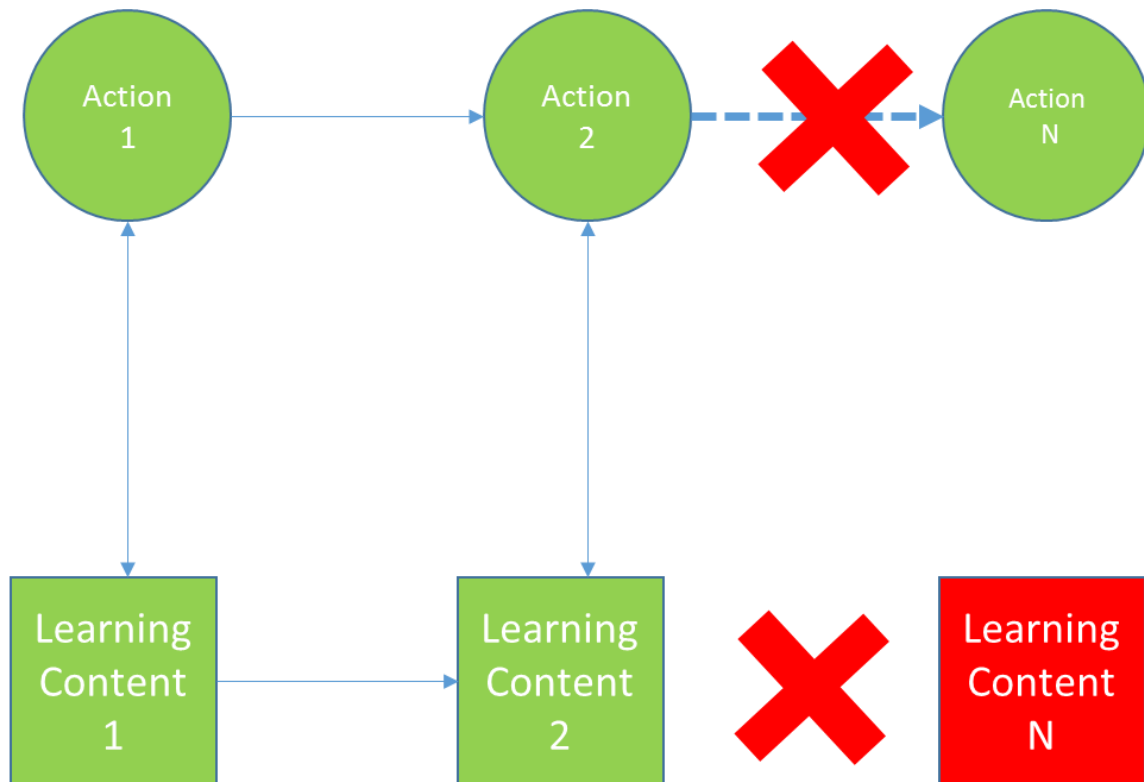
Figure 7: Game and learning actives synchronization

4.4 Facilitator

Role
Based on the learning activity and on the identified role of a facilitator that will follow the evolution of players and engage the students in moving forward with the learning activities, the facilitator in this model is key to help the player achieve the optimum knowledge from the training, as the player will constantly be applying it, and moving either in the right direction with the game, or in the wrong direction based on insufficient or incorrect knowledge that can be linked directly to the level of freedom the player should have before being corrected by the facilitator.

The facilitator will have also a clear indication of where players start, which situations they have solved, in how much time, and with which amount of correct choices. Based on that, he will be able to decide whether to engage with the player as to help him/her addressing current issues, or expected ones, as there is already a clear understanding on whether the player will be able to reach the next phase smoothly (without having a problem that will require him /her to go back), or whether s/he will need the help of the facilitator to better understand the nature of the problem faced and to revisit her/his decisions.

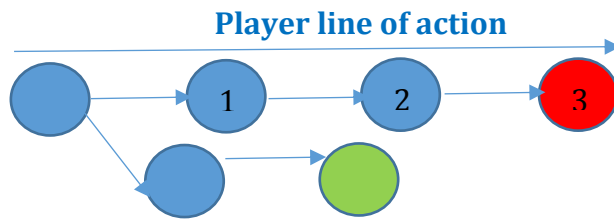   A. *Wrong choices*

Player line of action

Figure 8 – Wrong choices

In the figure above, the player has made the wrong decision and is clearly in a wrong line of action that will take him to dead end. The Facilitator could be triggered right from node 1,2, or way until node 3, before helping the player understanding what has happened. The later the intervention, the more direct consequences the player will have from his/her actions.

  B. *Insufficient credits*

Figure 9 - Insufficient credits

In the figure above, the Player has taken a decision that created a value of action. The game knows already from Node 0, that the value is insufficient to reach successfully the Node 3. As with the previous example, the facilitator could engage the player in the first nodes after the mistake was performed or wait for the node in which the player will be unable to move forward as to review with the player the process that led him/her to a situation where the game had to end, or the business reached critical point.

Implementation
Due to the nature of the implementation of the game as a functional layer set on the Moodle LMS system, the facilitator role can be implemented over the users' roles predefined in Moodle of Trainer, Teacher or Moderator.
This mapping allows for the facilitator to have all the tools and communication facilities that Moodle allows for content and students to be managed correctly, both collective and individual approaches. It also allows the facilitator to have the right tools to manage correctly the group of students under his responsibility.
This solution allows also for the facilitator to regulate the access to the training contents and to follow the progress of the students/players both in terms of game and learning (competences and learning activities to be performed to progress correctly).

4.5 Game Objectives

The game objectives must be linked to the learning process, i.e.:

- *Reaching a successful result for the activity performed (learning perspective);*
- *Successfully reach the end of the story as inspired from real stories from social entrepreneurs (from a game perspective).*

The game objectives can be also calibrated to extrapolate on the real story, and if the real entrepreneur was unsuccessful, extend the simulation over the failure point as to give the chance to the player to be rewarded when s/he is able to be successful where the real story ended with a failure, so to reinforce his/her intrinsic motivation and help him/her engage further with the game.

The final objective for the game, would be to have the player/student successfully engaged in a real case and able to solve it without the help of the facilitator, while **guaranteeing that all the information available on the system and needed to overcome the mission have been consulted.**

5. *Game architecture*

The game is set to be integrated with Moodle Learning Management Systems as to allow to follow from the LMS the progression of the student and to put specific evaluations to the competencies learned.
Based on the information provided, the architecture model will be a client-server where all the information is centralized in the servers.
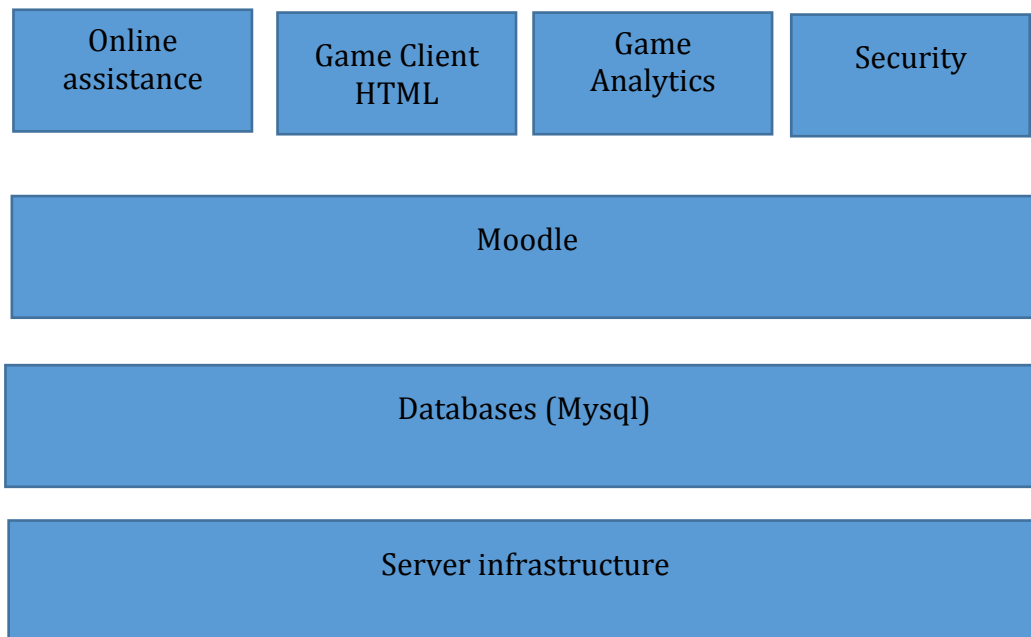

Figure 10 Game architecture

5.1 Moodle

Moodle (Modular Object-Oriented Dynamic Learning Environment)[53] is a free open-source learning management system or e-Learning platform that serves educators and learners across the globe. It is the most widely used LMS in the world and currently has over 68 million users world-wide (and growing!). Guided by social constructionist pedagogy, Moodle offers a set of learner-centric tools and collaborative learning environments that empower both teaching and learning.

Moodle was developed in 2002 by Martin Dougiamas to help educators create online courses with a focus on interaction and collaborative construction of content.

Moodle is a Virtual Learning Environment (VLE), which makes it easy to provide online support for training courses. It provides a central space on the web where students and staff can access a set of tools and resources anytime anywhere. The following key features help the system create a learning community[54]:

- *An easy way to communicate with learners and trainers wherever they are. The news form automatically emails messages to all learners and trainers on the course. Forums can also be used to answer commonly asked questions – and to provide a space for informal peer to peer student discussion or even online tutorials*

- *A quick way to share documents. Moodle allows for an easy creation of web pages with information about the course and provides links to word documents, slides, and other resources that learners will want to access.*

- *Easy access to relevant and useful online resources: be them e-library resources, skills courses, or information about nice pubs to visit …..*

- *Online assignment handling. Possible both for student submission with marking done on paper and for a fully online process.*

- *Control access to different areas – can make a space for dispersed tutors to communicate with each other as well as students.*

- *Designed to encourage collaborative learning – Moodle makes it easy to model the tutorial system online if you want to use it with globally distributed students.*

- *Easy to experiment with new ideas and tools – a low risk way to incorporate new tools and ideas into your teaching.*

- *Course calendar – use this to flag important events to everyone on each course.*

- *Profiles and contact information – help students and staff get to know each other at the start of the course, also hold information about course team and students in one place.*

- *Deliver content – post up slides etc*

- *Video and audio – many academics find it easy to record lectures as podcasts or even arrange for videos of lectures or special events– posting these online and making it available to students is straight forward with Moodle*

- *Group tools for students – there are many tools that students can use for collaboration with each other e.g. forums, wiki and chat.*

One of the strengths of Moodle is the plethora of widgets available which will allow for an evolution of the Social Seducement community system in line with learners' needs.

---

[53] https://docs.moodle.org/29/en/About_Moodle

[54] Ibidem

However, minimal critical specifications55 for the Social Seducement community in terms of in-game communication functions are:

- *Email / messages function – to ensure learners and facilitators are notified in real time of key events and have a technology for operational communication.*
- *Chat function – to allow for group discussion among the whole group and individual players as they learn and problem solve together to advance in the game.*
- *Audio function – to allow for group discussions and facilitators group 'tutorials' in order to help individuals and the group progress.*
- *Wiki function – to allow for the co-creation of business plans through collaborative writing as well as the elaboration of preceding ideas.*
- *Calendar function – to allow learners (and facilitators) to schedule specific events as they progress through their learning journey (and levels) of the game.*
- *Document sharing function – to ensure there is a space that all learners can acces where key training content as well as documents produced by the learners are stored and shared.*

The pilots will monitor the use of these functions and collect data on the demand for additional plug-ins into the Social Seducement game environment which can then be provided in an organic way as the Social Seducement game is shaped through its use by learners.

6. Technology

The technologies to be used in the development of the game can be divided in three main categories:

- *Game development*
  - o *Moodle*
  - o *HTML5, Javascript*
  - o *Graphics tools, Photoshop/Ilustratror (Proprietary) or Gimp, InkScape (Open Source)*
- *Server Scripts*
  - o *JSP, Java, Ajax*
- *Databases*
  - o *Mysql*

---

[55] "The principle of minimal critical specification design can be stated as that of identifying the minimal set of conditions required to create viable self-m
aintaining and self-adjusting production units." [Herbst, D *Designing with Minimal Critical Specifications*, p. 4
http://moderntimesworkplace.com/archives/ericsess/sessvol2/17HERDES.pdf]

7. **Example of a Storyboard**

The purpose of this chapter is:
- *To generate an example framework for the creation of a story in the format that will allow it to be mapped into Social Seducement game format that can be shared with the consortium and built collaboratively.*
- *To offer a case to be used for technical implementation while developing the graph tool that will map the story into the correct content in the LMS*
- *To showcase the elements of the game that needs to be clarified as to improve the detail of technical information associated with the game.*

7.1 Synopsis

John, Jacques and Miriam are three successful managers in a large multinational company who have engaged in a corporate voluntary program to help poor unsheltered homeless people during the long Winter nights of London. The reality they are seeing makes them decide to leave the comfort of their offices and create a social foundation to help the homeless. The story will follow their actions as they embark on this new vital experience.

7.2 Storylines

Storyline #1 JOHN's, JACQUES' & MIRIAM's views

John, Jacques & Miriam have been working for a long time together. 10 years have gone by since they took the same training sessions required to take a job at the large IT multinational company Gepetech. In this period, they have been able to rise in the hierarchy, each now managing different business units. As well as being managers, they volunteer after work, participating in a voluntary program run by the company to help the homeless with the hard reality of London.
Now they are sitting in the large meeting room of the first floor on the edge of taking a very difficult decision about leaving Gepetech to create their own social foundation.

Storyline #1: JOHN's view
While waiting in the room for Jacques and Miriam, John is having some doubts on the outcome of this meeting. They had been talking for a long time about the possibility to quit their jobs and start their own company in the social landscape. However, one thing is to talk about it and the other is to actually do it.
John has been married for five years now, and is the proud father of twin boys that require a lot of attention. John and his wife have also bought a new bigger house to cope with their growing family, so the financial risk makes him anxious about the new adventure.

What should he do?

    A. *Leave meeting room*

    B. *Stay and say that he has taken the decision that he is not able to take the risk*

    C. *Stay and keep quiet, afraid of losing the friendship.*

Storyline #1: Jacques' view

Jacques is what could be called a maverick. At 18, he left his family house and went by himself to Ireland, where he was able to find a job in a gas station to improve his English. From there, he decided to go to London and try his luck as waiter in several restaurants. Here he came head to head with the reality of homeless people. He was able to convince his boss to share the spares from the restaurant with the poorest people, but he had the feeling that it was not enough. Therefore, he decided to go back to high school and study. Over the last 10 years, apart from taking a degree, he became a successful manager in a large IT company, launched the idea of creating a voluntary program and fell in love the brightest of all the girls he ever met, Miriam, a high-school colleague who became his best-friend and finally companion, although they never got married.
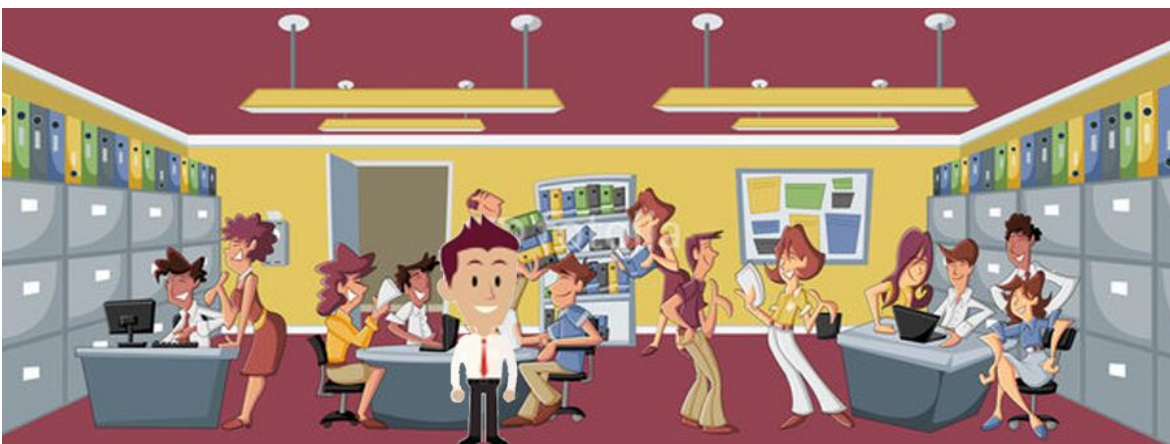
Now, while he is waiting for her to go and meet John in the meeting room, he is full of energy with the plans that they have made of creating a social foundation that would help the homeless. He is feeling the rush to start running and make everything happen, feeling that too much time has already been lost. He hasn't had time yet to talk in more detail with John about the idea, but he is feeling that John has some doubts. Maybe he should just:

A. Cancel the meeting until he has the time to talk with John
B. Have the meeting and force John in/or out
C. Propose marriage to Miriam.

Storyline #1: Miriam's view

Miriam is finishing a late conference call, and while talking on the phone she is able to see Jacques, restlessly moving across the halfway outside her office. He never stops, always filled with energy, without fear or doubts. A tornado of nature.

You can love or hate him, because he usually has that impact on people around him. In her case love, although she is always under the impression that he never fully commits with anyone. Although she is happy with him, she would like to have a marriage in a white dress in her home country, Spain.

She met him at university. It was not love at first sight, quite the opposite in fact, but she felt that under the rude appearance and hush personality trying always to go as fast as possible, there was a tender heart that worried about everything and everyone, and that wanted to change the world.

She always followed and supported him, but now, in this new adventure, she is a little bit scared of the risk that they would be taking: leaving their secure incomes and risk everything in a utopian project, where the income is not 100% assured. Moreover, she was having doubts; she could feel even more fear in John's eyes and words, as he is the one who has a family to take care of. When hanging up the phone she thinks that maybe she should check with Jacques:

A. Drop the idea and let's go to Las Vegas to get married.
B. I think that we should talk with John to assure him of the decision
C. Let's go for the meeting.

Storyline #2: John's view

John is making rough calculations. They will need 50000 Euros to start the Company, and would not take a salary for 6 months. John earns 4000 Euros a month, and has costs of 3500 Euros. He has saved 35 000 Euros. Without a salary, he would have to live off savings, which would hold 21 000 Euros. How much money should he put into the 50000 Euros initial fund?

Storyline #2: Jacques' view

Jacques earns 6000 Euro per month and spends approximately 2000 euros per month. He has been able to save 100,000 Euros over the last years because he lives with Miriam in her house. Without a salary, he would have to draw from his savings of approximately 12,000 Euros. How much should he bring to the common 50,000 Euro fund?
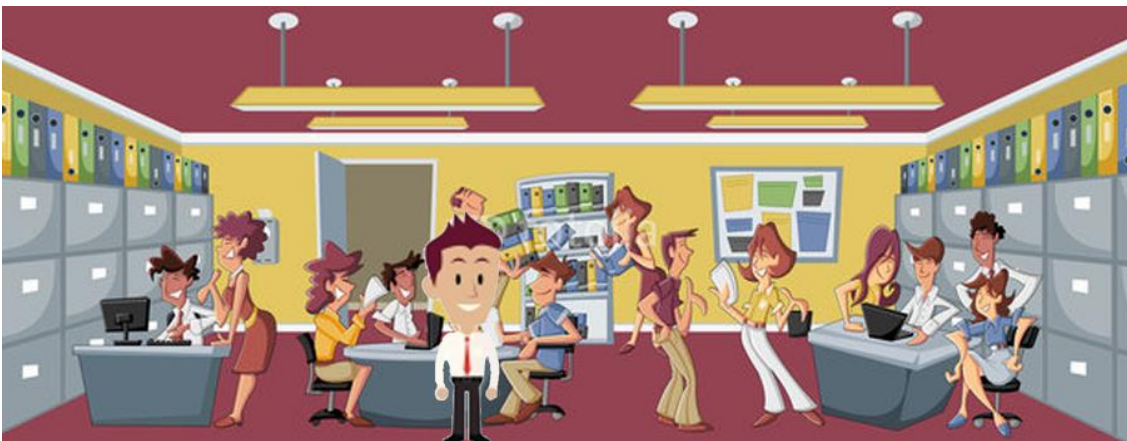
Storyline #2: Miriam's view

Miriam earns 4500 Euros per month and has accumulated costs of 3500 Euros as she bought a house a couple of years ago and is now also paying for a car. She has no savings because she has put everything in the house. She trusts that Jacques would cover for her part with the savings that he has been making by living in her house rent-free.

This means that she would not have any security net, and she would be 100% dependent on Jacques to move the adventure forward.

Storyline #3: John's, Jacques' and Miriam's view in the meeting room
Jacques has been working on the business plan for their social company, and based on the fact that they would not pay themselves salaries for the first six months, the offices would be in Jacques' garage. This way they are able to operate the first six months of the company with approximately 50,000 Euros.

Will they be able to have that money, and are they able to commit for six months without a salary?
    A. Enter Jacques amount:
    B. Enter Miriam amount:
    C. Enter John amount:

7.3 Example of storyline graph
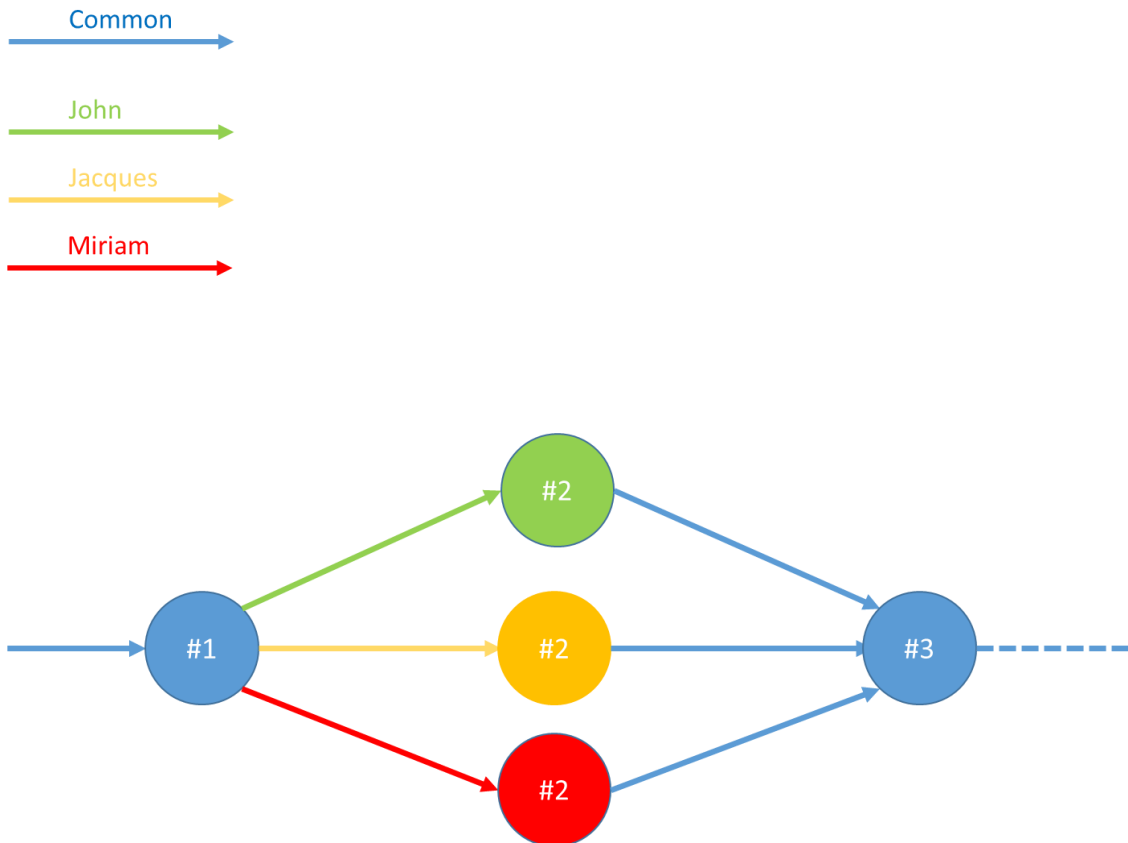
Common

John

Jacques

Miriam

Figure 11 Example of a storyline graph

Possible Random Events associated with Node #2 before moving out to #3 where amount as to be entered, and depending on whether the participants have been able to fulfill all the conditions associated with entering the values (have they made the training associated with Business Plan?):

- *John's wife calls him giving him with bad news about a possible financial problem they may have.*
- *Miriam is having second doubts on being financially dependent on Jacques for the beginning of the project.*
- *Jacques can be called up by its boss to propose him a promotion to be Responsible for the EMEA region of his company.*
- *The Leader of the voluntary project can call the three partners to give them very good news that they have won an important award for voluntary projects.*

- *One of the unsheltered person being helped have had an accident and has to be taken to the hospital to be taken care.*

8. Summary and implications

The SocSed game has been designed based on the requirements and constraints identified during the design phase of the game, and associated with the high level objectives for the SocEd project, being the more critic ones the short budgets associated with the process of creating an online game with high quality graphics.

The SocSed platform enables the creation of a link between learning contents and its application in simulated situations by the student, which will allow for a more direct assimilation of the learning outcomes by the students. The usage of Stories with different storylines and and random actions/storylines, allow the system to cope with different progression paces of students while avoiding a blocking situation that could affect the motivation of the student, while at the same time giving a direct feedback of the learning process.

The facilitator roles build on top of the moderation/teaching roles of the LMS system and its linkage with the game progress, allows him to fullfill key role in keeping the player/student engaged and motivated, and at the same time, able to check and evaluate the individual progresses as to be able to communicate directly with students or groups of students.

The initial stories used in the system can be fiction but there is room to recreate real social entrepreneurship stories that can have a deeper impact on students and benchmarking tool to check on the different capacities of the students.

By mapping the game on top of the LMS system, the contents associated with the stories can be multimedia and includes, text, images, sound, videos, or even HTML5 interactive content, which will allow for the system to have a dynamic evolution to face any future learning requests.

The SocSed platform is a modular and evolutive platform that can grow in the future to cope with any additional requirements from the operation, and that can be applied to other learning environments where educational contents and its direct application in business situations can help in the learning process.

PART 3 – FUNCTIONAL ANALYSIS OF THE SOCIAL SEDUCEMENT GAME

Author: Matteo Mariucci and Rossella Ventimiglia (Ecobyte)

Contributors: Daniel Parente (UNIR)

1. *Introduction*

The scope of Part 3 is to define the functional analysis associated with the implementation of a game-based learning system integrated with a LMS as to create an interconnected solution where learning and game practice are combined through the usage of interactive stories where the player/student has to put in practice the acquired knowledge and skills as to be able to progress correctly.

The solution is composed of four important parts:
- **Interactive Storytelling Manager***, which creates the tools to define the different storylines, links it to the learning outcomes in the LMS, introduces randomness as to make the experience more challenging, and allows the facilitator to manage the progress of students/players across the story.*
- **Interactive Story creation***, based on the previous element, allows an easy creation of new stories associated with interactive elements choices, and integration with the LMS.*
- **LMS integration** *maps the interactive stories of the game entirely on the LMS both with the contents, users roles and communication tools made available by the LMS.*
- **Score system** *that takes into account the users/players acquisition of skills.*

.

The proposed web application has the goal to teach or to instruct the disadvantaged people, playing a game, to face the entrepreneurial world putting themselves in group and learning all together to face every adversity through the cooperation.

The web application, through a series of fixed scenarios (game work flow), offer to the player a group of prearranged choices that guide him/her into the game story across a proper path, with the main task to train the player. The player can't fail playing the game, because the game is based on a win-win logic: if a player takes a bad decision and falls in a blocking step, s/he can come back and to obtain the facilitator's help.

The game does not offer a managerial game with a punctual financial management (cash flow, bankruptcy, and so on), but a didactical simulation of the real cases that a social cooperative has to face in its life: when the player makes a mistake selecting the wrong choice, s/he has the chance to learn in a safe environment.

To enrich the story's interactivity, the game also provides the opportunity to evaluate some random events (chosen by facilitators) that generate a sort of under-scenarios that do not affect the main story, but give the simulation a better realistic feeling and add training materials.

2. Functional Requiriments

Below a list is provided of the main requirements associated with each of core parts of the entire solution.

2.1 Interactive Storytelling Manager

The interactive StoryTelling Manager must implement a graph model that, once the conditions associated with learning progress and information required to the player is entered, will transform into a Finite State Machine that will control the flow of the player through the resulting graph, allowing to experience a game situation.

Each Node in the graph can allow the player to progress through different outgoing branches based on the choices being entered by the player, the conditions put by the facilitator, or by checking on the learning progress associated with the player within the layered down LMS system.

One of the core challenges is to define the rules that govern the system and the reactions that the system will take in response to the players choices.

A node can be also associated with a preset list of random stories branched or subgraphes that allow the player to stay in the same node/state for an undefined period of time, while the conditons that allow the state to change are not verified.

As the game is set to be multiplayer, some of the conditions could be associated with the status of other players within the same group of users playing the same story and there, so the system must be allowed to define conditions based on an higher setting of groups.

Another core challenge is to define the rules and the system reaction to the random events.

2.2 Interactive Story creation

One of the key elements with the system is the possibility to create interactive stories that create different branches of possibilities associated with the objectives of the learning, and associated with putting in practice what has been learned.

For these reasons, the Interactive Story Editor, must allow an integrated and consistent story creation that will allow entering the different storylines and the actions associated to the story that need to be checked as to define progression to the next phase. In parallel, the system must allow an easy and consistent mechanism to associate the storyline with the learning outcomes with the LMS as well as if the system will enable for the node random events or not, or a direct intervention of the Facilitator.

Since Random Events can be seen as Random Storylines or succession of Random

storylines, this component will also be responsible for the definition and creation of all the random events that will be made available for the story that will be used in the game[56].

2.3 The Learning Management System

The main task of the proposed web application is "training by playing" with the facilitator's help.
For this reason, the solution is intended integrated with a Learning Management System that allows:
- *To track the players' training progress*
- *To use the native LMS training tools*
- *Access to Training materials*
- *Access to Lessons*
- *Quiz*
- *Chat*

Moodle 2.9 is going to be used as LMS, because it is the most used LMS system and it counts on the largest peer community of developers that could help in case of need during the technical implementation phase.

The functionalities that will be analyzed and configured are:
- *The rule of Users management, provided by Moodle*
- *The rule of Site Administrator, the main figure that manages the System*
- *The rule of Course Creator, the figure that create a course and choose the training materials and the functionality provided by the course*
- *The rule of Teacher/Facilitator, the figure that helps the player to gain the goal*
- *The rule of Student/Player, that approachs the course/game, that play the game, and gain the evaluation at every step of the game*
- *Course Management: every storytelling is matched with a specific course activated on Moodle with all the related activities and materials*
- *Lessons guided by facilitators*
- *Quiz, with closed or oper answers*
- *Chat, for communication between the players and the facilitators*
- *Training content management (tests, images, videos, quizzes, …)*
- *Grades management, as some activities are linked to some specific contents and they produce grade linked to the singolar players*

N.B.: Facilitators can attribute more grades to students, based on specific scenarios

---

[56] *For more information about the Random events please consult Part 2 of this report.*

Figure 12: A view by Moodle of the management page of a System Administrator

The game will be integrated with the LMS Moodle as concerns:

- **Authentication**: *every user logs in only one of the two System (in Moodle or in the game web application) and can move between the two Systems without the need to insert again the credentials*
- **Content:** *every story is mapped on a specific course on Moodle, the related contents (tests, images, videos, quiz, …) are found directly in Moodle*
- **Grades management**: *some choices taken by players in relation with the game or with the contents can generate a quantitative evaluation*

N.B.: the rule and the scenarios that generate such type of evaluaton are to be clearly defined.

Figure 13: interaction between facilitators, players, game platform and Moodle platform
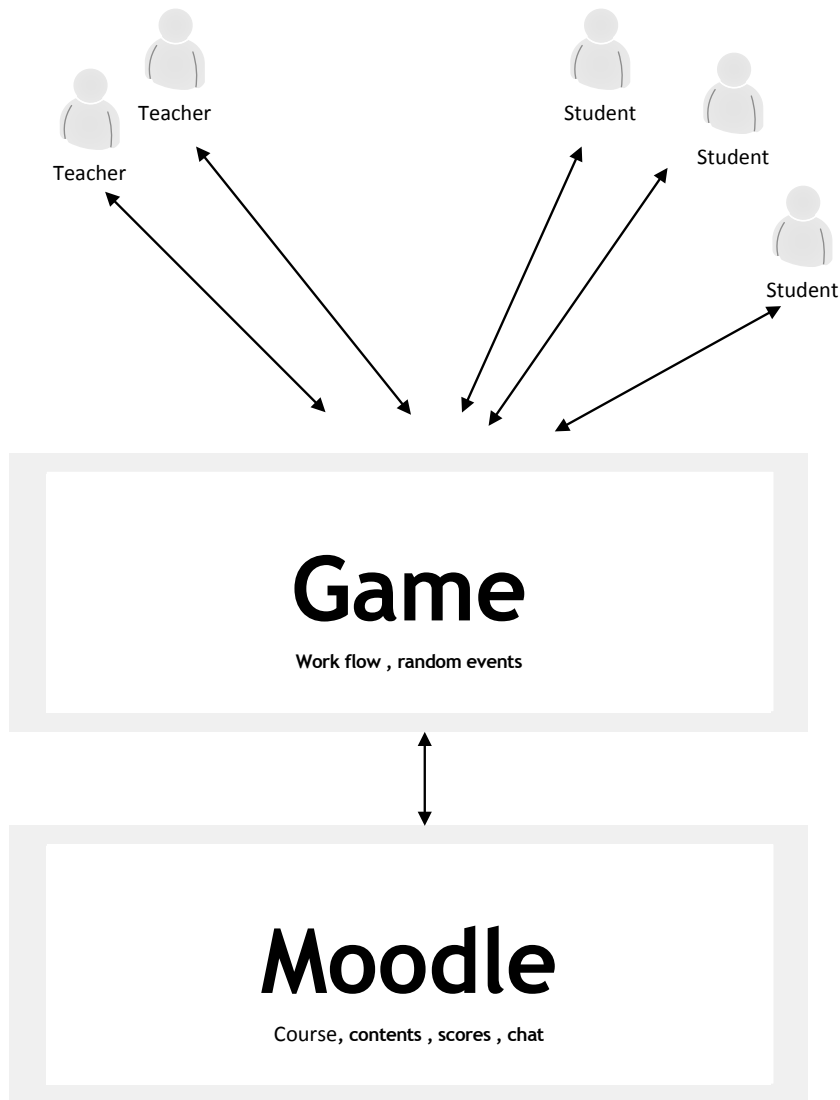
2.4   The score system

The score system will established at a later stage as it depends on the pedagogical model choosen for the game.

3.   The Game

The game it is made up of an event work flow manager, in which the events are picked up directly from Moodle; every player (or group of players linked to the same course and story), could move through a series of prearranged steps that could bring him/her in every place of the story, following a given graph, based on the decisions s/he has taken in the previous step:
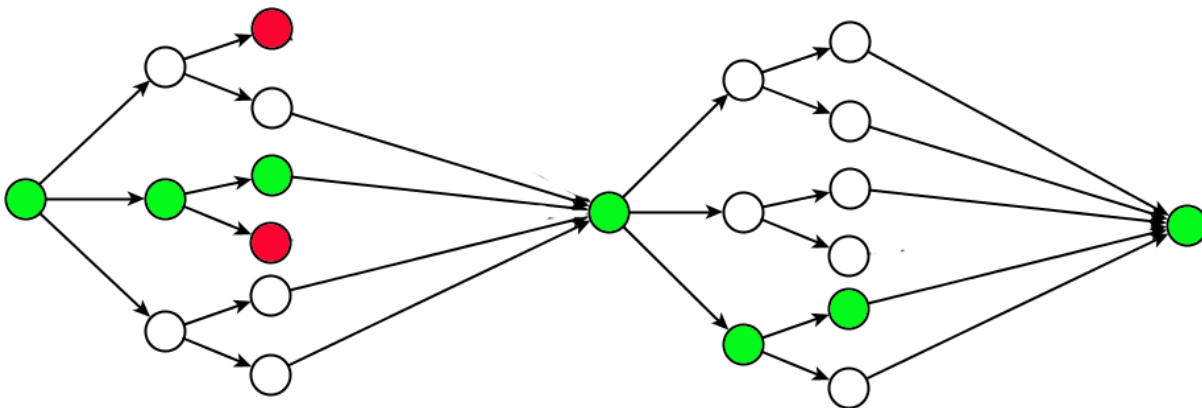
Every scenario is rapresented by a web page that contains the following items, as it picks them up from LMS:

* *Texts and images*
* *Close quizzes*
* *Videos*
* *Open quizzes with a text boxes in which the player must enter an answer (numeric, textual, …)*

When a player enters the choosen answer (open or closed), s/he can switch to the next step generating the relative grades (if considered and necessary for that step), that have to be fixed during the creation or the management of the story.

If the player falls in a dead-end (red step on the graph), s/he can go back or can be helped by the facilitator to understand the "empasse". The facilitators can communicate with the player through the chat, for istance, or have the possibility to move the player directly on the graph.

N. B.: It must be defined, based on the specific story:

o *which type of answers or other events can move the user on the right branch of the graph.*
o *the rules that manages the grade assignment for every given answer*

For each step, a certain number of random events can be defined, that create an interaction with the player, enliven the game, but have no relations with the main story, and than can't affect it.

N.B.: The typology of these random events and their management (opening and closure) must be strictly defined.

The game layout will be developed in html5 and css3, to make the system indipendent from the device on which the game will be visualized (pc, tablet, smartphone, …)

4. The Back Office

In this section the Site Administrators and the Course Creators can create the story work flow:

- *creating a story matched to a course on Moodle*

- *creating, changing, deleting a single step in a story*

- *linking the contents to the course*

- *configuring the logic rule that brings from a step to another one*

N.B.: the rules and the different type of rules that manage the work flow must be defined from the analisys of the stories (for instance: choose a given answer or to insert a specific value) (in these first steps of developing game, <u>all the partners should decide these rules</u>)
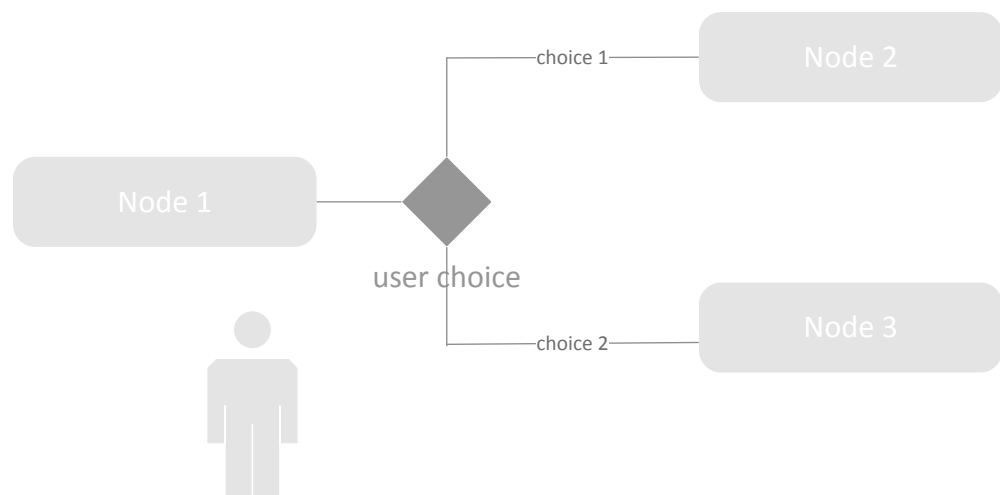

Figure 14: the linking path between a step and the following one

5. Infrastructure

The solution is composed of three web applications:

- **A Moodle 2.9 Installation** *with web service creation, based on REST architecture, with preshared key authentication on Moodle and Game application.*

  Every type of activity on the platform will perform a set of action (like "read" and "write" actions) and some specific actions for users score updates.

  - o *Authentication: for the single login sign-on and the subsequent recovery of all users and user roles data*
  - o *Content: to regain all the contents associated to users and to save the choices related to the past steps*
  - o *Score: linked on Moodle*

- **Game Web Application**, *with the following application layers*
  - o *Presentation Layer, realized with Microsoft ASP.NET MVC with html5, css3 and javascript framework*
  - o *Business Layer, for the management of application functionality*
  - o *Data Access Layer: in this case to permit the interfacing with StoryTelling Manager Database, at the moment we can foresee the use of a content database (Mongo DB o Raven DB) and the use of REST services by Moodle*

- **Back-office application**, *with the following application layers:*
  - o *Presentation Layer, realized with Microsoft ASP.NET MVC with html5, css3 and javascript framework*
  - o *Business Layer, for the management of application functionality*
  - o *Data Access Layer: in this case to permit the interfacing with StoryTelling Manager Database, at the moment we can foresee the use of a content database (Mongo DB o Raven DB) and the use of REST services by Moodle*

6. Conclusions

In this part of the report we have provided the Functional analysis of the game, related to the "what" has to be developed. Based on the specifications provided in Part 2 (about the game design) and Part 3 (functional requirements), the next milestone for the development of the game consists in the joint work of the consortium on the defintion of:

- *the type of training content to be managed*
- *the nature of questions and answers within the game*
- *The kind of input values to be provided and and what related behavior must be expected in the work flow*
- *the rules of the game*

- *the specifications of the random events, related behaviour, and what type of influence such events have on the work flow*
- *What type of grades must be used in the work flow and how they must be handled the grades assignment*

Once the above is defined, the technical implementation of the game will start and its results will be reported in IO4

Annex 1 - Field and desk research tools

Game analysis grid

*The aim of this grid is to analyse practices (initiatives, projects) in the field of Serious
Games and specifically Serious Games and Online Role Games for Business and
Entrepreneurship, possibly addressing disadvantaged groups. The input provided by the
analysed practices will feed O1 and particularly O1/A1 and O1/A5.*

*The grid is aimed to cover either intitiatives and projects that have developed games or
games as such. Depending on the case, the researcher shall fill in the relevant fields. In
case a game not developed within a project or intiative is analysed, the following fields will
have to be filled in: 1.; 2.; 4.; 5.; 8.; 11.a to the end of the grid.*

1. Title of the initiative/intervention/project	
2. Web Link	
3. Promoter (s)	*Who funded it*
4. Developer(s)	*Who developed it*
5. Investment	*Amount of money and resources invested for the realisation of the initiative; Monthly amount of money needed for ongoing developement and support.* *Who funds ongoing costs*
6. Lifecycle of the initiative	*Is it just started, being developed, finalised, ended*
7. Aims and objectives	*What are the general aims and objectives of the initiative and what is the role of serious gaming / ORPG within it. (pls specify also whether the initiative is aimed at enhancing specifically business or entrepreneurial skills or both. Specify also whether the initiative enhances self- or collective entrepreneurship.*
8. Target Group	*Specify category(ies) of disadvantaged group addressed*
9. Socio economic enviroment addressed	*Specify the features of the context addressed by the initiative*
10. Activities and tools	*Describe the activities carried out and tools used to achieve the project goals*
11. Role of gaming within the initiative	*Did the initiative foresee the development/use of serious game/ORPG to achieve one or more project goals? If yes:*
11a Features of the game	
Name of the game and web link (if available)	
Methodology applied to develop or adapt the game	

Description of the game	
Accessibility features of the game	
Technology platforms on which it is available and most frequently used	
Is the game played off and/or online?	
What languages are supported? - Can groups play together in different languages?	
What models are used to measure and present success and progress of the gamers in the game	
If available on mobile terminals, is this done by generic apps or through webinterface	
Are there general technical limitations?	
Can users play together via one or several logins?	
11b Learning dimension	
Describe the pedagogical approach adopted to design or adapt the game	
Describe the features of trainers/facilitators helping gamers in playing.	
Topics and / or competencies that are being 'taught' with the help of the game	
How is acquired knowledge feedback to gamers	

Is there a known set of knowledge that progress is measured towards	
11c Users' involvement	
Were users' needs analysed prior to the game design/adaptation?	
Were users involved in the design of the game	
Were users involved in evaluation of the game	
Who uses the game and how often is it used?	
12. Stakeholders' involvement	*What kind of stakeholders were involved in the implementation of the initiative? (training providers, policy makers, social partners…) and how were they involved. How was the use of the game promoted?*
13. Indicators of success	*What were the indicators for success defined by the project? Why is the project successful/not successful? What evidence is there for success?*
14. Good practice	*- Can the game / project be characterised as good / effective practice, and why?* *- what is the learning for social seducement?*

Interview grid to game designers
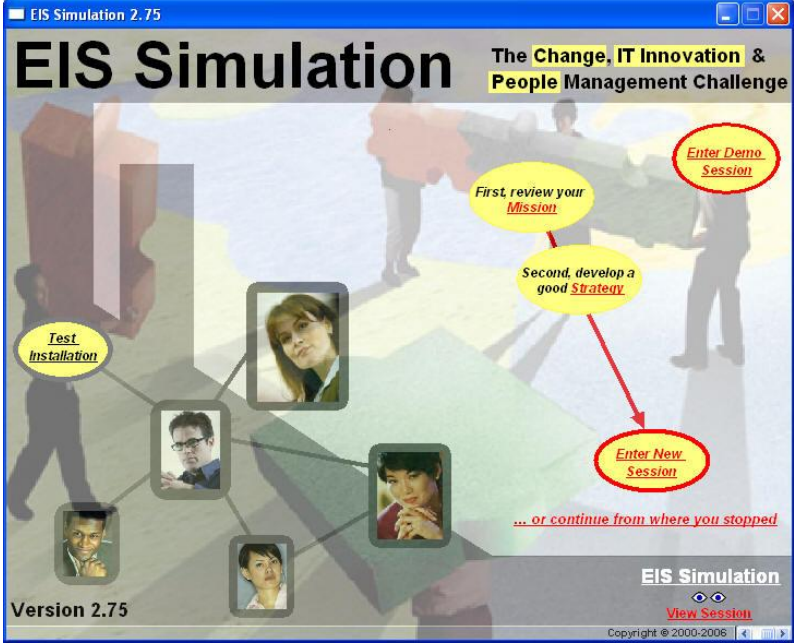
The aim of this grid is to get the view of experienced game designers and game designers on the needs the Social Seducement game should address from a "gaming" point of view. The input provided by the analysed practices will feed O1 and particularly O1/A1 and O1/A5.

Interview carried out by	*Partner name*
	Researcher name and contact details
Date	

Name of the expert/organisation	
Contact details (email/phone number)	
Area of expertise	
What is your opinion on the latest evolution of gaming and in particular of games for learning?	
How best can computer games be designed to enhance learning?	
Do you think differences in game design can affect learning experience? How?	
Do you think ORPG can be used for learning? How?	
Do you think a game addressing unemployed people with the aim to train them on the set up and management of a company should have specific requirements?	*If so please explore*
Have you ever designed a serious game/ORPG with learning purposes? what difficulties did you encounter and how did you solve them?	
Are there alternative and cheaper solutions to a 3D game environment able to equally motivate and engage players?	

Annex 2 - Good practices in Online Gaming addressing entrepreneurship and social entrepreneurship

1. EIS SIMULATION

1. Title of the initiative/intervention/project	THE EIS Simulation[57]
2. Web Link	*http://www.calt.insead.edu/eis/*
3. Promoter (s) who funded it	*INSEAD*
4. Developer(s) who developed it	*AlphaLabs*
5. Investment *Amount of money and resources invested for the realisation of the initiative; Monthly amount of money needed for ongoing developement and support. Who funds ongoing costs*	*NA*
6. Lifecycle of the initiative *Is it just started, being developed, finalised, ended*	*ActiveDevelopment has stopped but the game is active. The simulation is constantly being improved.*

---

[57] *This simulation is no longer available and working contacts (emails, skypes etc.) are not either, making features of the simulation hard to obtain (only material available is a manual).*

7. Aims and objectives *What are the general aims and objectives of the initiative and what is the role of serious gaming / ORPG within it. (pls specify also whether the initiative is aimed at enhancing specifically business or entrepreneurial skills or both. Specify also whether the initiative enhances self- or collective entrepreneurship)*	*In today's complex business environment, organisations cannot avoid to innovate, and implementing change has become one of the key tasks of managers. On the other hand - as everybody who has tried to introduce innovations and change in organisations knows by experience - managing change processes and making new things happen is often a difficult, lengthy and sometimes frustrating process.* *The EIS Simulation aims at providing managers with a shared experience. An experience which brings them in direct touch with a variety of factors impacting the dynamics of innovation and change in organizational contexts. Many of such factors (such as the one illustrated here) can be potentially addressed during the reflection/debriefing phase - see this article to get more insights into the models underlying the EIS Simulation which can be "injected" during the debriefing sessions to complement the participants' experiences with insights from academic studies related to change and innovation management.*
8. Target Group *Specify category(ies) of disadvantaged group addressed*	*Company Management* *The EIS Simulation has been used and is still successfully used by Faculty Members of Top Universities and Research Institutes worldwide* *It is also integrated in projects, programmes, courses, workshops and events in Companies and Organizations worldwide*
9. Socio economic enviroment addressed *Specify the features of the context addressed by the initiative*	*Employed people wanting to develop management skills.* *Reasons for use:* *Following our very biased intelligence gathering sources, it is simply because the EIS Simulation provides them (and us) the basis for designing great learning experiences for and with groups of managers and executives.* *Learning experiences that 'stick' and that help key issues and learning points to be addressed more easily and in depth, because they can be linked to characters, behaviors, situations and events of the realistic challenge and experience the participants go through during the simulation.* *In addition, there is no doubt that the EIS Simulation makes participants go through a strong, intensive and*

	instructive decision-making, consensus-building and team-building experience.
10. Activities and tools *Describe the activities carried out and tools used to achieve the project goals*	*Simulation putting the students in front of situations related with the topics they need to train as enable the decision taking process*
11. Role of gaming within the initiative *Did the initiative foresee the development/use of serious game/ORPG to achieve one or more project goals? If yes:*	*Serious game and Business Simulation.*
11a Features of the game	*Rest of the information is not know,asked the developer about it waiting for answer.*
Name of the game and web link (if available)	*EIS Simulation* *http://www.calt.insead.edu/eis/*
Methodology applied to develop or adapt the game	*NA*
Description of the game	*During the simulation, participants, operating as change agents, can choose among many different initiatives and change management tactics to meet their goal. They may gather information on the managers (the profiles, their relationships, etc.) or may take direct action to try to convince the managers and thus influence their willingness to adopt the proposed innovation.* *Each time participants implement a tactic, they immediately receive feedback about the impact of their decisions. The objective is to get as many adopters as possible, overcoming different forms of individual and organizational resistance to change.*
Accessibility features of the game	*NA*
Technology platforms on which it is available and most frequently used	*NA*
Is the game played off and/or online?	*NA*
What languages are supported? - Can groups play	*There are other variants of the simulation such as French, Italian, Spanish and Chinese.*

together in different languages?	
What models are used to measure and present success and progress of the gamers in the game	*NA*
If available on mobile terminals, is this done by generic apps or through webinterface	*NA*
Are there general technical limitations?	*NA*
Can users play together via one or several logins?	*NA*
11b Learning dimension	
Describe the pedagogical approach adopted to design or adapt the game	*Role playing and business simulation. The player takes the role of a team member and his confronted with problems that needs teamwork and decision taking.* *Short sessions of hald a day of business simulation processes that immerse the player in a role playing task as consultants of a company that must address specific problems for the company.*
Describe the features of trainers/facilitators helping gamers in playing.	*Facilitor is called Maitre de Jeux, and is supervising the game session*
Topics and / or competencies that are being 'taught' with the help of the game	*Innovation, Change Management*
How is acquired knowledge feedback to gamers	*NA*
Is there a known set of knowledge that progress is measured towards	*NA*
11c Users' involvement	*Not known*
Were users' needs analysed prior to the game design/adaptation?	
Were users involved in the design of the game	
Were users involved in evaluation of the game	

Who uses the game and how often is it used?	
12. Stakeholders' involvement *What kind of stakeholders were involved in the implementation of the initiative? (training providers, policy makers, social partners…) and how were they involved. How was the use of the game promoted?*	*The game is being promoted directly and through INSEAD business school.*
13. Indicators of success *What were the indicators for success defined by the project? Why is the project successful/not successful? What evidence is there for success?*	*The success is indicated by the success in addressing the missiones and tasks created by the system and represented by a virtual customer being pleased with the solution.*
14. Good practice *- Can the game / project be characterised as good / effective practice, and why? - what is the learning for social seducement?*	*Yes, because the game is being actively used by companies of different sistes that that providing they testimonial as a show case of the game efffectivity to perform the learning correctly.* *The simulation process allows the player to effectivly put at work the learn knowledge helping in its consolidation.* *It also uses the figure of the facilitator that can be drawn from succesful students and that supervises the learning activity.* *The learning for social seducment is the social entrepreneurship skills and be taught and validated by an online business simulation type of game as the contents used in the game are entrepreneurship ones.*
15. Process for supplementing information	*To play this simulation, you need a INSEAD CALT ICDT Platform login and to book/reserve a copy. There is also a Demo version available through emailing info@alpha-simulations.com* *The website contains information that gives quite detailed insight into the objectives of the project and skills being taught through the simulation. It is however (the website) awkward to navigate and the contact information of the developers and project leaders hasn't been updated since 2009.*

2. Innov8 & IBM CityOne

1. Title of the initiative/intervention/project	*Innov8 & IBM CityOne*[58]
2. Web Link	*http://www-01.ibm.com/software/solutions/soa/innov8/index.html* *http://www-01.ibm.com/software/solutions/soa/innov8/cityone/*
3. Promoter (s) **who funded it**	*IBM*
4. Developer(s) **who developed it**	*IBM*
5. Investment *Amount of money and resources invested for the realisation of the initiative; Monthly amount of money needed for ongoing developement and support. Who funds ongoing costs*	*NA*
6. Lifecycle of the initiative *Is it just started, being developed, finalised, ended*	*Development ended and being operated.*
7. Aims and objectives *What are the general aims and objectives of the initiative and what is the role*	*The game is focused in developing specific management skills related with specific sectors associated with IBM portfolio of services.*

[58] *Spoke to support staff in a chat to learn more about what languages are supported etc but was lead to an arbritrary support page.*

of serious gaming / ORPG within it. (pls specify also whether the initiative is aimed at enhancing specifically business or entrepreneurial skills or both. Specify also whether the initiative enhances self- or collective entrepreneurship)	
8. Target Group *Specify category(ies) of disadvantaged group addressed*	*Company Management*
9. Socio economic enviroment addressed *Specify the features of the context addressed by the initiative*	*Employed people wanting to develop management skills.*
10. Activities and tools *Describe the activities carried out and tools used to achieve the project goals*	*Players quickly see how practical process improvements can help meet profitability, customer satisfaction and environmental goals while addressing real problems faced by municipalities and businesses today. And when they're done playing, they can compare scores with other players on global scoreboards.*
11. Role of gaming within the initiative *Did the initiative foresee the development/use of serious game/ORPG to achieve one or more project goals? If yes:*	*Serious game, Business Simulation, Role Playing*
11a Features of the game	*The game currently approaches, Traffic management, Supply Chain an Customer Service.* *The game blends learning by presenting partial content to the player and to choose the correct choices to solve specific problems. A virtual facilitator is associated with the process and corrects the player on the decisions conducing it to the solution.* *After the learning process takes place, the student is presented to event simulation where in a 3D world events are triggered that will request the envolment of the player into addressing the issues as to solve them according to the level of knowledge the player has acquired up to that step.*

Name of the game and web link (if available)	Innov8 & IBM CityOne *http://www-01.ibm.com/software/solutions/soa/innov8/index.html* *http://www-01.ibm.com/software/solutions/soa/innov8/cityone/*
Methodology applied to develop or adapt the game	
Description of the game	*During the simulation, participants, operating as change agents, can choose among many different <u>initiatives and change management tactics</u> to meet their goal. They may gather information on the managers (the profiles, their relationships, etc.) or may take direct action to try to convince the managers and thus influence their willingness to adopt the proposed innovation.* *Each time participants implement a tactic, they immediately receive feedback about the impact of their decisions. The objective is to get as many adopters as possible, overcoming different forms of individual and organizational resistance to change.*
Accessibility features of the game	None
Technology platforms on which it is available and most frequently used	Web & Flahs
Is the game played off and/or online?	Online
What languages are supported? - Can groups play together in different languages?	English
What models are used to measure and present success and progress of the gamers in the game	NA
If available on mobile terminals, is this done by generic apps or through webinterface	Only Web
Are there general technical limitations?	None

Can users play together via one or several logins?	*No.*
11b Learning dimension	
Describe the pedagogical approach adopted to design or adapt the game	*Virtual facilitators present the player with the initial information and leads the player through variations of the variaton by asking player input on specific variations on the content as to reach new results.* *The player is not penalized by mistakes, and is only notified by the facilitator that the answer is not the best one.* *The game helps the player in analyzing situations in the scope of the learning activity, understand the tools available to operate on the system and make the modifications associated with addressiing the problem. Since the world is simulated the rules of engagement are correctly dimensioned ot the level of expertise of the player managing correctly the motivation* *An overal score is used as to drive player competitivity and gamify the system.*
Describe the features of trainers/facilitators helping gamers in playing.	*Facilitator is like supervisor/advisor of the studend within the game, that is briefing player on missions and on the knowledged neeted to perfom those.*
Topics and / or competencies that are being 'taught' with the help of the game	*Critical thinking, Problem Solving,*
How is acquired knowledge feedback to gamers	*Knowledge is explained by facilitators, and then tested by the player when taking decisions.*
Is there a known set of knowledge that progress is measured towards	*Yes, measured by the facilitator*
11c Users' involvement	*Not known*
Were users' needs analysed prior to the game design/adaptation?	
Were users involved in the design of the game	
Were users involved in evaluation of the game	

Who uses the game and how often is it used?	
12. Stakeholders' involvement *What kind of stakeholders were involved in the implementation of the initiative? (training providers, policy makers, social partners…) and how were they involved. How was the use of the game promoted?*	*Not Known*
13. Indicators of success *What were the indicators for success defined by the project? Why is the project successful/not successful? What evidence is there for success?*	*The virtual facilitator is giving permanent feedback to the player and the 3D visualization of the game allows the player to see if the problem has been solved, and the learning assimilated correctly.*
14. Good practice *- Can the game / project be characterised as good / effective practice, and why? - what is the learning for social seducement?*	*The game is currently running on its 2.0 version, and has been extended to cover more fields os activity. The role playing activit associated with the simulaton allows for the knowledge to really be checked. The usage of a virtual facilitator constantly supervising the information and players answers is a great mechanism to keep player engaged.* *The learning for the Social Seducement project is that the facilitator role, should be probably real and virtual as to have the player/student engaged.*
15. Process for supplementing information	*Screenshots were gathered through playing the trailers on the home page. All other information is provided through the website support pages. Beginning the INNOV8 and CityOne simulation requires you to fill out this form to adapt the simulation, specific to your requirements:*

INNOV8 2.0 - What's smart about BPM enabled by SOA.

We hope you enjoy INNOV8 2.0 and see how Business Process Management and Smart SOA are helping people, companies, and cities work smarter. Please register to play INNOV8 Online, comprised of three mini games: Smart Traffic, Smart Supply Chain, and Smart Customer Service.

- **Smart Traffic** - Help a municipality lower congestion and pollution levels by using BPM
- **Smart Supply Chain** - Keep profits and customer satisfaction high while optimizing your supply chain.
- **Smart Customer Service** - Leverage BPM during partner brownouts, new product rollouts and changing business models

Business Contact Information

First name*

Last name*

E-mail address*

Country or Region*

Select one ▾

Asterisks (*) indicate fields required to complete this transaction.

Which game scenario are you most interested in?*
- ○ Smart Traffic
- ○ Smart Supply Chain
- ○ Smart Customer Service

Which of the following best describes your company or organization?*

Company or Organization looking for so ▾

What role do you play in the acquisition of software solutions?*

Decision Maker ▾

Would you like an IBM representative to contact you regarding this IBM Software information?
- ☐ Yes

Privacy

Please keep me informed of products, services and offerings from IBM companies worldwide.

- ☑ by email.
- ☑ by telephone.
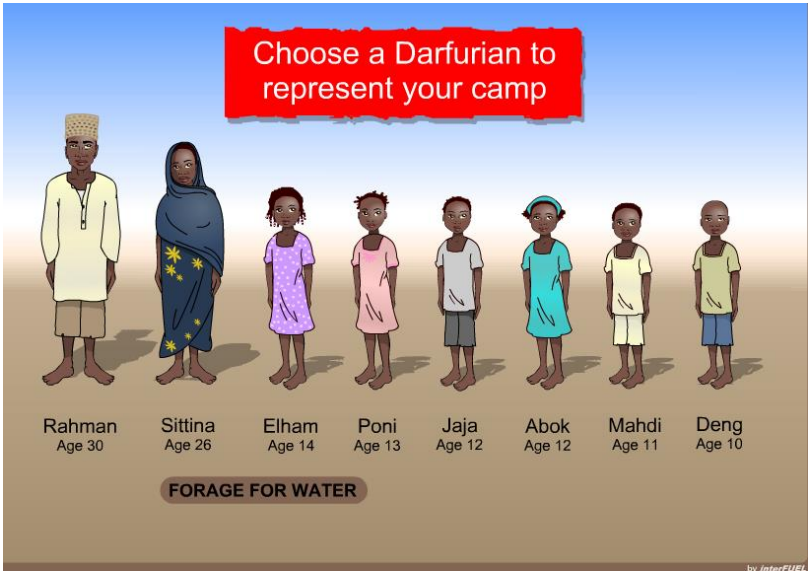- ☑ by postal mail.

I accept IBM's Privacy statement.

Submit

3. Triage trainer

1. Title of the initiative/intervention/project	Triage trainer
2. Web Link	http://www.trusim.com/?page=CaseStudy *Game is not an online game but a downloadable game. Mst be purchased*
3. Promoter (s) who funded it	*Trusim*
4. Developer(s) who developed it	*Trusim*
5. Investment *Amount of money and resources invested for the realisation of the initiative; Monthly amount of money needed for ongoing developement and support. Who funds ongoing costs*	*Not Known*
6. Lifecycle of the initiative *Is it just started, being developed, finalised, ended*	*Finalized and being shipped*
7. Aims and objectives *What are the general aims and objectives of the initiative and what is the role of serious gaming / ORPG within it. (pls specify also whether the initiative is aimed at enhancing specifically business or entrepreneurial skills or both. Specify also whether the initiative enhances self- or collective entrepreneurship)*	*Train paramedic personnel*
8. Target Group	*Peopled wanting to get into the health sector*

Specify category(ies) of disadvantaged group addressed	
9. Socio economic enviroment addressed *Specify the features of the context addressed by the initiative*	*Employed and unemployed people*
10. Activities and tools *Describe the activities carried out and tools used to achieve the project goals*	*The student is faced to a situation of emergency with several patients needing care and with the time counting down. The player needs to address the status of each patient as to define the attending order.* *The system tries to help the trainee improve decision process, work under pressure, time management and analytical skills.*
11. Role of gaming within the initiative *Did the initiative foresee the development/use of serious game/ORPG to achieve one or more project goals? If yes:*	*The game can be considered of the genre Serious game with a touch of ORPG smulation.*
11a Features of the game	*3D simulation putting the player in an immersive experience that generates stress when having to take decisions about patient triages*
Name of the game and web link (if available)	*Triage Trainer* **http://www.trusim.com/?page=CaseStudy** *Game is not an online game but a downloadable game. Mst be purchased*
Methodology applied to develop or adapt the game	
Description of the game	*The game simulates an accident happening in a city where the rescue team has to take cricial decisions on addressing diagnostic of the injuries as to allow the correct triage of the patients by urgency.*
Accessibility features of the game	*None*
Technology platforms on which it is available and most frequently used	*Web & Flahs*
Is the game played off and/or online?	*Offline*
What languages are supported? - Can groups play	*English*

together in different languages?	
What models are used to measure and present success and progress of the gamers in the game	*Number of patients*
If available on mobile terminals, is this done by generic apps or through webinterface	*PC*
Are there general technical limitations?	*None*
Can users play together via one or several logins?	*No.*
11b Learning dimension	
Describe the pedagogical approach adopted to design or adapt the game	*Simulation and put player in a situation where he needs to take decisions under pressure.* *No facilitator or trainer.* *The skills being developed can be considered business skills as it affects directly the capacity of the unit to attend all patients in the best contitions.*
Describe the features of trainers/facilitators helping gamers in playing.	*None*
Topics and / or competencies that are being 'taught' with the help of the game	*Critical thinking, Problem Solving,*
How is acquired knowledge feedback to gamers	*Acknowledge messages are indicating the player on good or wrong desions.*
Is there a known set of knowledge that progress is measured towards	*Number of patients correctly attented*
11c Users' involvement	*Not known*
Were users' needs analysed prior to the game design/adaptation?	*NA*

Were users involved in the design of the game	*NA*
Were users involved in evaluation of the game	*NA*
Who uses the game and how often is it used?	*People wanting to work in the health*
12. Stakeholders' involvement *What kind of stakeholders were involved in the implementation of the initiative? (training providers, policy makers, social partners…) and how were they involved. How was the use of the game promoted?*	*Not Known*
13. Indicators of success *What were the indicators for success defined by the project? Why is the project successful/not successful? What evidence is there for success?*	*The game is a commercial game, and still being sold online, with some case shows and testimonials from users*
14. Good practice *- Can the game / project be characterised as good / effective practice, and why? - what is the learning for social seducement?*	*- Yes, again the use of serious games with a simulatiton and immersive approach can replicte some thought processes associated with the activity of the trainee and improve the learning process. The 3D approach is highly costly and complex, and not needed for the type of trainees to be found in the social seducement program.*
15. Process for supplementing information	*The game doesn't seem to be available for purchase anymore and the linked case study shows the development of the game began before 2010, this is also the only source of information for the simulation.*

4. Darfur is Dying

1. Title of the initiative/intervention/project	*Darfur is Dying*
2. Web Link	**http://www.darfurisdying.com/**
3. Promoter (s) **who funded it**	*MTV U, Reebok Human Rights, International Crisis group*
4. Developer(s) **who developed it**	*University of South California*
5. Investment *Amount of money and resources invested for the realisation of the initiative; Monthly amount of money needed for ongoing developement and support. Who funds ongoing costs*	*Not Known*
6. Lifecycle of the initiative *Is it just started, being developed, finalised, ended*	*Finalized and working*
7. Aims and objectives *What are the general aims and objectives of the initiative and what is the role of serious gaming / ORPG within it. (pls specify also whether the initiative is aimed at enhancing specifically business or entrepreneurial skills or both. Specify also whether the initiative*	*The main objetive of the game is to alert the global population of the humanitarian situation on Darfur, and by putting the player in the situation of control refugees in the camp on some of day to day situations they have to face. The objective of the game is not to develop business skills or entrepreneurial.*

enhances self- or collective entrepreneurship)	
8. Target Group *Specify category(ies) of disadvantaged group addressed*	*People in developed countries*
9. Socio economic enviroment addressed *Specify the features of the context addressed by the initiative*	*Potential voluntaries*
10. Activities and tools *Describe the activities carried out and tools used to achieve the project goals*	*The player takes chooses one of the refugeess and is assigned a task that needs to be completed to progresss. Little information is given as to create a situation of being exposed to danger and help projecting player feelings into the game character being controlled.* *If the player dies, the game then exposes some of the facts about that situation in the Darfur, contributing to his learning of the situation.* *The game has been designed and developedd with well know game designers.* *This game uses educational prompts to get you to make actions and to progress. It switches between a point and click ORPG to a simple W, A, S, D mini-game unlike any of the other titles.*
11. Role of gaming within the initiative *Did the initiative foresee the development/use of serious game/ORPG to achieve one or more project goals? If yes:*	*The game uses ORPG to immerse the player in the daily life and dangers of the refugees. The learning activity happens after the player has felt him self the results of the activity, which makes him more focused in learning.*
11a Features of the game	*3D simulation putting the player in an immersive experience that generates stress when having to take decisions about patient triages*
Name of the game and web link (if available)	*Darfur is Dying* **http://www.darfurisdying.com/**
Methodology applied to develop or adapt the game	*NA*
Description of the game	*Darfur is Dying is a viral video game for change that provides a window into the experience of the 2.5 million refugees in the Darfur region of Sudan. Players must keep their refugee camp functioning in the face of possible*

	attack by Janjaweed militias. Players can also learn more about the genocide in Darfur that has taken the lives of 400,000 people, and find ways to get involved to help stop this human rights and humanitarian crisis.
Accessibility features of the game	*None*
Technology platforms on which it is available and most frequently used	*Web & Flash*
Is the game played off and/or online?	*Online*
What languages are supported? - Can groups play together in different languages?	*English, Spanish, Chinese and Arab*
What models are used to measure and present success and progress of the gamers in the game	*Score by player*
If available on mobile terminals, is this done by generic apps or through webinterface	*Web*
Are there general technical limitations?	*None*
Can users play together via one or several logins?	*No.*
11b Learning dimension	
Describe the pedagogical approach adopted to design or adapt the game	*RPG to make the player live the actual experience of the refugees in simple daily tasks that the player can corelate with the ones he have on his own country, creating a clear gap that helps creating a deeping feeling for the game character.*
Describe the features of trainers/facilitators helping gamers in playing.	*None*
Topics and / or competencies that are being 'taught' with the	*Raise the awareness of first world people about the situation being lived in the Darfur Region.*

121

help of the game	
How is acquired knowledge feedback to gamers	*none*
Is there a known set of knowledge that progress is measured towards	*No, the game is only oriented to raise knowledge about the situation in Darfur.*
Experience playing the game	*The game is designed to describe and show the difficulty that refugees face in their everydays. Firstly, you select a character and their involvement is dependant on their gender and age because of certain difficulties they face (e.g. the fully grown man cannot forage for water as he would be killed on sight by the militia).* *You progress in the game through foraging for water for your village (this is a screenshot that appears when you fail at doing so:* *By entering the camp, you can explore this area:*

To progress, you have to keep the threat meter down through doing the objectives in the screenshot above and also to keep the "Camp Health" full over a period of days.

Pop-ups like the one in the screenshot above will appear when you go to particular areas within the camp that give an educational insight into being a refugee.

When threat levels are increased, this is the screen that will pop-up to take action:

By doing one of these, you will eliminate the threat and progress (in days) closer to your objective of keeping the camp 'healthy' until day 30.

Visuals/functionality

This style of animation is used throughout the game. W, A, S, D are used to control your character but most of the actions are performed by click, it is easily navigated.

11c Users' involvement	*Not known*
Were users' needs analysed prior to the game design/adaptation?	*Yes, the game has been designed with the help of human rights foundations and workers as to recreate real situations.*
Were users involved in the design of the game	*Yes, the game has been designed with the help of human rights foundations and workers as to recreate real situations.*
Were users involved in evaluation of the game	*Yes, the game has been designed with the help of human rights foundations and workers as to recreate real situations.*
Who uses the game and how often is it used?	*Famous people around the world have been used as ambassdors of the game.*
12. Stakeholders' involvement *What kind of stakeholders were involved in the implementation of the initiative? (training providers, policy makers, social partners…) and how were they involved. How was the use of the game promoted?*	*Human Rights foundations, Commerciall brands a TV channel (MTV) and UN International crisis group.*
13. Indicators of success	*The game is still active and being discussed.*

What were the indicators for success defined by the project? Why is the project successful/not successful? What evidence is there for success?	NA
14. Good practice - Can the game / project be characterised as good / effective practice, and why? - what is the learning for social seducement?	*Yes, the use o RPG elements with dosifying correctly the amount of information the player is given at time can help in the retention of the information/knowledge when presented. Thus way, some tasks if done with prior knowledge will drive an higher learning when the knowledge is later on exposed to the trainee.* *Replicate some of the learning processes by letting the player try to perfom actions without the right level of information.*
15. Process for supplementing information	*The webpage contains detailed information on the objective of the game and the initiative. It's simple to begin playing (it doesn't required a login etc.)*

5. Karma School

1. Title of the initiative/intervention/project	*Karma School[59]*
2. Web Link	**http://www.karmatycoon.com/**
3. Promoter (s) **who funded it**	*Dosomething.org Virtual community*
4. Developer(s) **who developed it**	*Not Known*
5. Investment *Amount of money and resources invested for the realisation of the initiative; Monthly amount of money needed for ongoing developement and support. Who funds ongoing costs*	*Not Known*
6. Lifecycle of the initiative *Is it just started, being developed, finalised, ended*	*Finalized and working*
7. Aims and objectives *What are the general aims and objectives of the initiative and what is the role of serious gaming / ORPG within it. (pls specify also whether the initiative is aimed at enhancing specifically business or entrepreneurial skills or both. Specify also whether the initiative enhances self- or collective entrepreneurship)*	*Karma Tycoon rocks the gaming world by offering you a thrilling ride through the world of social entrepreneurship as you earn Karma in virtual communities across the US.* *Karma Tycoon is a game that teaches users how to help their communities by running their own nonprofit organizations. The more you help your community, the more karma you get! With more karma, comes more eligibility for nonprofit grants; the more money you get, the more you can help your community! The object of the game is to collect as much karma as possible to become a Karma Tycoon*
8. Target Group *Specify category(ies) of disadvantaged group addressed*	*People interested in social entrepreneurship*
9. Socio economic enviroment addressed *Specify the features of the context addressed by the initiative*	*Social Entrepreneurs in the US*

10. Activities and tools *Describe the activities carried out and tools used to achieve the project goals*	*The game is based on the board table genre.* *Once logged in to www.KarmaTycoon.com, you're taken to a map screen where you're asked to select the city in which you want to run your nonprofit organization. Players may choose from eleven different cities across the US. Some of the cities are easier to play with than others.* *After selecting the city in which you want to play, select the type of nonprofit organization you want to run. With the options given at any time to split between learn and play actvities. The play button takes the player to the actual game, while the learn button leadsto a screen that teaches users about how specific issues (i.e. homelessness) are affecting particular cities. The learn section also includes links to actual nonprofit with information on how young people may volunteer to help solve issues.*
11. Role of gaming within the initiative *Did the initiative foresee the development/use of serious game/ORPG to achieve one or more project goals? If yes:*	*The game uses ORPG blended with board game features, which could be considered an online version of a game like Coopolis.*
11a Features of the game	*3D simulation putting the player in an immersive experience that generates stress when having to take decisions about patient triages*
Name of the game and web link (if available)	*Karma Tycoon* **http://www.karmatycoon.com/**
Methodology applied to develop or adapt the game	*NA*
Description of the game	*Karma Tycoon is a game that teaches users how to help their communities by running their own nonprofit organizations. The more he helps the community, the more karma received. With more karma, comes more eligibility for nonprofit grants; with more money, more communities can be helped ! The object of the game is to collect as much karma as possible to become a Karma Tycoon.*
Accessibility features of the game	*None*
Technology platforms on which it is available and most frequently used	*Web & Flash*

Is the game played off and/or online?	*Online*
What languages are supported? - Can groups play together in different languages?	*English, Spanish*
What models are used to measure and present success and progress of the gamers in the game	*Ranking associated with player*
If available on mobile terminals, is this done by generic apps or through webinterface	*Web*
Are there general technical limitations?	*None*
Can users play together via one or several logins?	*No.*
11b Learning dimension	
Describe the pedagogical approach adopted to design or adapt the game	*The game splits at all time the options between play and learn and give at any moment the player the ability to switch between contexts as to allow him to get more information and knowledge on social entrepreneurship. Links to real communities experiences are provided as to allow the engagment of the player with them if needed.*
Describe the features of trainers/facilitators helping gamers in playing.	*No facilitator or trainer.*
Topics and / or competencies that are being 'taught' with the help of the game	*Run local social communities businesses.*
How is acquired knowledge feedback to gamers	*none*
Is there a known set of knowledge that progress is measured towards	*No, the game is only oriented to raise knowledge about the situation in Darfur.*

Playing process	Obtain a Do Something login. It's quick and easy, just click on the link that takes you to the Do Something Web site www.DoSomething.org/register, answer a few simple questions (Do Something does not share personal information with other organizations), and receive your Do Something login. Once logged in to www.KarmaTycoon.com, you're taken to a map screen where you're asked to select the city in which you want to run your nonprofit organization. Players may choose from eleven different cities across the US. Some of the cities are easier to play with than others. For example, Columbus is a good place to start because it is an easy city, while Chicago, Los Angeles, New York, and San Francisco are the more difficult. After selecting the city in which you want to play, select the type of nonprofit organization you want to run. Notice that one button says learn and the other button says play. The play button takes you to the actual game, while the learn button leads you to a screen that teaches users about how specific issues (i.e. homelessness) are affecting particular cities. The learn section also includes links to actual nonprofit with information on how young people may volunteer to help solve issues. After you press the play button, you're taken directly to the game board!
11c Users' involvement	*Not known*
Were users' needs analysed prior to the game design/adaptation?	*Not known, but due to the amount of information about social communities and businesses, it is supposed that a large number of users have been interviewed.*
Were users involved in the design of the game	*Not known, but due to the amount of information about social communities and businesses, it is supposed that a large number of users have been interviewed.*
Were users involved in evaluation of the game	*Not known, but due to the amount of information about social communities and businesses, it is supposed that a large number of users have been interviewed.*
Who uses the game and how often is it used?	*Young people wanting to get envolved with social entrepreneurship.*
12. Stakeholders' involvement *What kind of stakeholders were involved in the implementation of the initiative? (training providers,*	*The promoter of the game is a virtual social community that is leveraging on database of socal communities and people wanting to help.*

policy makers, social partners…) and how were they involved. How was the use of the game promoted?	
13. Indicators of success *What were the indicators for success defined by the project? Why is the project successful/not successful? What evidence is there for success?*	*The game is still and is a learning tool used by dosomething to training members wanting to get more envolved with social entrepreneurship in the US.*
14. Good practice *- Can the game / project be characterised as good / effective practice, and why?* *- what is the learning for social seducement?*	*Yes, the effective use of community and training to the community can leverage in the conversion between user to active user in the social entrepreneurship. To get envolved social businesses and communities in the platform or game could certainly enhanced the possibilities for the platform to grow and be successul.* *The game is the conversion of a board game into an lone RPG game, Social Seducement can leverage from the experience and the existence of Coopolis.*
15. Process for supplementing information	*The game doesn't appear to be available anymore, when you try to login it says "The server is down". All information detailing the objectives etc was supplemeneted from an external website which talks about the initiative.*

6. THE NEW HEROES

1. Title of the initiative/intervention/project	*THE NEW HEROES*
2. Web Link	*http://www.pbs.org/opb/thenewheroes/*
3. Promoter (s) **who funded it**	*PBS education TV Channel*
4. Developer(s) **who developed it**	*PBS education TV Channel*
5. Investment *Amount of money and resources invested for the realisation of the initiative; Monthly amount of money needed for ongoing developement and support. Who funds ongoing costs*	*Not Known*
6. Lifecycle of the initiative *Is it just started, being developed, finalised, ended*	*Finalized*
7. Aims and objectives *What are the general aims and objectives of the initiative and what is the role of serious gaming / ORPG within it. (pls specify also whether the initiative is aimed at enhancing specifically business or entrepreneurial*	*A 4 parts TV serie with an online game associated with it.* *The New Heroes tells the dramatic stories of 14 daring people from all corners of the globe who, against all odds, are successfully alleviating poverty and illness, combating unemployment and violence, and bringing education, light, opportunity and freedom to poor and marginalized people around the world.*

skills or both. Specify also whether the initiative enhances self- or collective entrepreneurship)	
8. Target Group *Specify category(ies) of disadvantaged group addressed*	*Social Entrepreneurs in 3rd world countries*
9. Socio economic enviroment addressed *Specify the features of the context addressed by the initiative*	*Potential Social entrepreneurs for developing countries*
10. Activities and tools *Describe the activities carried out and tools used to achieve the project goals*	*The game is a storytelling driven genre, where the player must choose an action that he wants to perform and will have to select along the way several options that will unfold the full story. After decisions are to be taken, the game gives a small overview of the information, more for inpirational purposes than for actual learning.* *Different options/'wrong decisions' don't affect the experience of 'playing' the game other than the "Result:…" text differing depending on your ations.*
11. Role of gaming within the initiative *Did the initiative foresee the development/use of serious game/ORPG to achieve one or more project goals? If yes:*	*Narrative driven game with options enabling different storylines.*
11a Features of the game	*3D simulation putting the player in an immersive experience that generates stress when having to take decisions about patient triages*
Name of the game and web link (if available)	*THE NEW HEROES* *http://www.pbs.org/opb/thenewheroes/*
Methodology applied to develop or adapt the game	*NA*
Description of the game	*The New Heros foretells the histories of 14 entrepreneurs in a jouney to help people in the developing countries*
Accessibility features of the game	*None*

Technology platforms on which it is available and most frequently used	*Web*
Is the game played off and/or online?	*Online*
What languages are supported? - Can groups play together in different languages?	*English*
What models are used to measure and present success and progress of the gamers in the game	*Progress on the story associated with achievements made while story development.*
If available on mobile terminals, is this done by generic apps or through webinterface	*Web*
Are there general technical limitations?	*None*
Can users play together via one or several logins?	*No.*
11b Learning dimension	
Describe the pedagogical approach adopted to design or adapt the game	*The game is more used for inspirational purposes. Character by telling true stories and allowing the playing to compare his choices with the ones the real people behind the stories actually took.*
Describe the features of trainers/facilitators helping gamers in playing.	*None*
Topics and / or competencies that are being 'taught' with the help of the game	*It seeks to test your entrepreneurial instincts within tough and dangerous environments.*
How is acquired knowledge feedback to gamers	*Comparation with the true stories behing the information that allows for the people to take the decision.*
Is there a known set of knowledge that progress is measured towards	*No, the game is only oriented to raise knowledge about the situation in Darfur.*

Experiencing the game	*This is a simple point and click game, accessible straight from the website (with no login, or payment required). Once you launch the game, you are taken to this screen:*
	First you select a persona (there doesn't appear to be any particular reason to go with either over the other), you then choose your "big idea" which is either "Profit Pump" or "Crafty Clothing."
	You then get taken to screens like this:
	And have to make decisions like these ones using your instincts to tackle these issues/progress in the game:

Based on correct decisions, you will get praise such as this (although, again, there doesn't appear to be any difference in whether or not you complete the game if you choose the other options):

After you have made all of your decisions, your 'performance' and decision making will be evaluated and you will get an arbitrary results screen like this one:

Result: Determined Do-Gooder

You have a strong social conscience and have even made a difference in your local community. Your entrepreneurial talents help you accomplish tasks like building a thriving business that donates a portion of its profits to charity every year. While you're successful and have a well-developed social conscience, your ventures haven't permanently altered any social, economic or political system.

QUIT | PLAY AGAIN

Visuals/Navigation:
It's simple to navigate as it is a point and click and the design is just as it's shown above.

11c Users' involvement	*Not known*
Were users' needs analysed prior to the game design/adaptation?	*Yes, the game has been designed based on true stories*
Were users involved in the design of the game	*Yes, the game has been designed based on true stories*
Were users involved in evaluation of the game	*Yes, the game has been designed based on true stories*
Who uses the game and how often is it used?	*Not known*
12. Stakeholders' involvement *What kind of stakeholders were involved in the implementation of the initiative? (training providers, policy makers, social partners…) and how were they involved. How was the use of the game promoted?*	*The promoter of the game is education TV Channel, and the game is a companion to the TV show.*
13. Indicators of success *What were the indicators for success defined by the project? Why is the project successful/not successful?*	*Not Known*

What evidence is there for success?	
14. Good practice *- Can the game / project be characterised as good / effective practice, and why?* *- what is the learning for social seducement?*	*Yes, the effective use of real stories for inspiration purposes can be a a great tool for prescription of the experiences and allow more people to get converted in a trainne.* *Document success stories in the social entrepreneurship as to be used as references for the social seducement activity.* *Replicate some of the learning processes by letting the player try to perfom actions without the right level of information.*
15. Process for supplementing information	*This is a game based on the TV show that follows the dramatic stories of 14 people who are successfully allivieating poverty and illness. The game is playable straight from the web page and information can be gathered here too.*

7. EVOKE

1. Title of the initiative/intervention/project	EVOKE
2. Web Link	*www.urgentevoke.com*
3. Promoter (s) who funded it	*Korean ICT trust fund at the World Bank*
4. Developer(s) who developed it	*World Bank Institute*
5. Investment *Amount of money and resources invested for the realisation of the initiative; Monthly amount of money needed for ongoing developement and support. Who funds ongoing costs*	*NA*
6. Lifecycle of the initiative *Is it just started, being developed, finalised, ended*	*The game's first season began on March 3, 2010 and ended on May 12th, 2010. It's possible to request to join the game with a group now.*
7. Aims and objectives *What are the general aims and objectives of the initiative and what is the role of serious gaming / ORPG within it. (pls specify also whether the initiative is aimed at enhancing specifically business or entrepreneurial skills or both. Specify also whether the initiative enhances self- or collective entrepreneurship)*	*Evoke is an online 'serious game' designed to empower people all over the world to start solving urgent social problems like hunger, poverty, disease, conflict, climate change, sustainable energy, health care, education, and human rights. It is meant to encourage people to collaborate with each other, across the world, to develop real world ideas to address these challenges.*
8. Target Group *Specify category(ies) of disadvantaged group addressed*	*EVOKE is for all ages; recommended age 13 and up.*
9. Socio economic enviroment addressed *Specify the features of the*	*Mainly students to be engaged in local communities and develop innovative solutions to local development challenges.*

context addressed by the initiative	
10. Activities and tools *Describe the activities carried out and tools used to achieve the project goals*	*A variety of social media tools and narrative approaches commonly found in video games.*
11. Role of gaming within the initiative *Did the initiative foresee the development/use of serious game/ORPG to achieve one or more project goals? If yes:*	*Yes.*
11a Features of the game	
Name of the game and web link (if available)	*Evoke www.urgentevoke.com*
Methodology applied to develop or adapt the game	*NA*
Description of the game	*The game acts as a kind of online course. The system launches a social problem to be solved and everyone can decide whether to participate in the solution. The mission is to practice the world-changing skills. Each mission has three objectives.* *LEARN - Investigate our great challenges and share what you discover. ACT - Get out in the world. Do something small to help solve. IMAGINE - Unleash your creativity. Tell a story about the future you want to make.* *The game is supported by pictures, videos, blogs, submissions of questionnaires.*
Accessibility features of the game	*NA*
Technology platforms on which it is available and most frequently used	*ELGG platform*
Is the game played off and/or online?	*Online*
What languages are supported? - Can groups play together in different languages?	*Groups can play together in different languages.*

What models are used to measure and present success and progress of the gamers in the game	*NA*
If available on mobile terminals, is this done by generic apps or through webinterface	*It is available on mobile terminals through webinterface.*
Are there general technical limitations?	*NA*
Can users play together via one or several logins?	*Several logins.*
11b Learning dimension	
Describe the pedagogical approach adopted to design or adapt the game	*Massive multi-player game. Platform for social innovators to support dialogue and action on global development challenges. Each player is asked to contribute to find a solutions, answering to questionnaires, proposing ideas, interacting with other players.*
Describe the features of trainers/facilitators helping gamers in playing.	*Experts in facilitating training classes, designing activities to reinforce learning (game, tests, excercises), consulting on performance improvement and organizational development project, general ledger accounting*
Topics and / or competencies that are being 'taught' with the help of the game	*Collaboration, creativity, courage, entrepreneurship, knowledge share, local insight (know your market, meet local needs and build on local assets), resourcefulness, sustainability.*
How is acquired knowledge feedback to gamers	*Through voting by other palyers*
Is there a known set of knowledge that progress is measured towards	*NA*
11c Users' involvement	
Were users' needs analysed prior to the game design/adaptation?	*Yes.*
Were users involved in the design of the game	*Yes.*
Were users involved in evaluation of the game	*Yes.*

Who uses the game and how often is it used?	*NA*
12. Stakeholders' involvement *What kind of stakeholders were involved in the implementation of the initiative? (training providers, policy makers, social partners…) and how were they involved. How was the use of the game promoted?*	*Librarians donated time to do research. Someone developed a wiki for the game. Teachers created their own online community within the game. Some players developed an online conference for sharing the best ideas. One player wrote a song about EVOKE. Others planted gardens.*
13. Indicators of success *What were the indicators for success defined by the project? Why is the project successful/not successful? What evidence is there for success?*	*People from 150 countries registered to play. Players had submitted over 23,500 blog posts (about 335 each day), 4,700 photos and over 1,500 videos highlighting challenges and solutions to the development issues featured each week.* *EVOKE has created space for dialogue around serious issues that may not be discussed in other social networking forums.*
14. Good practice *- Can the game / project be characterised as good / effective practice, and why?* *- what is the learning for social seducement?*	*Evoke can be a good practice in serious game because it is spread all over the world, everyone can play, is easily accessible, a lot of people used it.* *For social seducement: don't use a too restrictive target, see the importance of telling stories as a starting point for gaming, consider digital interaction with other players (network gaming).*
15. Process for supplementing information	*Information provided through the web page and videos designed to teach you how to play/what's your objective here: www.urgentevoke.com*

8. YENTELS

1. Title of the initiative/intervention/project	**YENTELS**-*Young European Entrepreneurs e-learning Suite[60]*
2. Web Link	*Www.yentels.com*
3. Promoter (s) who funded it	*European Commission*
4. Developer(s) who developed it	*PIXELearning Ltd, UK - Virtech Ltd, Bulgaria - Alitern, Spain - Foretagarna, Sweden*
5. Investment *Amount of money and resources invested for the realisation of the initiative; Monthly amount of money needed for ongoing developement and support. Who funds ongoing costs*	*NA*
6. Lifecycle of the initiative *Is it just started, being developed, finalised, ended*	*ended*
7. Aims and objectives *What are the general aims and objectives of the initiative and what is the role of serious gaming / ORPG within it. (pls specify also whether the initiative is aimed at enhancing specifically business or entrepreneurial skills or both. Specify also whether the initiative enhances self- or collective entrepreneurship)*	*The main objective of the project is to encourage entrepreneurship of young people to improve employability, competitiveness and innovation developing a simulation/computer gaming based e-learning suite of training materials which will assist them in acquiring the entrepreneurial skills necessary to set up & run their own businesses.*
8. Target Group *Specify category(ies) of disadvantaged group addressed*	*The project will particularly focus on young people who have chosen not to follow the traditional higher education route and are more suited to following a vocational career.*
9. Socio economic enviroment addressed *Specify the features of the context addressed by the*	

---

[60] *This game has been discontinued therefore there is no image avaiblable on the web*

initiative	
10. Activities and tools *Describe the activities carried out and tools used to achieve the project goals*	*There are 3 tools in the YENTELS online suite: the game; the e-learning course; the knowledge base.*
11. Role of gaming within the initiative *Did the initiative foresee the development/use of serious game/ORPG to achieve one or more project goals? If yes:*	*The complexities of running a business made easy simply by playing the game, the player begin to understand what's involved in running the business. Test knowledge and gain access to a wealth of training resources.*
11a Features of the game	
Name of the game and web link (if available)	*DJ Game www.yentels.com*
Methodology applied to develop or adapt the game	*The game compliments the YENTELS course and the YENTELS knowledge Base by helping learners to identify areas where they may have a lack of knowledge in a particular subject. Having identified the 'lack of knowledge' subject, they will then have the ability to find the relevant subject material (through the course or the knowledge base) in a traditional e-Learning format. The great thing about the game is that the player will be able to play it repetitively (through-out their learning phase) and test their new found knowledge in the context of the game.*
Description of the game	*The YENTELS Game is based on the scenario of a young person who decides to start a new DJ business. The objective for the player is to make key critical decisions within the game in order to turn their new DJ business into a success. The player goes through various stages/options which are chosen to highlight a range of business related subjects. The game is lasts approximately an hour, but can be paused at any point and returned to. Games can also be replayed depending on what decisions you make within the game.*
Accessibility features of the game	*Registration with name and password*
Technology platforms on which it is available and most frequently used	*NA*
Is the game played off and/or online?	*Online*

What languages are supported? - Can groups play together in different languages?	*English, Bulgarian, Swedish, Spanish.* *Groups can't play together in different languages.*
What models are used to measure and present success and progress of the gamers in the game	*Automatically by the system.*
If available on mobile terminals, is this done by generic apps or through webinterface	*No.*
Are there general technical limitations?	*NA*
Can users play together via one or several logins?	*Several logins.*
11b Learning dimension	
Describe the pedagogical approach adopted to design or adapt the game	*NA*
Describe the features of trainers/facilitators helping gamers in playing.	*Found nothing about trainers/facilitators*
Topics and / or competencies that are being 'taught' with the help of the game	*Entrepreneurship, marketing, legal and financial issue.*
How is acquired knowledge feedback to gamers	*Finishing the game.*
Is there a known set of knowledge that progress is measured towards	*NA*
11c Users' involvement	
Were users' needs analysed prior to the game design/adaptation?	*Yes.*
Were users involved in the	*Yes.*

design of the game	
Were users involved in evaluation of the game	*Yes.*
Who uses the game and how often is it used?	*Training centres for young people.*
12. Stakeholders' involvement *What kind of stakeholders were involved in the implementation of the initiative? (training providers, policy makers, social partners…) and how were they involved. How was the use of the game promoted?*	*Training providers, Local policy makers.*
13. Indicators of success *What were the indicators for success defined by the project? Why is the project successful/not successful? What evidence is there for success?*	*No evidence for success.*
14. Good practice *- Can the game / project be characterised as good / effective practice, and why?* *- what is the learning for social seducement?*	*This project is the precursor of a LLP called Entre Explorer.*
15. Process for supplementing information	*The link to the itself game is null, it's been discontinued.*

9. ENTRE EXPLORER

1. Title of the initiative/intervention/project	Entre Explorer - Serious Game for Immersive Entrepreneurs
2. Web Link	www.entrexplorer.com
3. Promoter (s) who funded it	European Commission
4. Developer(s) who developed it	Center for Economic Policy Research at the University of Minho, Spin-off Sketchpixel (Portugal), Coventry & Warwickshire Chamber of Commerce (United Kingdom), Steirische Volkswirtschaftliche Gesellschaft (Austria) and Bulgarian Development Agency (Bulgaria)
5. Investment *Amount of money and resources invested for the realisation of the initiative; Monthly amount of money needed for ongoing developement and support. Who funds ongoing costs*	NA
6. Lifecycle of the initiative *Is it just started, being developed, finalised, ended*	Ended.
7. Aims and objectives *What are the general aims and objectives of the initiative and what is the role of serious gaming / ORPG within it. (pls specify also whether the initiative is aimed at enhancing specifically business or entrepreneurial skills or both.*	*The main purpose of the Project ENTRExplorer "Serious Game for Immersive Entrepreneurs" is to develop a 3D online serious game related to entrepreneurship theme where the users\learners can have access to learning contents that will assist them in acquisition of entrepreneurial skills necessary to manage their own businesses in the future. This project has also the ambition of stimulate innovative ideas, drive and prepare learners to set up their own*

Specify also whether the initiative enhances self- or collective entrepreneurship)	*occupation and creation of new jobs.*
8. Target Group *Specify category(ies) of disadvantaged group addressed*	*Person 15-25 who desire to become an entrepreneur.*
9. Socio economic enviroment addressed *Specify the features of the context addressed by the initiative*	*NA (resources on project web site not accessible)*
10. Activities and tools *Describe the activities carried out and tools used to achieve the project goals*	*NA (resources on project web site not accessible)*
11. Role of gaming within the initiative *Did the initiative foresee the development/use of serious game/ORPG to achieve one or more project goals? If yes:*	*Improve entrepreneurial competences.*
11a Features of the game	
Name of the game and web link (if available)	*Entreexplorer Game www.entrexplore.com*
Methodology applied to develop or adapt the game	*NA*
Description of the game	*See above*
Accessibility features of the game	*Free. Registration needed.*
Technology platforms on which it is available and most frequently used	*NA*
Is the game played off and/or online?	*Online*
What languages are supported? - Can groups play together in different languages?	*English, Bulgarian, Swedish, Portuguese. No, groups can't play together in different languages.*

What models are used to measure and present success and progress of the gamers in the game	*Step to the next level of the game.*
If available on mobile terminals, is this done by generic apps or through webinterface	*Through webinterface.*
Are there general technical limitations?	*NA*
Can users play together via one or several logins?	*Several logins*
11b Learning dimension	
Describe the pedagogical approach adopted to design or adapt the game	*NA*
Describe the features of trainers/facilitators helping gamers in playing.	*NA*
Topics and / or competencies that are being 'taught' with the help of the game	*NA*
How is acquired knowledge feedback to gamers	*Entrepreneurship, taking decisions, financial-economic knoledge, leadership.*
Is there a known set of knowledge that progress is measured towards	*NA*
11c Users' involvement	
Were users' needs analysed prior to the game design/adaptation?	*Yes.*
Were users involved in the design of the game	*Yes.*
Were users involved in evaluation of the game	*Yes, during the piloting phase of the project.*
Who uses the game and how often is it used?	*NA*

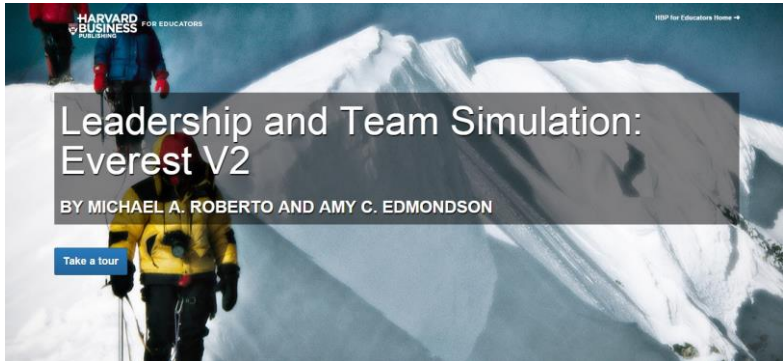|	
12. Stakeholders' involvement *What kind of stakeholders were involved in the implementation of the initiative? (training providers, policy makers, social partners…) and how were they involved. How was the use of the game promoted?*	*Training providers, policy makers.*
13. Indicators of success *What were the indicators for success defined by the project? Why is the project successful/not successful? What evidence is there for success?*	*NA*

10. CISCO ASPIRE

1. Title of the initiative/intervention/project	Cisco Aspire
2. Web Link	*At the moment is not available*
3. Promoter (s) who funded it	*Academy Department of Cisco Systems*
4. Developer(s) who developed it	*Researchers at Academy Department of Cisco Systems*
5. Investment Amount of money and resources invested for the realisation of the initiative; Monthly amount of money needed for ongoing developement and support. Who funds ongoing costs	/
6. Lifecycle of the initiative Is it just started, being developed, finalised, ended	*Ended, end out of market for the moment.*
7. Aims and objectives What are the general aims and objectives of the initiative and what is the role of serious gaming / ORPG within it. (pls specify also whether the initiative is aimed at enhancing specifically business or entrepreneurial skills or both. Specify also whether the initiative enhances self- or collective entrepreneurship)	*The Simulation based learning Game "Cisco Aspire" wants to give the young network associates (in the protected and interactive world of Aspire) the opportunities to:* *- learn to think like an entrepreneur* *- learn business and financial skills* *- discover networking opportunities* *- practice business and networking skills* *- negotiate network projects* *- make business decisions* *- build relationship and gain experience* *- build himself/herself reputation* *- look for new contract opportunities* *- purchase the right equipment* *- install and configure equipment* *- set-up networks* *- troubleshoot networks* *- visit the learning center* *- earn gadget* *… having little fun while they improve their skills*
8. Target Group Specify category(ies) of disadvantaged group addressed	*The young unemployers that are attending the basic network training course Cisco CCNA (Cisco Certified Network Associate) to become network engineers*
9. Socio economic enviroment addressed Specify the features of the context addressed by the initiative	*Unemployed people that want to develop networking skills and to become self-entrereneurs*
10. Activities and tools	*The Simulation based learning Game "Cisco Aspire"*

Describe the activities carried out and tools used to achieve the project goals	*brings the gamer into a virtual city in which the gamer simulate to be a technician/self-entrepreneur in the world of digital networks. In this city he/she receive some technical proposals with some opportunities/risks and he/she must make decisions regarding the proposals, like which devices to aquire depending on the features and costs, how to configure them, how to administer the budget, evaluate his/her job and how much costs to final customer, which partnership he/she has to build to achieve the goals required by the customers. All the step are opportunities/risks that the gamer must carefully evaluate.*
11. Role of gaming within the initiative *Did the initiative foresee the development/use of serious game/ORPG to achieve one or more project goals? If yes:*	*Serious Game, Business Simulation, Role Playing*
11a Features of the game	*The game approaches the Network Management, Supply Chain and Customer Services*
Name of the game and web link (if available)	*Cisco Aspire* <u>*www.cisco.netacad.net*</u> *(No more available).*
Methodology applied to develop or adapt the game	*Not known*
Description of the game	*The gamer is a young technician that receives some requests to build some new digital networks (made up of PC, Servers, Routers, Switchs, and so on) or to restore some new ones. He/She is offered a budget usually and he/she has make the better decisions about the assigned job.* *In the game a simulator is also available to configure the network devices as they where the real ones.*
Accessibility features of the game	*NA*
Technology platforms on which it is available and most frequently used	*NA*
Is the game played off and/or online?	*Off line*
What languages are supported? - Can groups play together in different languages?	*American English*
What models are used to measure and present success	*Not known*

and progress of the gamers in the game	
If available on mobile terminals, is this done by generic apps or through webinterface	*Only PC*
Are there general technical limitations?	*None*
Can users play together via one or several logins?	*No*
11b Learning dimension	
Describe the pedagogical approach adopted to design or adapt the game	*The theoretical parts of the skills that a gamer must hold are provided during the traditional training in the classroom.* *During the game the player must implement in a protected environment what he/she learnt.*
Describe the features of trainers/facilitators helping gamers in playing.	*- The trainer could became the facilitator during the play of the game giving suggestions and clearifying some aspects of the job of network engineering.*
Topics and / or competencies that are being 'taught' with the help of the game	*- learn to think like an entrepreneur* *- learn business and financial skills* *- discover networking opportunities* *- practice business and networking skills* *- negotiate network projects* *- make business decisions* *- build relationship and gain experience* *- build himself/herself reputation* *- look for new contract opportunities* *- purchase the right equipment* *- install and configure equipment* *- set-up networks* *- troubleshoot networks* *- visit the learning center* *- earn gadget*
How is acquired knowledge feedback to gamers	*- The knowledge is explained by trainer/facilitator, and then tested by the player when taking decisions.*
Is there a known set of knowledge that progress is measured towards	*- Measured by trainer/facilitator*
11c Users' involvement	*Not known*
Were users' needs analysed prior to the game design/adaptation?	*/*

Were users involved in the design of the game	
Were users involved in evaluation of the game	
Who uses the game and how often is it used?	
12. Stakeholders' involvement *What kind of stakeholders were involved in the implementation of the initiative? (training providers, policy makers, social partners…) and how were they involved. How was the use of the game promoted?*	*Not known*
13. Indicators of success *What were the indicators for success defined by the project? Why is the project successful/not successful? What evidence is there for success?*	*The virtual facilitator gives permanent feeback to the players and the configuration simulator allow the player to know if the problems are solved and the learning assimilated correctly.*
14. Good practice *- Can the game / project be characterised as good / effective practice, and why?* *- what is the learning for social seducement?*	*The game has not yet been developed in the version 2.0, I suppose for the complexities of the tasks the game would deal with.* *The learning for Social Seducement project is that the facilitator for so complex skills must be real, and to provide some more inputs to the players in the matters they miss specific skills.* *Moreover the facilitator must be real to have the player engaged.*
15. Process for supplementing information	*NA*

11. EVEREST V2

1. Title of the initiative/intervention/project	*Everest V2*
2. Web Link	*http://academic.hbsp.harvard.edu/everest*
3. Promoter (s) who funded it	*Harvard University*
4. Developer(s) who developed it	*Forio Online Simulations*
5. Investment *Amount of money and resources invested for the realisation of the initiative; Monthly amount of money needed for on-going development and support. Who funds on-going costs*	*NA*
6. Lifecycle of the initiative *Is it just started, being developed, finalised, ended*	*2ⁿᵈ release*
7. Aims and objectives *What are the general aims and objectives of the initiative and what is the role of serious gaming / ORPG within it. (pls specify also whether the initiative is aimed at enhancing specifically business or entrepreneurial skills or both. Specify also whether the initiative enhances self- or collective entrepreneurship)*	*Team-based simulation using the dramatic context of a Mount Everest climb to teach group dynamics and leadership with an updated user experience.* *Students play one of five different roles on a team of hikers attempting to summit the mountain. During the simulated six-day climb, each hiker is faced with health, weather, and resource related challenges.* *How well each team member shares information and makes sound decisions determines if they make it to the next camp and survive the climb.* *FOR COURSES IN:* *Organizational Behaviour* *Group Dynamics* *Leadership*
8. Target Group *Specify category(ies) of disadvantaged group*	*No disadvantage group,* *Higher education students*

154

addressed	
9. Socio economic environment addressed *Specify the features of the context addressed by the initiative*	*This simulation combines the proven learning objectives and storyline of the original with an updated user experience and enhanced administrative features.* *Higher education students during the classes*
10. Activities and tools *Describe the activities carried out and tools used to achieve the project goals*	*Students have six days to travel through five camps on their way to the top of Everest. There is only one day of slack built into the schedule and the team must use it judiciously. At each camp, students have an opportunity to analyse current conditions and share their conclusions with the team. The students must then decide whether or not to advance to the next camp.* *CLIMBING CONDITIONS — Conditions such as weather, physical health, supply inventory, and average hiking speed factor heavily into the students' climbing decisions. The dashboard view provides up-to-the-minute information on the conditions as well as the status of the climb.* *CHAT FEATURE — During the ascent, students can talk with each other via the chat tool. This simulates the communication conditions that real-world climbers have with walkie-talkies.* *Students monitor the status of their health, weather, supplies, and position on the mountain.* *CONDITION DETAILS — At all times, students can drill into the dashboard for more detailed information on each category.* *LEARNING OBJECTIVES — A comprehensive Teaching Note covers key learning objectives, including:* *How to build, participate in, and lead effective teams.* *How opposing interests and asymmetric information affect team dynamics.* *How cognitive biases impair decision-making.* *How teams and leaders deal with trade-offs between short-term task completion and longer-term task effectiveness.* *Duration* *1 to 3 hours including introduction and debrief*

11. Role of gaming within the initiative *Did the initiative foresee the development/use of serious game/ORPG to achieve one or more project goals? If yes:*	*NA*
11a Features of the game	*See above*
Name of the game and web link (if available)	*Everst V2 – see above*
Methodology applied to develop or adapt the game	*- NA*
Description of the game	*See above*
Accessibility features of the game	*NA*
Technology platforms on which it is available and most frequently used	*NA*
Is the game played off and/or online?	*online*
What languages are supported? - Can groups play together in different languages?	*English and Spanish* *Yes, groups can play together in different languages*
What models are used to measure and present success and progress of the gamers in the game	*At all times, students can drill into the dashboard for more detailed information on each category. Each team member makes individual decisions relative to their role. Instructors have access to aggregate class data, individual user and team performance results, and simulation configuration options.*
If available on mobile terminals, is this done by generic apps or through webinterface	*NA*
Are there general technical limitations?	*Unknown*
Can users play together via one or several logins?	*Each student has its own login*
11b Learning dimension	

Describe the pedagogical approach adopted to design or adapt the game	*Students explore group dynamics and leadership in the context of climbing Mount Everest. In each round of the sim, students decide how to effectively distribute supplies and information needed for the ascent — decisions that affect speed, health, and ultimately the team's success in summiting the mountain.* *Students play one of five team members attempting to summit Mount Everest in this collaborative, multi-player simulation. During each round of play, team members analyze information on weather, health conditions, supplies, goals, or hiking speed, and determine how much of that information to communicate to their teammates. Failure to accurately communicate and analyze information has consequences on team performance.*
Describe the features of trainers/facilitators helping gamers in playing.	*Teachers in class*
Topics and / or competencies that are being 'taught' with the help of the game	*Explore influences on collective decision-making — including team dynamics, opposing interests, and cognitive biases* *Analyze different leadership approaches and team responses* *Understand effective strategies for building, participating in, and leading teams more effectively* *Leadership* *Team Building* *Communication* *Group Dynamics and Group Decision-Making*
How is acquired knowledge feedback to gamers	*In the Analyze section, students can drill down for more detailed status information.* *Instructors have access to aggregate class data, individual user and team performance results, and simulation configuration options*
Is there a known set of knowledge that progress is measured towards	*After team discussion, students must input their climb decisions separately in order to advance to the next day. The ability to effectively evaluate and exchange information will determine the team's success on the climb.*
11c Users' involvement	
Were users' needs analysed prior to the game design/adaptation?	*Unknown*
Were users involved in the design of the game	*Unknown*

Were users involved in evaluation of the game	*Unknown*
Who uses the game and how often is it used?	*Higher education students in classes*
12. Stakeholders' involvement *What kind of stakeholders were involved in the implementation of the initiative? (training providers, policy makers, social partners…) and how were they involved. How was the use of the game promoted?*	*Unknown*
13. Indicators of success *What were the indicators for success defined by the project? Why is the project successful/not successful? What evidence is there for success?*	*Students explore group dynamics and leadership in the context of climbing Mount Everest. In each round of the sim, students decide how to effectively distribute supplies and information needed for the ascent — decisions that affect speed, health, and ultimately the team's success in summiting the mountain.*
14. Good practice *- Can the game / project be characterised as good / effective practice, and why? - What is the learning for Social Seducement?*	*Yes. For the approach used: simulation and face-to-face and virtual (through the chat) discussion among a group; for the easiness of the method used: incremental steps based on decisions taken jointly that will lead or not to achieve the success.*
15. Process for supplementing information	

12. THE START UP GAME

1. Title of the initiative/intervention/project	*The Start Up Game*
2. Web Link	*http://forio.com/store/wharton-entrepreneurship-simulation-startup-game/*
3. Promoter (s) who funded it	*Wharton School of the University of Pennsylvania and Ethan Mollick*
4. Developer(s) who developed it	*Forio Online Simulations*
5. Investment *Amount of money and resources invested for the realisation of the initiative; Monthly amount of money needed for on-going development and support. Who funds on-going costs*	*NA*
6. Lifecycle of the initiative *Is it just started, being developed, finalised, ended*	*On-going. Available to be purchased* *Before being made available to general audiences, this simulation was played by over 2,000 students — MBAs, undergraduates, and executive students — as well as people with both extensive entrepreneurial experience and those who are much less familiar with the concepts involved. It is often listed as a course highlight by players, regardless of their background.*
7. Aims and objectives *What are the general aims and objectives of the initiative and what is the role of serious gaming / ORPG within it. (pls specify also whether the initiative is aimed at enhancing specifically business or entrepreneurial skills or both. Specify also whether the initiative enhances self- or collective entrepreneurship)*	*Startups are different from larger firms, and often encounter unstructured and difficult problems that are not as well-defined as the strategy issues faced by established organizations.* *In this simulation, students play the role of different stakeholders in a market full of early-stage startups. They gain an understanding of decision-making under uncertainty, the variations in strategy among individuals, and experience with common trade-offs resulting from different strategies and decisions.*
8. Target Group *Specify category(ies) of disadvantaged group addressed*	*No disadvantage group,* *Higher education students*

9. Socio economic environment addressed *Specify the features of the context addressed by the initiative*	*This simulation combines the proven learning objectives and storyline of the original with an updated user experience and enhanced administrative features.* *Students and interested in starting up an activity*
10. Activities and tools *Describe the activities carried out and tools used to achieve the project goals*	*Students play one of three roles: founders, investors, or employees. Founders are individuals starting an early-stage company. Investors are Angel or VC investors. Employees are C-level talent who will become part of the core management team and will have a significant stake in the company. Students in all roles compete and cooperate in order to fund, join, and grow startups.* *At the conclusion of the game, the simulation scores the performance of each student based on a range of key factors known to be important to startups: Rich versus King orientation, management skill sets, diversity, funding levels, equity versus salary compensation, and valuation approaches. In addition to an extensive teaching note, the simulation includes a video from Prof. Mollick and video interviews with successful entrepreneurs and investors for use during the classroom debrief session.* *Duration* *1 to 3 hours including introduction and debrief*
11. Role of gaming within the initiative *Did the initiative foresee the development/use of serious game/ORPG to achieve one or more project goals? If yes:*	*NA*
11a Features of the game	
Name of the game and web link (if available)	*The Start Up Game*
Methodology applied to develop or adapt the game	*- NA*
Description of the game	*See above*
Accessibility features of the game	*NA*
Technology platforms on which it is available and most frequently used	*NA*

Is the game played off and/or online?	*online*
What languages are supported? - Can groups play together in different languages?	*English* *Yes, groups can play together in different languages*
What models are used to measure and present success and progress of the gamers in the game	*At the conclusion of the game, the simulation scores the performance of each student based on a range of key factors known to be important to startups: Rich versus King orientation, management skill sets, diversity, funding levels, equity versus salary compensation, and valuation approaches.*
If available on mobile terminals, is this done by generic apps or through webinterface	*NA*
Are there general technical limitations?	*Unknown*
Can users play together via one or several logins?	*Each student / player has its own login*
11b Learning dimension	
Describe the pedagogical approach adopted to design or adapt the game	*NA*
Describe the features of trainers/facilitators helping gamers in playing.	*Unknown*
Topics and / or competencies that are being 'taught' with the help of the game	*Introduce key concepts in entrepreneurial management, including valuation approaches, compensation, fundraising considerations, Rich versus King orientation, exploration versus exploitation, and the effects of diversity* *Illustrate the interplay between the many factors required to make entrepreneurial ventures successful* *Provide classroom experiences in entrepreneurship* *Entrepreneurship* *Fundraising and Valuation Considerations* *Rich versus King Orientation* *Exploration, Exploitation, and Diversity* *Employee Compensation*
How is acquired knowledge feedback to gamers	*Through the debriefing*

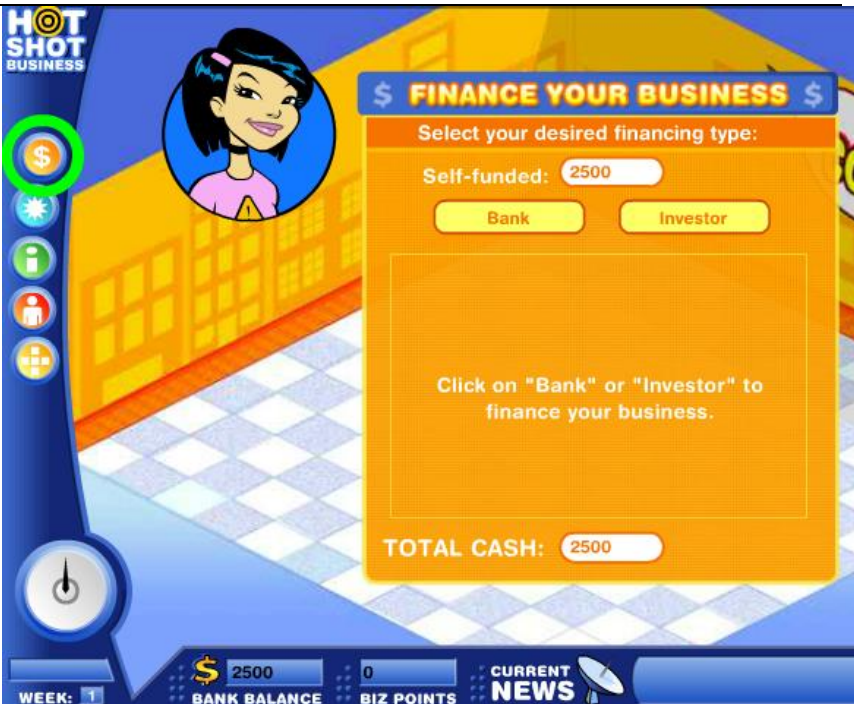|	
Is there a known set of knowledge that progress is measured towards	*Unknown*
11c Users' involvement	
Were users' needs analysed prior to the game design/adaptation?	*Unknown*
Were users involved in the design of the game	*Unknown*
Were users involved in evaluation of the game	*Yes*
Who uses the game and how often is it used?	*Students and interested in starting up a business*
12. Stakeholders' involvement *What kind of stakeholders were involved in the implementation of the initiative? (Training providers, policy makers, social partners…) and how were they involved. How was the use of the game promoted?*	*People with both extensive entrepreneurial experience and those who are much less familiar with the concepts involved.*
13. Indicators of success *What were the indicators for success defined by the project? Why is the project successful/not successful? What evidence is there for success?*	*The simulation scores the performance of each student based on a range of key factors known to be important to startups: Rich versus King orientation, management skill sets, diversity, funding levels, equity versus salary compensation, and valuation approaches.*
14. Good practice *- Can the game / project be characterised as good / effective practice, and why?* *- What is the learning for Social Seducement?*	*Relevant for* *the topic: starting up a business* *the group discussion / cooperation required* *the clear set of roles foreseen* *the short duration*
15. Process for supplementing information	

13. HOT SHOT BUSINESS

1. Title of the initiative/intervention/project	*Hot Shot Business*[61]
2. Web Link	*http://igrezadecu.com/hot-shot-business/*
3. Promoter (s) who funded it	*Disney*
4. Developer(s) who developed it	*Kauffman Foundation and Disney Online's creative team*
5. Investment *Amount of money and resources invested for the realisation of the initiative; Monthly amount of money needed for on-going development and support. Who funds on-going costs*	*- NA*
6. Lifecycle of the initiative *Is it just started, being developed, finalised, ended*	*On-going - free*
7. Aims and objectives *What are the general aims and objectives of the initiative and what is the role of serious gaming / ORPG within it. (pls specify also whether the initiative is aimed at enhancing specifically business or entrepreneurial skills or both. Specify also whether the*	*Hot Shot Business is an online business simulation game. Players pick various businesses to start and play to win. Sample online business range from pet shops to skate parks, and comic book shops.* *Hot Shot Business blends fast-paced, fun addictive game play with real-world business-simulation lessons to teach "tweens," (children ages 9 to 12) entrepreneurship concepts and business skills.*

---

[61] *No details of user's involvement found and no 'hub' area to get more information about the game's objectives etc from the publisher.*

initiative enhances self- or collective entrepreneurship)	
8. Target Group *Specify category(ies) of disadvantaged group addressed*	*No disadvantaged people specifically addressed*
9. Socio economic environment addressed *Specify the features of the context addressed by the initiative*	*Students of primary and secondary school as well anybody interested in starting up a business.*
10. Activities and tools *Describe the activities carried out and tools used to achieve the project goals*	*The game is based on a dialogue between two business advisors and the entrepreneur (the player). In case for instance of the need of a loan, there is a third subject to deal with.* *Each dialogue provides basic information on how and what it is intended to start up a business.* *Possibility of tailoring the business* *Marketing is also briefly treated* *After the activities for the start-up the simulation continues with the running of the business itself.* *Generic characters serve as a prompt in this game, with them popping up every now and then to offer you helpful advice in what decisions to make to achieve your goal (making an extra £2,000 for your business).*
11. Role of gaming within the initiative *Did the initiative foresee the development/use of serious game/ORPG to achieve one or more project goals? If yes:*	*Yes*
11a Features of the game	
Name of the game and web link (if available)	*See above*
Methodology applied to develop or adapt the game	*NA*
Description of the game	*See above*
Accessibility features of the	*NA*

game	
Technology platforms on which it is available and most frequently used	*NA*
Is the game played off and/or online?	*online*
What languages are supported? - Can groups play together in different languages?	*English*
What models are used to measure and present success and progress of the gamers in the game	*There is a dashboard available with the sum up of the information and where to find the current state of the art of the business. It is also useful for tailoring the business*
If available on mobile terminals, is this done by generic apps or through webinterface	*No*
Are there general technical limitations?	*No*
Can users play together via one or several logins?	*Only one user per time*
11b Learning dimension	
Describe the pedagogical approach adopted to design or adapt the game	*Very basic:* *First general information on how to start up a business, what it is needed and the decision on the typology of business; Identification of the goal.* *Than running simulation towards the achievement of the goal*
Describe the features of trainers/facilitators helping gamers in playing.	*No facilitators required*
Topics and / or competencies that are being 'taught' with the help of the game	*Basic entrepreneurship competences*
How is acquired knowledge feedback to gamers	*Through the dashboard. If the objective is achieved or not*

Is there a known set of knowledge that progress is measured towards	*No*
Experiencing the game	*When you begin the game, you will be taken to this introduction screen with characters Jack and Kate who are there to prompt you with advice/things to do.* *The objective of the game is to run a successful store of one of the three business types:* *The objective is to make an additional £2,000 (to your starting sum of £2,500) in a virtual 6 weeks.*

You then manage your business based on multiple variables and adjust your approach depending on what each of the tabs on the left tell you, these tabs are; finances, customer needs, stations (price changes, what you're selling), marketing (adjustments you make to your business plan dependent on films that are being released etc.)

Visuals and navigation:

The visuals are bright and cartoony as shown above and the game is easy to navigate (point and click). In terms of the other games that are playable here, this game is also on the higher end of the budgets given.

11c Users' involvement	*Unknown*
Were users' needs analysed prior to the game design/adaptation?	
Were users involved in the design of the game	
Were users involved in evaluation of the game	
Who uses the game and how often is it used?	
12. Stakeholders' involvement *What kind of stakeholders were involved in the implementation of the initiative? (Training providers, policy makers, social partners…) and how were they*	*NA*

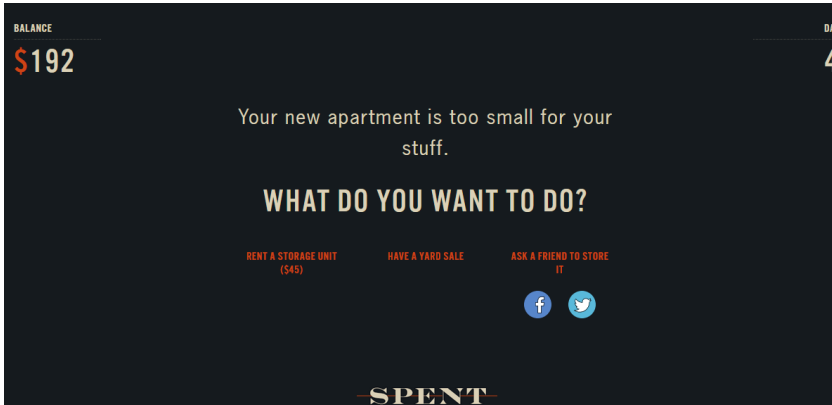| involved. How was the use of the game promoted?	
13. Indicators of success *What were the indicators for success defined by the project? Why is the project successful/not successful? What evidence is there for success?*	*NA*
14. Good practice *- Can the game / project be characterised as good / effective practice, and why?* *- What is the learning for Social Seducement?*	*Relevant since it is a basic game with basic visual identity.*
15. Process for supplementing information	

14. SPENT

1. Title of the initiative/intervention/project	*SPENT*
2. Web Link	*http://www.umdurham.org/spent.html*
3. Promoter (s) who funded it	*Urban Ministries of Durham (UMD)*
4. Developer(s) who developed it	*Agency McKinney*
5. Investment *Amount of money and resources invested for the realisation of the initiative; Monthly amount of money needed for on-going development and support. Who funds on-going costs*	*- NA*
6. Lifecycle of the initiative *Is it just started, being developed, finalised, ended*	*On-going*
7. Aims and objectives *What are the general aims and objectives of the initiative and what is the role of serious gaming / ORPG within it. (pls specify also whether the initiative is aimed at enhancing specifically business or entrepreneurial skills or both. Specify also whether the initiative enhances self- or collective entrepreneurship)*	*SPENT is an online game about surviving poverty and homelessness, whose mission "is to provide food, clothing, shelter and supportive services to neighbours in need". Players must make the difficult decisions necessary to live for one month on $1,000, often having to choose between equally disagreeable options.* *The dilemmas they face represent those that bring people to places like UMD: Do you make a healthy meal or keep the lights on? Cover the minimum on your credit cards or pay the rent? Hope your sick daughter gets better on her own or risk your job by leaving early to take her to the doctor? Let your son play in the after-school sports league or save the money needed for his uniform?* *The game ends when players either run out of money before the end of the month or make it through with*

	money left over.
8. Target Group *Specify category(ies) of disadvantaged group addressed*	*citizens*
9. Socio economic environment addressed *Specify the features of the context addressed by the initiative*	*society*
10. Activities and tools *Describe the activities carried out and tools used to achieve the project goals*	*Questions are posed to each player in order to take decisions.* *The infographic is very simple and based on panels with questions and possible answers.* *Questions are given daily (virtual) to encourage players to make decisions from the list of them that it provides, they also have sort of 'lifeline' decisions which they can choose to do at any time such as "breaking into your piggey-bank" to gain some additional funds to help you to complete your objective.*
11. Role of gaming within the initiative *Did the initiative foresee the development/use of serious game/ORPG to achieve one or more project goals? If yes:*	*Yes:* *Raising awareness of the complex issues involved with poverty and homelessness and galvanizing the support needed to address those issues, are important components of our work. Our ongoing partnership with McKinney and their creation of this game are very important to us because they provide creative opportunities to engage new audiences and to enlist new support for the work we do each day.*
11a Features of the game	
Name of the game and web link (if available)	*See above*
Methodology applied to develop or adapt the game	
Description of the game	*Those interested in playing SPENT must go to http://playspent.org/ and click "Accept the Challenge". Players are given $1,000 to live on for one month. The goal is to end the month with some money left over. Throughout the game's one-month period, players learn how quickly changes in employment, housing, medical*

	costs and other expenses can have disastrous consequences.
Accessibility features of the game	*NA*
Technology platforms on which it is available and most frequently used	*PC*
Is the game played off and/or online?	*online*
What languages are supported? - Can groups play together in different languages?	*English*
What models are used to measure and present success and progress of the gamers in the game	*NA*
If available on mobile terminals, is this done by generic apps or through webinterface	*Yes, through an HTML interface*
Are there general technical limitations?	*- NA*
Can users play together via one or several logins?	*Each one via a specific log in. No Multiplayer but your friends can offer to lend you virtual money in the game to pay for particular things through a social media login.*
11b Learning dimension	
Describe the pedagogical approach adopted to design or adapt the game	*By experiencing real life difficulties situations, players are made aware of criticalities and difficult social and living conditions.*
Describe the features of trainers/facilitators helping gamers in playing.	*No trainer / facilitator required*
Topics and / or competencies that are being 'taught' with the help of the game	*Players learn how quickly changes in employment, housing, medical costs and other expenses can have disastrous consequences.* *To engage people in a powerful learning experience*

	about the reality of poverty and homelessness lived daily by those helped by UMD.
How is acquired knowledge feedback to gamers	*By advancing in the game and through ad hoc feedbacks, such as:* → *For example, if a player chooses to opt out of the health insurance plan offered by his or her employer for a couple hundred dollars a month, the player sees this message before the game continues: "Even when health insurance is offered, the premiums are often so high that many low-income workers opt out — just like you did. Let's hope you don't get sick!"* *If players find the game too difficult, they can click "I can't do this" on the upper left corner of the screen to quit. "This is too hard isn't it?" the game then asks before prompting players to donate $5 "to provide a day's meals for someone living SPENT" and providing a link to UMD.*
Is there a known set of knowledge that progress is measured towards	*The case scenarios.* *Using statistics from Durham's fair market rent values, the McKinney team determined realistic housing costs to offer players. After deciding whether to live closer to work (where the rent is high but the transportation costs low) or to live farther from work (where the rent is less expensive but the transportation costs much higher), players are shown this message: "A lack of affordable housing is the number one cause of homelessness. The definition of 'affordable' housing is 30 percent of income, but you and over 12 million other American households spend way more on housing."*
Experience when playing	 *This is the main screen that you get at the start of the game. The objective of the game is to make it through a virtual month after selecting a job without using up all of your money.*

This the job selection screen that you must choose from, you will then have to choose a place to live based on your budget from the job that you have chosen.

The game is also interactive with friends that have played the game through the use of social media, you can ask them for requests that will allow you to progress through the 30 days.

This game is designed to help you to show initiative when dealing with a tight budget.

Visuals/navigation:
This is another point and click game but with a slick design and really evident navigation.

11c Users' involvement	
Were users' needs analysed prior to the game design/adaptation?	*Yes, The team conducted focus groups with UMD caseworkers and the families and residents assisted by them in order to glean the details necessary to construct real-life situations for SPENT players to negotiate.*
Were users involved in the design of the game	*Yes, see above*
Were users involved in	*No*

evaluation of the game	
Who uses the game and how often is it used?	*NA*
12. Stakeholders' involvement *What kind of stakeholders were involved in the implementation of the initiative? (Training providers, policy makers, social partners…) and how were they involved. How was the use of the game promoted?*	*Yes, see n. 11*
13. Indicators of success *What were the indicators for success defined by the project? Why is the project successful/not successful? What evidence is there for success?*	*NA*
14. Good practice *- Can the game / project be characterised as good / effective practice, and why? - What is the learning for Social Seducement?*	*Relevant for the topic covered and the awareness spreading through the game about sensitive social concerns. Also interesting for the possibility of asking support / suggestions to the Facebook friends of each player by posting a message. The connection to social media also serves as organic advertising for the website and makes the experience seem more personal, less like a game.*
15. Process for supplementing information	

15. SIMVENTURE

1. Title of the initiative/intervention/project	*SimVenture*
2. Web Link	*http://www.simventure.com/the-product/overview*
3. Promoter (s) who funded it	*NA*
4. Developer(s) who developed it	*NA*
5. Investment *Amount of money and resources invested for the realisation of the initiative; Monthly amount of money needed for on-going development and support. Who funds on-going costs*	*- NA*
6. Lifecycle of the initiative *Is it just started, being developed, finalised, ended*	*Available to be purchased*
7. Aims and objectives *What are the general aims and objectives of the initiative and what is the role of serious gaming / ORPG within it. (pls specify also whether the initiative is aimed at enhancing specifically business or entrepreneurial skills or both. Specify also whether the initiative enhances self- or collective entrepreneurship)*	

8. Target Group *Specify category(ies) of disadvantaged group addressed*	*Students and individuals interested in starting up a business*
9. Socio economic environment addressed *Specify the features of the context addressed by the initiative*	*Learning and commercial contexts as well as public and voluntary sectors*
10. Activities and tools *Describe the activities carried out and tools used to achieve the project goals*	*SimVenture captures all decision data automatically and stores it in an easily accessible and user-friendly format. As a consequence, individuals and teams have plenty of robust data from which to deliver meaningful and accurate presentations that are based on truthful actions rather than hypothetical possibilities.*
11. Role of gaming within the initiative *Did the initiative foresee the development/use of serious game/ORPG to achieve one or more project goals? If yes:*	
11a Features of the game	
Name of the game and web link (if available)	*See above*
Methodology applied to develop or adapt the game	*The resource allows people to discover for themselves (by making decisions and dealing with consequences) how to create and run a business without fear of real financial failure.*
Description of the game	*SimVenture is a highly versatile tool used in a range of learning environments.* *It allows people to discover for themselves (by making decisions and dealing with consequences) how to create and run a business without fear of real financial failure.* *For individual and group work, it allows people to develop critical team-working skills whilst making decisions about running their virtual business.* ***Since the business game includes ready-made Scenarios and a save and load function**, SimVenture can be used to run 'active' case studies where people face up to the consequences of the business decisions*

	they make *Whether it's 10 or 100 people, the software quickly focuses people on the task in hand.* *Since the software automatically stores decisions and actions taken within the simulation, students can present their work for assessment, focusing on facts rather than just hypothetical thinking.* *SimVenture meets key criteria for effective learning by:* *putting learning in context so that students benefit from studying in an authentic environment where knowledge is applied meaningfully.* *engaging students in their work motivating them to solve problems and find answers individually, collaboratively and within a wider social community.* *facilitates the construction of mental models that simultaneously develop new perspectives.* *incorporating words, sounds and images as well as a flexible hands-on approach to learning, which appeals to all learning styles.* → *Walkthrough Videos,* → *Game screenshots,* → *Watching entrepreneurship educators talk about SimVenture on film*
Accessibility features of the game	*- NA*
Technology platforms on which it is available and most frequently used	*- NA*
Is the game played off and/or online?	*online*
What languages are supported? - Can groups play together in different languages?	*English, yes.*
What models are used to measure and present success and progress of the gamers in the game	*There are diverse tools that facilitate the evaluation of the game progress such as:* *Save and Load* *Monthly reports, profit & Loss; Cashflow, Balance Sheet* *Historical Data, Charts*
If available on mobile terminals, is this done by	*no*

generic apps or through webinterface	
Are there general technical limitations?	*The following specification is recommended to run SimVenture: 1 Ghz Pentium equivalent or better, 500Mb disk space, 1Gb RAM, 1024x768 screen (+ CDROM to install or internet connection to download), sound (although it can be used without sound), Microsoft Windows 2000, XP service pack 2, Vista or Windows 7 or Windows 8 / 8.1.*
Can users play together via one or several logins?	*Several logins (based on the licences)*
11b Learning dimension	
Describe the pedagogical approach adopted to design or adapt the game	*SimVenture is a simulation is about creating and running a small business.* *The business simulation is rooted in key principles: Engagement; Authenticity; Sustainability; and Flexible Support for Trainers/Teachers. These principles support the development of competencies such as:* → *Engagement and Autenticity* → *Sustainable Learning* → *Flexibility* → *Employability*
Describe the features of trainers/facilitators helping gamers in playing.	*The software provides the teacher with a range of ways to differentiate activities to meet the specific needs of learner, whilst the Custom Button feature allows teachers to add course specific content to the already present resources.* *SimVenture supports traditional teaching methods because it helps learners to explore and link subject matter together – rather than simply understanding issues such as marketing and finance in isolation.*
Topics and / or competencies that are being 'taught' with the help of the game	**Start & Grow a Business through Solving Problems** *Principally, SimVenture ensures people understand what it takes to start and grow a business from scratch. Whether it's in a commercial or academic environment, SimVenture accelerates the learning and understanding of critical business skills.* **Decisions, Analysis, Risk & Failure** *To create demand (enquiries, orders and sales), users must research, price, promote and design their product so that it is attractive to potential customers. But just like the real world success does not come easy.* *Learning how and when to take risks and coping with*

	failure is all part of the rich experience created by the simulation. **Communication & Teamwork** *People can use SimVenture on their own or as part of a team. Group work requires people to discuss issues, negotiate strategies and adjust priorities as the simulation unfolds and new challenges arise.*
How is acquired knowledge feedback to gamers	*The integrated Notepad facilitates assessment by providing a central location for players to gather their thoughts, actions and interpretations. These can then be exported to form the basis of discussions, presentations and formal submissions*
Is there a known set of knowledge that progress is measured towards	*Yes, depending on the area of interest chosen, there are several scenarios available. Also different difficulties settings are available.*
11c Users' involvement	
Were users' needs analysed prior to the game design/adaptation?	*Unknown*
Were users involved in the design of the game	*Unknown*
Were users involved in evaluation of the game	*Yes*
Who uses the game and how often is it used?	*Teachers / trainers, individuals that are interested in starting up a business*
12. Stakeholders' involvement *What kind of stakeholders were involved in the implementation of the initiative? (Training providers, policy makers, social partners…) and how were they involved. How was the use of the game promoted?*	*The SimVenture Team has been working with entrepreneurs, corporate trainers and teachers since 2006. Feedback has continually informed development work and ultimately helped create a powerful and multi-award winning simulation that allows people to create/grow a small business and really understand the mechanics and detail of what goes into running a company.*
13. Indicators of success *What were the indicators for success defined by the project? Why is the project successful/not successful? What evidence is there for success?*	**National Research survey commissioned** – *From March 2012, a national SimVenture impact study is being undertaken by Suresh Gamlath who is based at the University of West London.* *The 18 month study will examine the question: "Does the integration of SimVenture into formal Learning and Teaching environments within higher-education improve the student's learning particularly in the acquisition of transferable skills that are needed for self employment &*

	sought after by employers?"
14. Good practice *- Can the game / project be characterised as good / effective practice, and why?* *- What is the learning for Social Seducement?*	*Very relevant and complete, covering inline and offline settings. Availability of individual and group playing.* *Availability of a virtual tutor + presentations and videos* *To be used in different settings: learning and commercial* *Collecting and saving all the results achieved.* **Since the business game includes ready-made Scenarios and a save and load function**, *SimVenture can be used to run 'active' case studies where people face up to the consequences of the business decisions they make*
15. Process for supplementing information	

16. Go Venture Any Business

1. Title of the initiative/intervention/project	*Go Venture Any Business*
2. Web Link	**http://goventureanybusiness.com**
3. Promoter (s) who funded it	*MediaSpark Inc*
4. Developer(s) who developed it	*MediaSpark Inc*
5. Investment *Amount of money and resources invested for the realisation of the initiative; Monthly amount of money needed for on-going development and support. Who funds on-going costs*	-
6. Lifecycle of the initiative *Is it just started, being developed, finalised, ended*	*On-going. Available on the web*
7. Aims and objectives *What are the general aims and objectives of the initiative and what is the role of serious gaming / ORPG within it. (pls specify also whether the initiative is aimed at*	*Create a business simulation for ANY product, _ANY industry, and ANY market.* *The Simulation Manager (usually an instructor) chooses from dozens of ready-to-play industries or designs a new simulation using a simple point-and-click form. Build simulations that model current events, historical successes or failures, or to target specific challenges or*

enhancing specifically business or entrepreneurial skills or both. Specify also whether the initiative enhances self- or collective entrepreneurship)	*learning outcomes.*
8. Target Group *Specify category(ies) of disadvantaged group addressed*	*Anybody interested in being trained on how to start up a business and how to run it independently from the sector or typology of business* *GoVenture programs are designed for youth and adults, and for self-directed or facilitated learning.*
9. Socio economic environment addressed *Specify the features of the context addressed by the initiative*	*Learning, commercial contexts. Public and private environments.*
10. Activities and tools *Describe the activities carried out and tools used to achieve the project goals*	*See above*
11. Role of gaming within the initiative *Did the initiative foresee the development/use of serious game/ORPG to achieve one or more project goals? If yes:*	*Yes*
11a Features of the game	
Name of the game and web link (if available)	*See above*
Methodology applied to develop or adapt the game	*NA*
Description of the game	**1. Setting up the simulation (role of the instructor)** *Define ANY product, ANY industry, and ANY market, or choose from various preset scenarios.* *Determine product type, product features, human resources, market size, customer psychographics, currency, unexpected events, and much more.* **2. Running the simulation by 1 or more players** *Once the simulation is set up, players can join and compete individually, in teams, or head to head.* *The objective is to operate a successful business by*

	manufacturing and marketing a product line, while competing with other businesses managed by human and/or computer players. **3. Monitor revenue, profitability, market share, brand value, equity, and more.** *The simulation plays in preset periods set by the Instructor. Each period, players must decide where to invest: manufacturing, research and development, human resources, sales promotion, brand advertising, price discount advertising, market research, advertising mix, and more. Players set product prices, choose their business approach to ethics, and decide on whether to distribute into one or more markets. Market Research and Financial reports are available to aid analysis and decision making, and a virtual management team provides real-time business advice.* *The market is dynamic, with each business affecting the overall results. Players must manage their own strategies while monitoring competitive positioning, actions, and other market forces that arise.*
Accessibility features of the game	*Computer and internet connection. Also available for mobile phones through a dedicated app* *Online program accessible from any Flash-enabled Internet browser. High-speed Internet access is not required. The simulation is licensed on a per-user, limited-time subscription basis.*
Technology platforms on which it is available and most frequently used	*GoVenture CEO is completely online (in the "cloud").* *The simulation can be played on any computer that has an Internet browser with the free Adobe Flash Player.* *The instructor management website can be accessed on any computer or mobile device that has an Internet browser (Adobe Flash Player is NOT required). Instructors can create, manage, and monitor simulations.*
Is the game played off and/or online?	*Online*
What languages are supported? - Can groups play together in different languages?	*English*
What models are used to measure and present success and progress of the gamers in the game	*Ad hoc assessment tools are availableand that are integrated into the simulation.* *Many are automatically turned on and update in real time for instructors to review, while others are optional.*

	Performance evaluation, scoring, and journaling are built into the simulation and available at any time with the click of a button.
	*The comprehensive **Coaching Report** makes it easy for instructors to offer students personalized business advice, even if the instructor is not monitoring the simulation results.*
	Team Evaluation and Competency Quizzes can also be assigned.
	Team Evaluation
	If students are playing a simulation in teams, instructors can have them submit peer evaluations of their teammates' performance. This may be useful for identifying strong and weak contributors for grading or other purposes. Instructors can issue any number of Team Evaluations, including during and after play (allowing students the opportunity to improve).
	Competency Quiz
	Instructors may also require students to submit a Competency Quiz. It is personalized for each student. Students must gather answers from their actual simulation results, in addition to answering questions on business theory.
If available on mobile terminals, is this done by generic apps or through webinterface	*APP available*
Are there general technical limitations?	*Computer with internet connection needed*
Can users play together via one or several logins?	*Each user via an independent login*
11b Learning dimension	
Describe the pedagogical approach adopted to design or adapt the game	*Players guide and Instructor guide available.*
	How the simulation works:
	→ Simulation Manager (usually an instructor or trainer) creates a Simulation Competition, via a special website. Simulation Manager provides Simulation Numbers to players. Players can play on their own or in teams.
	→ Players create an account and log in to the GoVenture CEO website. Then, join a simulation competition using

	the Simulation Number provided to you by the Simulation Manager. The simulation runs asynchronously, which means players do not have to all be logged in simultaneously in order to play and compete. Each player can run his/her own business or play in teams.
	→ The player is a CEO, or a senior executive, of a company in a given industry. The objective (unless changed by the Simulation Manager) is to manufacture and sell your products to generate as much profit as possible. You and your competitors sell the same type of product.
	→ The simulation competition runs for a given number of periods. Each period, the players are provided with a budget to invest.
	→ Investing in research and development improves the features of the product to help differentiate it in the marketplace. Investing in sales and marketing improves the Brand Equity. **Players are also able to choose how ethical the business practices will be.**
	→ Internationalisation market opportunities available
	Market research reports can be purchased to analyze the market and competition.
	→ Players must make and SAVE your decisions each period prior to the decision deadline, as set by the Simulation Manager. At that time, all decisions by all businesses in the Simulation Competition are processed and the results immediately made available. Players can then begin making decisions for the new period.
	→ The Simulation Competition continues until the designated number of periods have been completed, unless the Simulation Manager chooses to end sooner. Players can review their performance versus competitors at any time.
Describe the features of trainers/facilitators helping gamers in playing.	*Instructors (simulation manager) can create, manage, and monitor simulations.*
Topics and / or competencies that are being 'taught' with the help of the game	*All dealing with the start up and running of a business, team work, leadership, marketing, communication, finance, etc.*
How is acquired knowledge feedback to gamers	*Through ad hoc assessment tools*

Is there a known set of knowledge that progress is measured towards	*Yes, a set of already made case studies are available*
11c Users' involvement	
Were users' needs analysed prior to the game design/adaptation?	*Unknown*
Were users involved in the design of the game	*Unknown*
Were users involved in evaluation of the game	*Unknown*
Who uses the game and how often is it used?	*See above*
12. Stakeholders' involvement *What kind of stakeholders were involved in the implementation of the initiative? (Training providers, policy makers, social partners…) and how were they involved. How was the use of the game promoted?*	*Unknown*
13. Indicators of success *What were the indicators for success defined by the project? Why is the project successful/not successful? What evidence is there for success?*	*Unknown*
14. Good practice *- Can the game / project be characterised as good / effective practice, and why?* *- What is the learning for Social Seducement?*	*Relevant for:* *→ The presence of the instructor (same role as the facilitator in Social Seducement)* *→ Team Evaluation possibility: If students are playing a simulation in teams, instructors can have them submit peer evaluations of their teammates' performance.* *→ Competency Quiz personalized for each student.* *→ Interesting Infographic* *→ Possibility to create new case-studies* *→ Individuals and team can paly at the same time* *→ Synchronous and asynchronous messaging is available* *→ Competition among individuals and teams is feasible* *→ Discussion and coaching opportunities feasible*

17. EVE Online

1. Title of the initiative/intervention/project	*EVE Online*
2. Web Link	*https://truestories.eveonline.com/truestories/index.html*
3. Promoter (s) who funded it	*CCP games*
4. Developer(s) who developed it	*CCP games*
5. Investment *Amount of money and resources invested for the realisation of the initiative; Monthly amount of money needed for on-going development and support.* *Who funds on-going costs*	*-*
6. Lifecycle of the initiative *Is it just started, being developed, finalised, ended*	*On-going. Available on the web. Last release JUNE 2006, FIRST IN 2003*
7. Aims and objectives *What are the general aims and objectives of the initiative and what is the role of serious gaming / ORPG within it. (pls specify also whether the initiative is aimed at enhancing specifically business or entrepreneurial skills or both. Specify also whether the initiative enhances self- or collective entrepreneurship)*	*Space simulation, Massive Multiplayer Online Role-Playing Game* *Eve Online is a player-driven, persistent-world massively multiplayer online role-playing game (MMORPG) set in a science fiction space setting, developed and published by CCP Games.* *Players of Eve Online can participate in a number of in-game professions and activities, including mining, piracy, manifacturing, trading, exploration and combat (both player vs environment and vs player).*
8. Target Group *Specify category(ies) of disadvantaged group addressed*	*Simply players!*
9. Socio economic environment addressed *Specify the features of the context addressed by the initiative*	*Amusement*

10. Activities and tools *Describe the activities carried out and tools used to achieve the project goals*	*Players start the game by either selecting a previously created character or by creating a new one.* *Each Eve Online account allows for up to three characters. When a player creates a new character, they start by choosing one of the four playable races – Amarr, Gallente, Minmatar, or Caldari. Each race is further divided into three bloodlines that give characters different pre-defined appearances, which can be finely tuned by the player.* *Eve Online is functionally a single-universe game, rather than starting a new "realm" when in-game population increases, CCP simply adds new features to the existing game environment.*
11. Role of gaming within the initiative *Did the initiative foresee the development/use of serious game/ORPG to achieve one or more project goals? If yes:*	*NA*
11a Features of the game	
Name of the game and web link (if available)	*See above*
Methodology applied to develop or adapt the game	*Volunteer program* *The Interstellar Services Department (ISD) is a group of volunteers who share their free time in order to assist in a variety of tasks. They answer questions from players, help hunt down and resolve problems, provide news and fiction as well as acting as good-will ambassadors throughout the community.*
Description of the game	*Set more than 21,000 years in the future, the background story of Eve Online explains that humanity, having used up most of Earth's resources through centuries of explosive population growth, began colonizing the rest of the Milky Way. In turn, this expansion also led to competition and fighting over available resources as it did on Earth, but everything changed with the discovery of a natural wormhole leading to an unexplored galaxy named "New Eden". Dozens of colonies were founded, and a structure was built to stabilize the wormhole that bridged the intergalactic colonies with the rest of human civilization, a giant gateway bearing the name "EVE". However, when the natural wormhole unexpectedly collapsed, it destroyed the gate. Cut off from the rest of humanity and supplies from Earth, the colonies of New Eden were left starved and disconnected from one another;*

	some died out entirely.
	Over the millennia the descendants of the colonists managed to survive and rebuild their own societies, but the memories and knowledge of humanity's origins as well as their own from Earth and the Milky Way became lost. Five major distinct societies rose to prominence from the colonies, each growing into interstellar spaceflight-capable civilizations. The states based around these colonies make up the five major factions in Eve Online: the Amarr Empire, the Caldari State, the Gallente Federation, the Minmatar Republic and the Jove Directorate.
	Unlike other massively multiplayer online games, player characters in Eve Online advance continuously over time by training skills, a passive process that occurs in real world time so that the learning process continues even if the player is not logged in.
	The skill training queue allows up to 50 skills to be scheduled, with up to a 10 year total training schedule. Some skills require other prerequisite skills to be trained to a certain level to be trained, and some skills require more time to train than others - for example the skill to fly a Titan spaceship takes 8 times as long to train as the skill to fly a frigate ship, with a significant number of prerequisite skills.
	Economy
	The in-game economy in Eve Online is an open economy that is largely player-driven.
	Non-player character (NPC) merchants sell skill books used by players to learn new skills and blueprints to manufacture ships and modules. NPC merchants also buy and sell Trade Goods. Some Trade Goods are only for trade between NPC merchants while others have a functional use and are not good for trade with NPC's. The characters themselves gather the necessary raw materials to manufacture almost all of the ships and ship modules in the game. NPC ships can be looted and salvaged for items and materials, Non-player created ships and equipment may be purchased from various NPC factions as a character gains status with them, and can be resold in the in-game economy.
Accessibility features of the game	*- NA*
Technology platforms on which it is available and most frequently used	*Skill-based RPG With hundreds of skills to choose from, EVE Online is the world's most open-ended sci-fi experience.* *It runs on the following platforms: Microsoft Windows,*

	OSx, linux. *Engine: Trinity, Ambulation*
Is the game played off and/or online?	*online*
What languages are supported? - Can groups play together in different languages?	*English, yes they can*
What models are used to measure and present success and progress of the gamers in the game	*The character advancement system is based upon passively training skills in real time, even while not logged into the game.*
If available on mobile terminals, is this done by generic apps or through webinterface	*NA*
Are there general technical limitations?	*- NA*
Can users play together via one or several logins?	*They play together through several logins*
11b Learning dimension	
Describe the pedagogical approach adopted to design or adapt the game	*No pedagogical approach*
Describe the features of trainers/facilitators helping gamers in playing.	*No facilitator foreseen. See volunteer programme*
Topics and / or competencies that are being 'taught' with the help of the game	*EVE Online is a massively multiplayer online game set 23,000 years in the future. As an elite spaceship pilot, you will explore, build, and dominate across a universe of over 7,000 star systems. Sandbox gameplay and advanced skill-based progression provide you with a truly unique experience as you rise to power among the stars.* *No technical competencies but exploring and team building. An interesting feature of the game is that due to the game's focus on freedom, consequence, and autonomy, many behaviours that are considered griefing in most MMOs are allowed in Eve.* *This includes stealing from other players, extortion, and causing other players to be killed by large groups of*

	NPCs. *Only malicious, prolonged and concentrated harassment where no material gain is involved and a few other actions are considered to be illicit griefing by the game's developers.*
How is acquired knowledge feedback to gamers	*By advancing in the game*
Is there a known set of knowledge that progress is measured towards	*No*
11c Users' involvement	
Were users' needs analysed prior to the game design/adaptation?	*Unknown*
Were users involved in the design of the game	*Unknown*
Were users involved in evaluation of the game	*There is a continuous feedback of the players through the community and the volunteer programme, for instance.*
Who uses the game and how often is it used?	*Players for fun*
12. Stakeholders' involvement *What kind of stakeholders were involved in the implementation of the initiative? (Training providers, policy makers, social partners…) and how were they involved. How was the use of the game promoted?*	*NA*
13. Indicators of success *What were the indicators for success defined by the project? Why is the project successful/not successful? What evidence is there for success?*	*NA*
14. Good practice *- Can the game / project be characterised as good / effective practice, and why?* *- What is the learning for Social Seducement?*	*Not relevant for the topic, but relevant because it is:* → *a massive online role play game* → *it is based on the collection of stories from the users* → *there is a volunteer programme to assist in a variety of tasks, such as answering questions from players, helping hunt down and resolving problems, providing news and fiction as well as acting as good-will ambassadors throughout the community.* → *internal economy* → *availability of training of each player character.*

18. Games for Change

1. Title of the initiative/intervention/project	*Games for Change*[62]
2. Web Link	*http://www.gamesforchange.org*
3. Promoter (s) who funded it	*Games for Change* *Tania@gamesforchange.org* *Tania Hack – Programme manager*
4. Developer(s) who developed it	
5. Investment *Amount of money and resources invested for the realisation of the initiative; Monthly amount of money needed for on-going development and support. Who funds on-going costs*	*NA*
6. Lifecycle of the initiative *Is it just started, being developed, finalised, ended*	*Ongoing initiative*
7. Aims and objectives *What are the general aims and objectives of the initiative and what is the role of serious gaming / ORPG within it. (pls specify also whether the initiative is aimed at enhancing specifically business or entrepreneurial skills or both. Specify also whether the initiative enhances self- or collective*	*Catalyzing Social Impact Through Digital Games* *Founded in 2004, Games for Change facilitates the creation and distribution of social impact games that serve as critical tools in humanitarian and educational efforts.* *We aim to leverage entertainment and engagement for social good. To further grow the field, Games for Change convenes multiple stakeholders, highlights best practices, incubates games, and helps create and direct investment into new projects.*

---

[62] *There are multiple educational games available on the website, contact listed above to gain any additional details/specifics.*

entrepreneurship)	
8. Target Group *Specify category(ies) of disadvantaged group addressed*	*Anybody interested in social change and digital gaming*
9. Socio economic environment addressed *Specify the features of the context addressed by the initiative*	*Social economy, social change*
10. Activities and tools *Describe the activities carried out and tools used to achieve the project goals*	*Games for Change (also known as G4C) is a movement and community of practice dedicated to using digital games for social change. An individual game may also be referred to as a "game for change" if it is produced by this community or shares its ideals. "Games for Change" is also the name for the non-profit organization which is building the field by providing support, visibility, and shared resources to individuals and organizations using digital games for social change.*
11. Role of gaming within the initiative *Did the initiative foresee the development/use of serious game/ORPG to achieve one or more project goals? If yes:*	*Games for Change, founded by S. Seggerman and Benjamin Stokes, is often considered a branch of serious games focused on social issues and social change. Its members represent hundreds of non-profit directors, game developers, artists and academics—a network committed to social change through gaming.*
11a Features of the game	*Not relevant (see 14)*
11b Learning dimension	*Not relevant (see 14)*
11c Users' involvement	*Not relevant (see 14)*
12. Stakeholders' involvement *What kind of stakeholders were involved in the implementation of the initiative? (Training providers, policy makers, social partners…) and how were they involved. How was the use of the game promoted?*	*Not relevant (see 14)*
13. Indicators of success *What were the indicators for success defined by the*	*Not relevant (see 14)*

project? Why is the project successful/not successful? What evidence is there for success?	
14. Good practice *- Can the game / project be characterised as good / effective practice, and why?* *- What is the learning for Social Seducement?*	*No specific game to be analysed, but interesting community to get in touch with. There is also a Europe team:* *Founded in 2013, Games for Change Europe helps support and increase the growing interest in social impact games throughout Europe.* *Therefore we frequently showcase best practices to the European public and discuss the potential of the medium with companies, organisations and governments. With our partners from games academia and industry, we have access to leading expertise and technology to help leverage entertaining games with non-entertainment goals and transform them into a compelling and convincing communication tool. Furthermore, we help find business opportunities for direct investment into new projects and incubate games to strengthen the role of European Game Developers in the emerging international markets.* *Interesting also for the free webinar:* *How can you learn more about game-related topics?* *How can you share the exciting details of your project with other Gameful people? How can you connect with others in the Gameful community?* *Answer:* *Come participate in the new Gameful Webinar Series!* *The Europe contact is: Games for Change Europe* *NX Publishing* *18, rue Hoche* *92130 Issy Les Moulineaux* *France*

19. Business Simulations for Executive Education and Business Learning

1. Title of the initiative/intervention/project	*Business Simulations For Executive Education and Business Learning* **Sustainability Management** This fascinating manufacturing-focused simulation provides a unique insight into issues of carbon management in the 21st century. You will manage an auto manufacturer to build a global strategy that both increases shareholder value and meets increasingly strict CO2 emission regulations set by government. **Retail Dealership** This simulation is used by several major car manufacturers around the world to train owners & managers of their dealer networks. You will learn principles of general management as applied to a dealer network – principles which can apply to any dealership style business. **Bank Marketing** With the Basel 3 rules coming into effect across the world, this simulation course provides a fascinating insight into the world of core capital, expense ratios & balanced lending principles. Ideal for anyone interested in learning more about the global banking industry, or for new recruits in this area. **Airport Management** Our Airport Management business simulation (modelled on a real US-based regional operator) incorporates an overview of essential management techniques used in large infrastructure projects. **Telco Global Manager** An absorbing look at the turbulent world of telecom operators. Participants need to understand the changing market dynamics of fixed line, mobile and data services, and the impact of pricing on customer churn and equipment utilisation. **Machinery Manufacturing** A manufacturing-focused simulation where you take over a company which operates in a maturing market with ageing products. How do you manage in flat or declining markets? This simulation has proved to be very effective in basic Business Acumen classes
2. Web Link	*http://www.industrymasters.com*
3. Promoter (s) **who funded it**	*Thomas Lehnert & Brian Rimmer*
4. Developer(s) **who developed it**	*IndustryMasters GmbH*
5. Investment *Amount of money and resources invested for the realisation of the initiative; Monthly amount of money needed for ongoing developement and support. Who funds ongoing costs*	*NA*
6. Lifecycle of the initiative *Is it just started, being developed, finalised, ended*	*The initative is operational and has simulation for different industries and activities.*
7. Aims and objectives *What are the general aims and objectives of the initiative and what is the role of serious gaming / ORPG within it. (pls specify also*	

whether the initiative is aimed at enhancing specifically business or entrepreneurial skills or both. Specify also whether the initiative enhances self- or collective entrepreneurship)	
8. Target Group *Specify category(ies) of disadvantaged group addressed*	*Business schools and Advnaced Management Education*
9. Socio economic enviroment addressed *Specify the features of the context addressed by the initiative*	
10. Activities and tools *Describe the activities carried out and tools used to achieve the project goals*	
11. Role of gaming within the initiative *Did the initiative foresee the development/use of serious game/ORPG to achieve one or more project goals? If yes:*	
11a Features of the game	*The game offers realtime simulations. They can be run as single user or multiuser. The simulation is done against an intelligent opponent that spots weaknesses of the players*
Name of the game and web link (if available)	*Industrymasters have several standard, reday to use simulations but offers also custom deisgned simulations. http://www.industrymasters.com/simulation-range/tycoon-systems-range-of-simulations*
Methodology applied to develop or adapt the game	*NA*
Description of the game	*NA*
Accessibility features of the game	*NA*
Technology platforms on which it is available and most frequently used	*Standard computer, laptop, tablet with Safari, Firefox, Chrome or IE. Internet Connection.*

Is the game played off and/or online?	*On Line*
What languages are supported? - Can groups play together in different languages?	*English*
What models are used to measure and present success and progress of the gamers in the game	*NA*
If available on mobile terminals, is this done by generic apps or through webinterface	*Internet browser on iPad and alike*
Are there general technical limitations?	*The simulation runs on a scalable web server set up. They clame they ar able to run simulations with thousands of users all over the world*
Can users play together via one or several logins?	*Several*
11b Learning dimension	
Describe the pedagogical approach adopted to design or adapt the game	*Experientail learning*
Describe the features of trainers/facilitators helping gamers in playing.	*Trainers have knowledge within the verticals they are operating*

Topics and / or competencies that are being 'taught' with the help of the game	Tycoon Systems - Range of Simulations Mobile Phones Developer Computer Manufacturing Machinery Manufacturing Sustainability - CSR Airport Management Car Dealership Fashion Retailer Retail Banking Telco Manager Hotel Manager Special Customisations
How is acquired knowledge feedback to gamers	*hte performance of the actions you take is feed back as business performance KPI´s*
Is there a known set of knowledge that progress is measured towards	*This depends on each vertical and I imagine it is based on knowledge of how these verticals behave.*
11c Users' involvement	
Were users' needs analysed prior to the game design/adaptation?	*Yes*
Were users involved in the design of the game	*NA*
Were users involved in evaluation of the game	*Yes*
Who uses the game and how often is it used?	*Businesses, Scholls, Individuals.*
12. Stakeholders' involvement *What kind of stakeholders were involved in the implementation of the initiative? (training providers, policy makers, social partners…) and how were they involved. How was the*	*Not relevant (see 14)*

use of the game promoted?	
13. Indicators of success *What were the indicators for success defined by the project? Why is the project successful/not successful? What evidence is there for success?*	*It can be seen as sucessfull since they have built a rather big tHeme, have several vertical simulations and seems to be developing more as they go*
14. Good practice *- Can the game / project be characterised as good / effective practice, and why? - what is the learning for social seducement?*	*the greatness lies in the specific verticals as they have built a simulation egnine that mirrors the real world in an effective way. The greatness does not lie in a fancy game with cool grafics and sound but in the focus what job is to be done. The learning ought to be: Keep it simple.*
15. Process for supplementing information	

20. The Green Community

The Sassari Green Community is a project aimed at raising the awareness on the environmental sustainability and on the topic of green economy. The target group are young people (14-20 years old). The objective is to make them aware of the importance of respecting the environment by showing them at the same time the real opportunities that this field may offer them (e.g. in form of new "green" jobs).

Green Community

1. Title of the initiative/intervention/project	*Green Community*
2. Web Link	*http://greencommunity.provincia.sassari.it/greencity/*
3. Promoter (s) who funded it	*Provincia di Sassari, Italy*
4. Developer(s) who developed it	*Net7*
5. Investment *Amount of money and resources invested for the realisation of the initiative; Monthly amount of money needed for ongoing developement and support. Who funds ongoing costs*	*The project was financed by Province of Sassare through EU funding.*
6. Lifecycle of the initiative *Is it just started, being developed, finalised, ended*	*The game is activated online.*
7. Aims and objectives *What are the general aims and objectives of the initiative and what is the role of serious gaming / ORPG within it. (pls*	*General objective of the initiative: Establishment, in the province of Sassari, of a technological instrument (available via web and Mobile) that supports knowledge of the "Green Economy" among young people between 14 and 20 years.*

specify also whether the initiative is aimed at enhancing specifically business or entrepreneurial skills or both. Specify also whether the initiative enhances self- or collective entrepreneurship)	*With the project specific instruments for the creation of a "community" are activated. Members of the green community have the feeling to belong to a same community and cooperate to create a better place to live with high standards of energy efficiency. Through the discussion and dissemination of these issues, the project aims to:* *Educate students/young people regarding the respect of the environment and other current issues of great interest and importance. They will then be supported in finding the "daily best practices".* *The game also aims to show the real job opportunities offered by the green economy and to help students in choosing studies or jobs that could be linked to green economy aspects.*
8. Target Group *Specify category(ies) of disadvantaged group addressed*	*Young people from 14 to 20 (mainly students from secondary school)*
9. Socio economic enviroment addressed *Specify the features of the context addressed by the initiative*	*- need to promote and share the definition of green economy among young people, showing them the real opportunities that this field may offer them (e.g. in form of new "green" jobs).*
10. Activities and tools *Describe the activities carried out and tools used to achieve the project goals*	*This online game was first presented to and tested by the schools and professors of the Provincia di Sassari. It is now available to a large public through the internet.*
11. Role of gaming within the initiative *Did the initiative foresee the development/use of serious game/ORPG to achieve one or more project goals? If yes:*	*NA*
11a Features of the game	*The simulation puts the player in an immersive experience that lets him/her decide how to manage a city from a sustainable point of view.* *Students/young people are responsable of the management of their community.* *Players have build installations that support energy efficiency in their virtual city. They have the responsabilty to choose among more sustainable energy facilities (photovoltaic power stations, wind farms, recycling facilities, car sharing, urban gardens) and to maintain them.*

Name of the game and web link (if available)	Green community http://greencommunity.provincia.sassari.it/greencity/
Methodology applied to develop or adapt the game	Not known
Description of the game	The aim of the game is to create a green and sustainable communty. All the energy facilities to create the Green community have a specific cost (expressed in coins) but thanks to them player earn other coins or green coins. To succeed each player has coins and green coins enabling him/her to win premiums and continue the business. Some of the facilities may need maintenance during the game. If the player does not carry out maintenance, their performance in Coins will decline until they become non-functional. Keys words and instruments of the game **Stemmi (Coats)** They are won when the player reaches a certain amount of Green Points. They also lead to the increase of Victory Points. **Medaglie(medals)** The medals are won after the player has created many installations of the same type. **Premi (bonus)** When the player wins a lot of coins he/she obtains a Bonus. **Coins** The Coins are the currency of the Green Community, they allow players to install facilities and to take care of them. **Green Point.** The Green Points are the "green values" of the player's actions. For every action he/she might earn Green Points which will, in turn, increase the Victory Point. There are some actions that can also lead to a loss of points.
Accessibility features of the game	NA
Technology platforms on which it is available and most frequently used	Beta version
Is the game played off and/or online?	The game is played online.
What languages are supported? - Can groups play together in different	Italian

languages?	
What models are used to measure and present success and progress of the gamers in the game	*The game is conceived in a way to allow the managers of the intiatiative to control the activities that take place in the community (access, members, activities, statistics, etc);* *It is also possible to write contents. There is also a forum where all contents can be read.*
If available on mobile terminals, is this done by generic apps or through webinterface	*The Green Community is based on the following instruments: a website; a blog;a Facebook page and a Twitter channel; a LinkedIn group.*
Are there general technical limitations?	*None*
Can users play together via one or several logins?	*yes*
11b Learning dimension	
Describe the pedagogical approach adopted to design or adapt the game	*Virtual facilitators present the player with the initial information and leadsthe player through the game. Players are informed on the installations they can use to build the village.* *The game helps the player in analyzing situations in the scope of the learning activity and in understanding the tools available to operate within the system.*
Describe the features of trainers/facilitators helping gamers in playing.	*No real Facilitator or supervisor/advisor.*
Topics and / or competencies that are being 'taught' with the help of the game	*Creativity, organisational skills, Problem Solving, fun, learning by doing*
How is acquired knowledge feedback to gamers	*Knowledge is tested when players take their decisions.*
Is there a known set of knowledge that progress is measured towards	*No*
11c Users' involvement	*Not known*
Were users' needs analysed prior to the game design/adaptation?	
Were users involved in the design of the game	

Were users involved in evaluation of the game	
Who uses the game and how often is it used?	*Initially students of the school that first tried the game; now a wider online community*
12. Stakeholders' involvement *What kind of stakeholders were involved in the implementation of the initiative? (training providers, policy makers, social partners…) and how were they involved. How was the use of the game promoted?*	*Students, professors*
13. Indicators of success *What were the indicators for success defined by the project? Why is the project successful/not successful? What evidence is there for success?*	*The game in itself is giving permanent feedback to the player and the visualization of the game allows the player to see if he is going ahead in building the green community.*
14. Good practice *- Can the game / project be characterised as good / effective practice, and why? - what is the learning for social seducement?*	*This game is at least an interesting practice given that it was conceived specifically for and then tested by youngsters. It might give useful inputs regarding instruments to collect, disseminate, exchange, store and foster understanding of information, but also regarding online promotion of creativity and teamwork. Also different elements built in to remind participants of the 'game character' of the initiative and let them also have 'fun' in learning might be interesting to look at more in depth.*
15. Process for supplementing information	*To play the game you must login via facebook, there is a help page available that is translatable (as originally in Italian)*

Annex 3 – Inteview reports to game designers

Interview carried out by	UNIR
	Daniel R. Parente
Date	**25/09/2015**

Name of the expert/organisation	Wilson Almeida / Bica Studios
Contact details (email/phone number)	wilson.almeida@bicastudios.com
Area of expertise	Game Design
What is your opinion on the latest evolution of gaming and in particular of games for learning?	All games are about learning. Some of them are simple, some are complex, but they're all systems that the player has to learn in order to enjoy the game. Thankfully I see the term educational game being dropped and instead they're just games that teach something that can be very useful like history, math or micromanagement.
How best can computer games be designed to enhance learning?	Design better game systems that can convey what we want to teach in a way that doesn't look like the traditional classroom approach, which is dated and not practical.
Do you think differences in game design can affect learning experience? How?	Yes. For example, trying to adapt an existing game to teach math and designing a game from the ground up with the same purpose. The first case will most likely be a disaster since it wasn't thought out to convey that, players will notice it and for sure will feel something is wrong.
Do you think ORPG can be used for learning? How?	Short answer is yes. Since every game has learning in it, it's just a matter to design it with a particular goal in mind.
Do you think a game addressing unemployed people with the aim to train them on the set up and management of a company should have specific requirements?	It would have to turn the whole process in a fun and accessible experience. It's actually an awesome challenge.
Have you ever designed a serious game/ORPG with learning purposes? what difficulties did you encounter and how did you solve them?	Not yet, but I think it would be very similar to designing every other game. From the get go, we already know what set of tasks we want the players to learn. We need to make them have fun doing them, so that they can be better prepared to learn the harder next set of tasks. Sounds simple, but it's not at all easy .
Are there alternative and cheaper solutions to a 3D game environment able to equally motivate and engage players?	Off course, people have fun with pieces of paper all the time, cards, board games and even rocks. Game design in general is media independent so there's no need to have expensive virtual worlds.

Interview carried out by	UNIR
	Daniel R. Parente
Date	

Name of the expert/organisation	Steve Ince
Contact details (email/phone number)	steve@steve-ince.co.uk
Area of expertise	Writer and games designer
What is your opinion on the latest evolution of gaming and in particular of games for learning?	There is a slight problem with this question because it is so generic. Games have evolved in so many areas – interface, platform, size, budget, crowdfunding, VR, etc. – that it's rather difficult to give a brief opinion. Many aspects have been very positive, particularly those that have enabled development teams to be more creative, but others, like the flood of games on the app stores, have meant it's really difficult to get a game noticed. I don't know much about games for learning, but I imagine that with tablet interfaces being so intuitive this gives great opportunities to deliver interactive learning experiences.
How best can computer games be designed to enhance learning?	For a long time the belief has been that if learning can be made fun it will have more of an impact, but I think that's only part of the picture. If a game gives the player a proper sense of achievement when reaching goals or overcoming obstacles, the learnign process will be enhanced. Mobile/casual games reward players regualrly and often and I'm sure the same principles can be applied to learning games.
Do you think differences in game design can affect learning experience? How?	Which differences are we talking about? In a general sense, if you designed a game with fewer rewards and compared it to a similar game with more rewards I'm sure the two would have different effects, assumign the quality of rewards are similar.
Do you think ORPG can be used for learning? How?	Don't know. This is actually the first time I've seen the term ORPG and had to look it up. I don't play this type of game.
Do you think a game addressing unemployed people with the aim to train them on the set up and management of a company should have specific requirements?	I would have thought that this was self-evident. You wouldn't run a clothes shop in the same way you'd run a restaurant, for example, so you need training that offers specifics. Yes, there will be common ground (accounts, taxes, etc.) but running a successful business is about knowing the specifics of that trade, surely?
Have you ever designed a serious game/ORPG with learning purposes? what difficulties did you encounter and how did you solve them?	No.

Are there alternative and cheaper solutions to a 3D game environment able to equally motivate and engage players?	3D doesn't make a game expensive, the quality and number of the resources required to make the game will define a lot of the cost. A simple child's spelling game doesn't need any 3D but it still needs quality for the interface and overall visual design if it's to be engaging and quality will always cost.