Product Vision
StandUp Game

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Challenge the future

1 Introduction

It is important for companies to keep the health of its employees in mind. Especially in office workplaces, which have a sedentary nature, there are increasing concerns to employee health (Marshal and Ramirez, 2011). Most of the employees in an office spend almost two-thirds of their time sitting (Clemes, Patel, Mahon and Griffiths, 2014).

Excessive sitting during the day can however lead to medical problems. Studies have shown that sitting for most of the day can lead to an increased risk factor for cardiovascular disease, type 2 diabetes, premature mortality as well as some cancers (Gierach et al., 2009; Thorp, Owen, Neuhaus and Dunstan, 2011). This risk factor is independent of how physically active this person is (Bankoski et al., 2011).

The problem is not just with sitting most of the day while at the job. As can be read in Clemes et al., 2014, even during lunch breaks the 'high work-time sitting' employees tend to walk little. This means that an employee that is more sedentary moves even less, even though especially that person needs to move around more.

Our product aims to be a tool that can help motivate people to regularly take breaks during the day. This is done through gamification. Gamification uses game elements to encourage non-game activities ranging from being more productive to living healthier (Deterding, Dixon, Khaled and Nacke, 2011).

2 The Customer

Who is going to buy the product? Who is the target customer?

We envisioned our target group to consist of people who remain inactive for prolonged periods of time. Although we want to motivate as many people as possible, we are aware that a single game can not be liked by every single person. Thus we assume that the initial users of the application are people who know that living a sedentary lifestyle is bad for their health and seek to change. They just need a little push or reminder.

This is exactly what our game offers. Hourly reminders to get up for 5 minutes and be active, and rewards for doing so. This will make the people feel proud of themselves for actively changing their lifestyle to a more healthy one and it will be the reason why people will keep using our game.

By having the possibility to organise groups with friends we hope that even the unmotivated as well as those who are unaware of the benefits of regularly moving will pick up our game.

3 Customer Needs

Which customer needs will the product address?

The primary customer need that our product will address is motivation. The game encourages people to keep exercising and moving for five minutes after every hour. By using reminders we increase the awareness of sedentary habits for our users. At the same time users are encouraged to play a fun game which rewards them for healthy behaviour. The game should not feel as a chore that has to be completed every hour.

4 The Product

Which product attributes are crucial to satisfy the selected needs, and therefore to the success of the product?

Research done by Dantzig, Geleijnse and Halteren, 2013 and Kan, Gibbs and Ploderer, 2013 in using mobile applications to reduce sedentary behaviour has been extremely useful for us to determine what our product has to contain. Thus, many of the statements we make can be found in Dantzig et al., 2013 and Kan et al., 2013.

Our game addresses several customer needs, so we will break down the crucial elements which will satisfy these needs:

Reminders The game will keep track of time while the customer is working. Every hour, the player will be reminded that he/she has been working or sitting for one hour and that it is time to be active for a little while (also known as a stroll). If the timing of this happens to be unfortunate, the player can simply postpone the stroll for a bit and do it at a later time when it is more convenient. If the player completely ignores the reminder the game will remind the player again one hour after the first reminder.

We do not force the players to be active, since this often leads to irritation and spite. The exact opposite of one of our other goals: Fun.

Encouragement There are two ways that the game encourages its players to keep going on these strolls and complete the events.

The first way is that the players receive rewards (in the form of collectibles) proportional to the amount of events they managed to complete within the five minutes of the stroll. People generally like to collect things, thus encouraging them to do as much strolls as possible.

The second way is that the players are able to join groups. These groups will have a shared collection screen which will only display the most rare collectibles. This creates small amounts of social pressure since you do not want to be the player with zero collectibles on display.

Fun As mentioned above, people generally enjoy collecting things, and for this reason our game will have lots of collectibles. Every reward will have a randomised colour and pattern applied to one of the possible shapes. The amount of different colours and patterns possible combined with the different shapes will make for a nearly endless amount of collectibles.

Every collectible will have a rarity score based on its colour, pattern and shape. These scores will be used to determine which rewards are most worthy of display for the groups and to impress and boast to your friends! This in turn will motivate your friends to do better!

5 Competition

How does the product compare against existing products, both from competitors and the same company? What are the products unique selling points?

While doing research on competitors we came to the conclusion that there are currently little applications that are similar to ours. Kan et al., 2013 for example examines the game 'Zombies, Run'. While this is a 'mixed reality' game it only applies to runners. The game is not directed to any sedentary target group at all. Dantzig et al., 2013 does look at the sedentary issue, but the 'SitCoach' application is not a game. It does create sedentary awareness to its users.

Even worse are applications like 'Workrave', n.d. Workrave is software that locks your computer every specified interval and limits your screen time to a specified time. This approach of forcing breaks on your users feels very invasive and can leave a frustrated feeling.

We are given a chance to explore the concepts of gamification as well as sedentary awareness firsthand. Since there is little reference material from other games that have been created we have to keep an open perspective. At the same time we have to try to make a game that is appealing to a broad public.

How will people react to our game? What will they find fun and what do they dislike? We are in the drivers seat while trying to find a good solution for a problem that only recently has been discovered.

6   Production

What is the target timeframe and budget to develop and launch the product? The final game implementation is to be ready on 22-06-2015. By then we will have had about ten weeks to design and develop the game from scratch. As most people to date have a mobile phone, there is no extra budget required to launch the application.

The first two and a half weeks have been spent on brainstorming and designing the game, while the rest will be spent on implementation. By having a clear understanding of the game and the components that its exists of we expect to have few changes to the product and thus increasing the productivity during development.

7   Gameplay

Using all the information collected from literature research as well as brainstorming sessions we came up with a concept for our game. *Figure 1* shows a quick overview of the phases a player will go through which we will describe next.
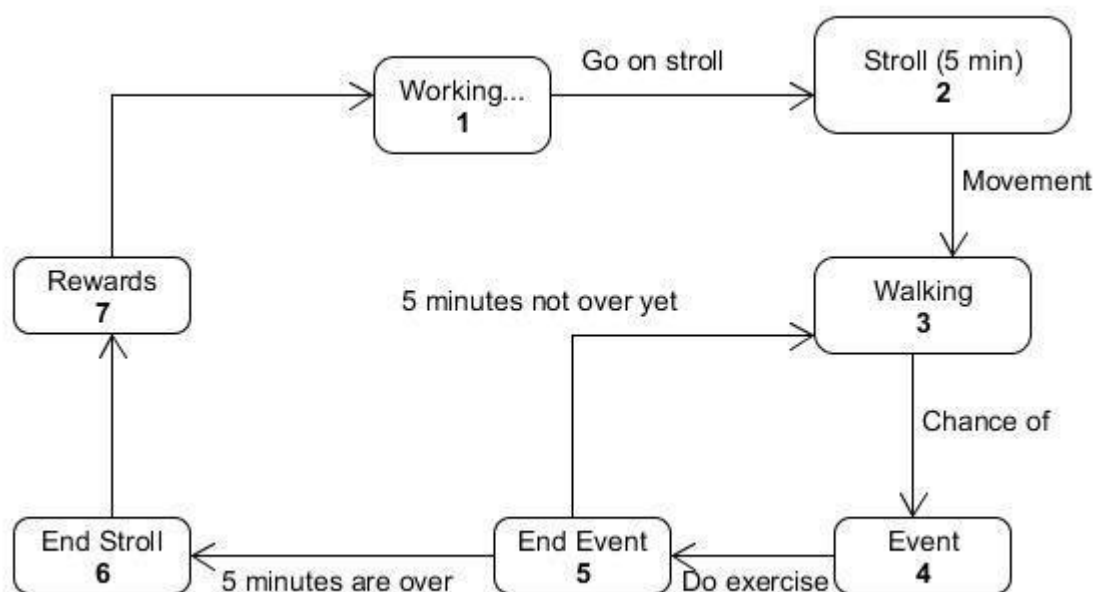

Figure 1: States in which the player can be

A player is initially in a 'working' state. In this state the game is not played at all. The player waits until an hour has passed and receives a reminder that tells a new stroll is playable.

A stroll is a 5 minute window where the player has to move around. While the player is moving there is a chance of an event occurring. These events create the actual gameplay and can be seen as a small challenge that has to be completed. There are various challenges which all require some physical activity to complete, for example: shaking the phone in order to remove objects.

When the player completed an event he/she can continue to walk and get even more events. This makes it possible for multiple events to be completed during a single stroll. When the 5 minutes have passed the player ends the stroll and receives rewards. These rewards are based on the amount of events that the player managed to beat. Thus completing more challenges is encouraged.

When the player has accepted his/her rewards it is time to get back to work. That pile of documents is not going to proofread itself.

Another fun and encouraging component of the game is the ability to create groups. Sharing a group with others results in a small competitive environment, since only the rarest rewards of the group will be on display. This drives people to try and get more rare rewards, and the only way to do that is by playing, and therefore exercising, a lot.

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