Municipality Groningen and Municipality Rotterdam

Case Study Papers

Gamification

USING GAMIFICATION TO HELP PEOPLE IN DEBT IMPROVE THEIR FINANCIAL SKILLS

Both the municipality of Groningen and the municipality of Rotterdam are struggling with a high number of households who have or are at risk of having high levels of debts. In Groningen it's about 17,000 households, and about 60,000 households in Rotterdam. Both cities have already set up programs to help these citizens and their families. As part of the Like! project both Groningen and Rotterdam have set up two service pilots to explore how gamification can help these citizens to improve their financial skills and decrease the levels of financial stress they face. In this use case, Groningen and Rotterdam share their what they've learned through these Like! pilots.

This pilot is an example of the LIKE! project's work to combine smart technology with better and more efficient customer services for vulnerable groups.

About LIKE!

Local governments, citizens, universities and SMEs have joined forces to co-create smarter, more efficient and more innovative services through 9 transnational pilot projects covering 3 core themes:

Innovation Culture Approach

Smart Services

Digital Dashboards

Relations to Workpackages

The pilots focused on a new approach to create better and smarter services for people with high levels of debt. If people have the opportunity to learn new financial skills in a relaxed and accessible way, they will hopefully feel better equipped to change their habits and ways of dealing with this stressful situation.

Local partners

&ranj (NL):   www.ranj.com/
&samhoud (NL):   www.samhoud.com/
Ikbenwij (NL):   www.ikbenwij.nl/
NHL Stenden University (EN/NL):   www.nhlstenden.com/
                                              onderzoek/serious-gaming
SiGa Lab (NL):   www.sigalab.nl/

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Background to the gamification experiment in Groningen

The Social Affairs and Work Department in the city of Groningen provides a financial safety net when residents need it. We focus on increasing the (financial) self-reliance of Groningers and relieving their stress. Our objective is to offer people living in debt and/or poverty a better foundation for the future. Through coaching, employees of the Social Affairs Department help residents set goals for themselves and to think of steps to get to where they want to be. This year the Income and Debt Services department will focus on increasing the coaching skills of all its employees to achieve this.

Serious gaming is the creative use of media technology to bring about change and deepen learning. It can be used to enable significant personal growth and behavioural change through the use of entertainment and interpretation techniques. The starting point is the development of an instrument that gives the player insight into financial skills that they can then use in their day to day lives.

We started up a trial to increase the insights and self-confidence of residents with financial problems by using serious gaming as a coaching and intervention tool. With the pilot, the municipality of Groningen aims to reduce the dropout rate and/or help citizens complete more of the debt counselling process.
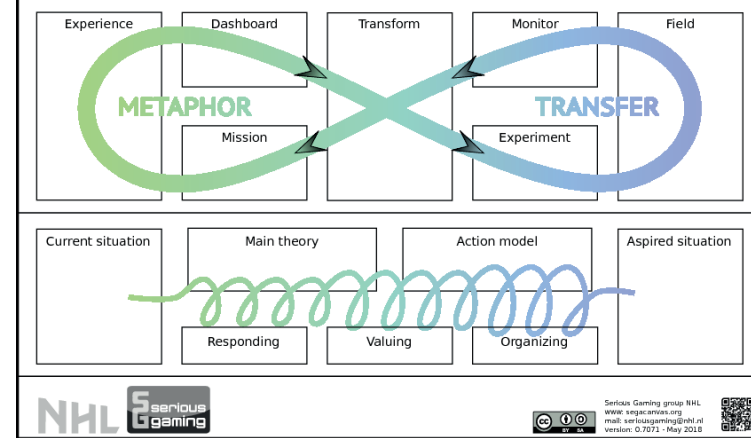

SEGA canvas NHL stenden

The municipality of Groningen approached the Serious Gaming professorship of NHL Stenden University and the University of Groningen not only to develop these games and to contribute to the delivery process, but also to provide more formal research on the impact of this work, as these learning outcomes will deliver the greatest long-term value from this pilot. NHL Stenden University and the municipality of Groningen are equal partners in the pilot, which is being delivered through the SiGa Lab - the Simulation & Game-Based Learning Lab of NHL Stenden University and the University of Groningen. SiGa offers a range of simulations and serious games for the development and assessment of skills and learning.

Background of the gamification experiment in Rotterdam

Bureau Frontlijn (Frontline team) helps Rotterdammers (citizens from Rotterdam) break the spiral of poverty. Frontlijn is an outreaching, intensive support team, which targets families with multiple and complex problems; such as poverty, debts, mental illness, issues such as addiction, and/or youth care or -protection supervision. They carry out complex interventions and use innovative methods. Bureau Frontlijn has developed several learning programs to help Rotterdammers learn different skills to be able to get out of poverty. These Rotterdammers live in a very stressful situation, so skills are learned through one-on-one support. Non-digital (text based) methods are usually used as part of the support efforts.

Together with Bureau Frontlijn we wanted to try a new, creative and innovative way to help Rotterdammers improve their financial skills. We looked for a partner who could help us with the innovation process. We wanted to do research on the target group, generate ideas, create concepts, and develop and test a prototype with the target group. This prototype could be either digital, or non-digital. We were looking for an agile and serious gaming approach, based on what we've learned from the field of behavioral sciences.

Double diamond approach
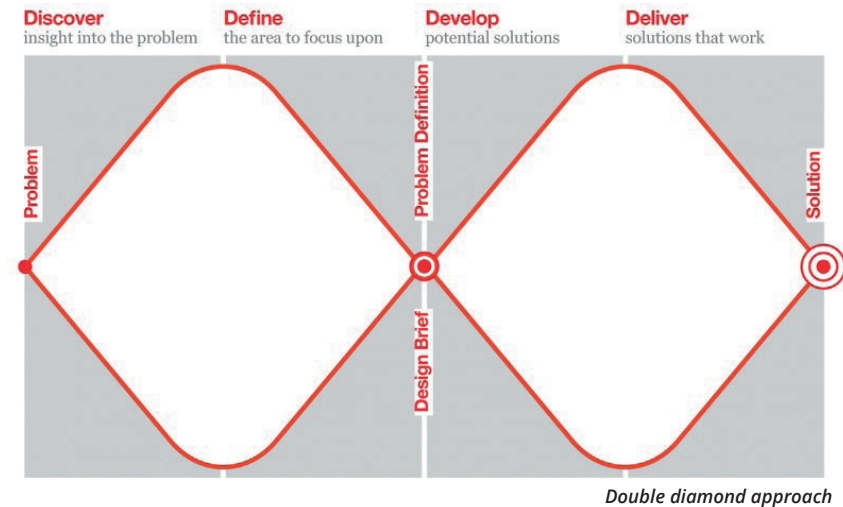
The Rotterdam gamification agency &Ranj was selected to be our partner in this project. The behavioural knowledge of the target group was provided by their colleagues of &Samhoud. In a small multidisciplinary team we worked towards a gamification solution that would last five sessions and have several additional contact points during the intervention, with the aim of:

"Helping citizens get more control over their money with: small financial habits, reinforcing self-esteem, reducing stress, and increasing the mental bandwidth."

The solution is currently being tested in the field and Bureau Frontlijn is continuously developing.

Groningen Approach

Last year, a project team consisting of eight employees from the Income and Debt department (including budget coaches, youth coaches, social services employees) and NHL Stenden University, prepared a trial that covered content, questions and subjects. We determined the final nature of the debt course through game design sessions. The team has mapped out how to use serious gaming, in which context and for which target groups based on their knowledge and experience. We currently have developed several games prototypes, and have delivered one skills game which is currently being field tested and refined. The Groningen pilot will run during 2019-2020.

Serious gaming testing

Creating for and with each other in Groningen

Research has shown that repetition has an effect on behavioural change. Therefore, we aim to play the game with 75-100 residents at 3-4 different times. To build up a good relationship between coach and player and to measure progress and impacts, it is important to repeat the process in the same setting several times during the year.

Ten debt counsellors and income consultants are trained at playing the game, coaching skills and in proposing reflective questions to help them have a good conversation with residents. The participants are in the final phase of their debt counselling process. We hope to increase the level of interaction between coaches and residents. A training course will also be developed for income and debt counsellors to learn how to apply the game. The development of the game and learnings will be split into 4 phases.

Because we worked together to build mutual understanding and to create a game, the process took longer than we had expected (or if had we hired a consultant to develop a game). Because of this the project team feels a great deal of ownership of the game and the project, and the same team will play the game with residents. The work title of the game is 'Acies', which means 'the full attention of one's sight, hearing or other senses, as directed towards a particular object'.

In Groningen, it's all about making (financial) choices

We created an analogue card game that contains a series of key situations. These examples stem from real world situations faced by the project group, and focus on one aspect of financial behaviour (but may touch other subjects). Participants play with an avatar. During the course of this game, participants must always decide to proceed to the next issue. Different choices will lead to different pathways in the game. For example: which smart phone should one buy? Or how do I spend my income throughout the month? Participants are given the responsibility for making these choices. During the game the coach can discuss the possible consequences of each choice with the participants.

Serious gaming session

The output of the game will be discussed with participants during a debriefing/reflection exercise to learn from this and to help us develop the situations and outcomes from different choices. In this pilot there is room for people to make different choices, as participants must be able to experiment and set their own goals. Being allowed to make your own choices is good for self-confidence and empowers participants. Initially the game will be used in 1 on 1 situations, but there is the potential to adjust it and use it during budget courses for groups of residents.

Serious game 'Acies'

Learnings in Rotterdam

In the municipality of Rotterdam we have been working with agile methods for more than ten years. This project used sprints, so prioritizing and testing hypotheses and assumptions by testing, wasn't actually new as such. However, the combination of sprints with gamification made this project innovative. &Ranj's gamification approach is based on the double diamond approach.

This model uses knowledge from the field of behavioural change. It explicitly examined how the 'Rotterdammer' can be facilitated and motivated to change their behaviour. We looked at the different types of players that can be identified in games, to try and make sure that the different player types who live in Rotterdam are as engaged as possible. Some players may like competition in a game, while others prefer collaboration.

16 gewoontekaarten: 4 van elke kleur

4 doelkaarten   1 insteekhoes   32 zelf-klevende edelstenen

The non-digital prototype

The structure of the game, and the breadth and depth of the game have also been designed and tested. All of this is knowledge and experience that we did not previously have in the municipality. While we had thought about customer journeys through Rotterdam's services, we had never thought about a player journey before, so this was very educational and inspiring! The project lead to a great (non- digital!) prototype.

Behavioural change alone is insufficient

Due to the focus on behavioural change, most of the attention went to the Rotterdammer during the development process. That made sense, because that's what it's ultimately about. However a new method also means change for our colleagues at Bureau Frontlijn. They were of course very committed to participating in the sessions, but that is not the same as getting colleagues committed to a change in working methods. Guiding our colleagues after the sessions with &Ranj on the potential impact of these changes on how they worked took more time than estimated in advance.

Views from outsiders lead to surprising insights in Rotterdam

We asked the *Ikbenwij Foundation*, who specializes in improving community engagement through creative interaction, to participate in the sessions at &Ranj and to record these sessions both digitally and in "spoken word poetry". The presence of Ikbenwij, however, was even more valuable than providing a mirror to us through the spoken word poem of each session. The IkBenWij team also provided the views of other Rotterdammers in our team, who occasionally kept us on our toes by reflecting on what happened in the sessions. At one point they argued that we should not only look at individual behaviour influencing financial situations, but to also recognise that many families in Rotterdam who suffer from poverty also experience systemic exclusion - such as systemic racism, or sexism as an obstacle to employment.

Another important insight for us was the lesson that working with personas can be very stigmatizing to a target group *"my mother didn't have much money, but she is not one of these personas!"*. We must remember that in the end it's all about providing services to individuals!

Patience is a virtue

As a municipality, we often want to get started quickly and to help the Rotterdammer. We also want to deliver change as quickly as possible. We learned in this pilot that the real work begins after the delivery of the first prototype. We expect to have several more test sessions with Rotterdammers and Bureau Frontlijn before the Rotterdammer and the Bureau Frontlijn staff can really get started with this new tool. We've learned in this and in other Like! projects that we should never roll out a new service until the Rotterdammer says: this is nice!

Prototype testing

Goals of the pilots in Groningen and Rotterdam

➢ Increasing the self-reliance, confidence and financial insights of residents
➢ Removing stress and promoting behavioral change
➢ Investigate whether serious gaming is a suitable coaching tool for clients
➢ Increase the skills and drive of employees in the areas of coaching, innovation and service delivery
➢ Increase mutual cooperation and understanding between employees and residents

Proceeds from the serious gaming pilot for residents of Groningen and Rotterdam

➢ A game can offer specific experiences and behavioral changes to a participant
➢ A game can coach a participant to practice specific skills
➢ A game can encourage a participant to follow a training program
➢ A game can activate a player to experiment with a different perspective and different interpretations of a situation.

Serious gaming summerclass

Insights from Groningen and Rotterdam

➢ Two municipalities know more than one, so we exchange knowledge throughout the process. We will be visiting each other to learn more on the subject of gamification
➢ A successful gamification pilot is not just about creating a game. It is a combination of services, innovation, understanding the target group, and developing coaching skills
➢ It is important to test material and prototypes with coaches and residents
➢ Thorough preparation is crucial and required. One cannot develop as quickly as one wants, there is more to it if the game is to be effective
➢ Setting up brainstorm and game design sessions with professionals is important for knowledge transfer, team spirit and ensuring that the game is of sufficient quality
➢ It's not about scoring, there is no right or wrong in gamification. Nor is there a first, second or third achievement level. We aim to give residents a better understanding of how their choices affect them.