CSC318 A3b
Combined Formative Study Results

The Problem Solvers

<u>January 26, 2019</u>
<u>Tutorial #3</u>

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The problem space we chose to investigate is fitness motivation. How do amateur or professional athletes, and gym goers keep such a tight schedule of working out and keeping themselves fit? How can normal people overcome laziness and procrastination to also get into the groove and get in shape? We aim to come up with a solution that would help with motivating people to keep getting fit.

To tackle the problem space from several angles we divided our work into a few categories. Each one of us focused in two of them, creating an overlap in the papers reviewed and the research studies done by the team. Below is a summary for each category, and the insights gained for our proposed solution.

Technology

The current technological solutions on the market are wearable devices (e.g. Fitbit, Apple Watch, step counters). From our interviews, we found that exercise and health tracking appealed to people because they were able to visualize their fitness habits and concretely see their progress. However, the interviewees did not develop a long-term habit of using the trackers due to the inconvenience of the system (frequent battery charging needed) and physical discomfort of the watch wristband.

Even though they stopped using the system, they still showed interest in data tracking and exercise, so a possible solution would be to have an application based on the cell phone which supports the data tracking functionality that appealed to users of trackers. From our observational studies, 60 out of 62 people interviewed reported that they use a cell phone regularly, so this platform would be more convenient for users since they already have a regular habit of carrying it with them. Our observations from the field studies support these numbers. Almost 100% of the gym-goers observed used a phone while exercising, and more than 70% of the people observed were listening to music using their phone. Overall, our studies all support the notion that a mobile app would be the most convenient and easily integratable form of solution.

Motivation

Our research shows numerous different factors affect users motivation with regard to exercise, use of health and fitness technology, and data tracking. Sources of motivation can be divided into two categories intrinsic, and extrinsic. These forms of motivation correspond to internal and external sources of motivation respectively. From our surveys and interviews we were able to determine that people do not overwhelming share one particular motivator and instead rely on an

array of numerous motivating factors, which is in alignment with the literature review completed by Reece. While there are numerous motivating factors at play when considering the aforementioned topics, extrinsic motivators are much more plentiful overall. However, research conducted by Yi suggests that intrinsic motivation (such as a personal desire to improve) is superior when compared to extrinsic motivation (such as changing societal norms).

We discovered a lot of ways that extrinsically motivate people to workout: Scheduling workouts with friends result in people showing up due to not wanting to bail on their friends; paying for gym memberships and classes result in people wanting to get their money's worth; social media and comparing themselves to others give people motivation to look better; fitness competitions such as step goal challenges encourage people to do better than their peers. These are all good ways to motivate people, but we need to combine these with ways to develop people's intrinsic motivation as well. Users need to be able to set fitness goals for themselves, and our solution should provide a way to help them incorporate fitness into their schedules, such as combining fitness together with their other routine activities, or helping them organize workouts with their friends. Through our user research, we also saw indication that people loved getting rewards for instant gratification, so we should incorporate a reward system in order to further motivate them to stick to their goals and workout schedules such as compliments, badges, and an avatar to reflect their appearance goals. Even if the users cannot see their progress clearly, the progress made in the app still gives them a sense of accomplishment, and they will be more likely to develop their intrinsic motivation to get more fit.

Exercise

Exercise is the activity that our solution will facilitate. There are various ways to exercise, and a beginner approaches exercise differently than someone who has already developed a habit of exercising. From our interviews, we learned that beginners favour workout and health guides to help them get started. This was supported by observations that some people google how to do certain exercises or how to use the machines at the gym. Thus, it is essential for our solution to have tutorials or guided exercise plans to accommodate beginners.

Our observational studies indicated that walking was the most popular exercise (52/62 people) followed by strength training (44/62) and running (26/62). Support for tracking and encouraging these activities will make our solution relevant to a larger portion of the population. Due to the importance of social activities demonstrated in the following section, our solution should also encourage participation in and help people form groups/clubs to play sports and active games.

Exercise also takes place in many different locations. For example, our observational studies revealed that gyms and fitness classes are a popular area designed specifically for exercise, however there are groups of people who may not have the means to pay for access to these locations. Another location where physical activity takes place is at work or during hobbies that involve

physical activity. Our questionnaire studies revealed that out of 9 people who indicated that physical activity is part of their work, 7 of them also reported 10 hours or more of physical exercise per week. Encouraging alternatives to traditional exercise such as participating in volunteer gardening or community park clean-ups is another way to help users become more physically active.

Social

The last component to our research is the social aspect of fitness and working out. Most people love being social in their fitness journey, and this is most often seen in the abundance of team sports and sports clubs around. Through our research and investigation, we confirmed our thinking that in order to fully benefit our users with regards to fitness and social, a strong connection to their existing social network is a must. Apps and plugins such as WeRun and Strava are as popular as ever, and users have an innate gravitation towards being the best in their social circle.

For the fitness and workout beginners, having a friend or a couple of friends to attend classes with can help them get off their behinds and actually attend workout sessions in order to not disappoint their friends. This is further supported by a previous research study which indicated that people felt like their smartphones helped encourage them to exercise more by connecting them with friends to organize group physical activities. For the fitness regulars who already have motivation to workout, they may already have friends and workout buddies to go to the gym with; however, they can always benefit from making new friends at the gym, or joining a sports club to learn a new sport. The accountability and motivation from friends and workout groups has proven to be one of the best ways to ensure consistent participation at the gym.

Interviewees and questionnaire participants have experienced hardship, however, regarding arranging workouts with their friends, and just finding compatible people to workout with to begin with. This is usually due to the fact that scheduling is complicated, and there isn't a good channel to easily find people of the same fitness level or same interests to exercise with. With fitness beginners, there is also the additional challenge of feeling uneasy and scared when exercising among a gym full of hardcore fitness maniacs, due to them feeling inadequate and lacking necessary guidance in an intimidating situation such as a full gym.

Our solution should aim to help users become more connected with their social network and new friends, and use this social power to motivate users to workout more, and help them ease into the world of fitness.

Experience Map for "*The Problem Solvers*"

LEGEND: ? Questions in customers mind, '+' positive experiences & reactions, '-' negative experiences & reactions

	ENTICE	ENTRY	ENGAGE	EXIT	EXTEND
PEOPLE	*Students *People not in organized sports *Online reviewers	Customer, customer support	Customer, friends, family, strangers, workout buddies, personal trainers	Customer, friends, strangers -> acquaintances	Social network, Customer, Press, Review
CONTEXTS	*At home, trying to start workout *At gym by self *In bed or couch	At home, trying to start workout	Public areas, parks, gyms, at home, outside, campus	After workout, at home	At home, out with friends
FEELINGS	+ Excited to start working out - Lonely cuz no friends - No time - No regular schedule	+ Excited - Hesitant - Nervous about perhaps meeting new friends - Annoyed, this is so much effort	+Healthy during workout +Satisfied during workout +Happy because new friends made -anxious meeting new people -confused too many options -overwhelmed too many people Motivated to workout because a date has been set	- Tired (Sore?) + Excited because new friends Motivated to work out again	+Social, want to make more friends +motivated, socializing is the main method for fitness motivation -social interactions to not motivate the user to be fit
THINKING	I want to workout, but no motivation to, too lazy, no friends to workout with me ? WIll this really help	? Will this charge me for full features ? Privacy of my data	- There are many different categories of people to choose from, i'm overwhelmed + This person the app found me is great! I love working out with them - This person the app found me is not a very good match When is dinner?	+ I enjoyed this workout experience a lot + I want to workout with this person again! - Okay I did what it told me to why am I not losing weight? - Such a pain do I need to do this every day?	? Should I recommend it to my friends
ACTIONS	Research on google Browse app store Recommended by friends	Download app Launch app Sign up and fill out details about self	Finding people to work out with on the app Using the app to set fitness goals Meeting new people from the app Arranging workouts with friends in existing social network Working out Logging details Enjoying self	Log daily progress to compete with friends Keep using the app Connect with people from workout Share with other people	+ Bragging / progress pics + Recommend to friends / gym-goers + Share app with friends in social network +/- Send feedback - Complain online + Review online
TOUCHPOINTS	User has no friends, need to help them make friends Need to get user out of bed	Onboarding process needs to be smooth, without much friction	Need to have a smooth user experience to not bog the user down too much	Content shared with other users must be controlled by user	Design an attractive sharing system

Appendix

<u>Research Summaries</u>

Yi

The solution will more likely be found in the relations between users than on interactions between a user and an app. Extrinsic motivators are common in the workplace (salary, hierarchical position within the organization, social status), while in educational settings, intrinsic motivators play a much more important role. Motivation for training (our problem space) is mainly intrinsic; but since extrinsic factors can carry more weight, this could hint towards the need for a social aspect to sustain a long term solution. The paper found a significant correlation between institutional support and decreased motivation, as in between the user expectation of reduced effort and increased performance. There is also a clear link between moderate to low social support and high amotivation.

Reece

The two primary areas of focus when conducting this research were exercise motivation and tracking and how they are be enabled by technology. All three individuals interviewed had directly interacted with purpose built exercise trackers but, none of them were still using these devices highlighting their inconvenient and unsatisfactory nature. In addition, all participants still showed interest in exercise tracking despite their prior experiences. Regarding motivation, it seemed that social interaction and data tracking were quite motivating to participants, regardless of what activities they were participating in. This is backed up by results from "*Flow is not Enough*" which suggested multiple design themes related to group exercise. Hence, going forward, it seems important that we ensure any solution we develop is low-friction and enables increased group exercise and socialization opportunities, while also providing accurate data points for tracking over time.

Kyle

I believe that when people pay for exercise, they are motivated to get their money's worth and take the class very seriously. The financials are their motivator to attend and receive a quality work-out. They paid for a service and it seemed like they expect high quality in return. With unpaid exercise, financials are no longer a motivator, and socialization seems to motivate attendees to be fit. The goal for these people seemed to be socialization while being fit at the same time. Implications of these results for our problem space is assigning types of fitness motivation for different audiences. Now that we know individuals who don't pay for exercise can be motivated to be fit via socialization, a possible solution to our problem space can be formed.

Yufei

The main goal of my research was to look into the correlation between fitness motivation and social practices such as friends and social networks. After doing careful background research into

relevant research papers and user research through interviews, my belief that the social aspect is one of the biggest factors in our problem space was reaffirmed. We are social by nature, and being in a group is always a big motivator in doing any task, especially when the group contains people who are more social than ourselves. Through my research, I found that people were much more inclined to workout if their friends were involved, and they were open to finding new compatible buddies whom they could workout with as well. This means that, whatever our proposed solution comes out to be, needs to have a strong social factor, preferably built on existing social networks, that users can use to connect with their friends and motivate each other with.

Louise

My research examined peoples' fitness habits, device usage patterns, and goal-setting practices. I found that more people desired the physical results of working out such as weight and muscle appearance rather than the perceived health benefits or body confidence. People who are efficient goal-setters tend to set goals that are complementary to each other and prioritize their goals in order to spend more time on the ones that matter more to them and less time on ones that do not matter as much. Meanwhile, people who reported that their goals conflicted with each other said that there was not enough time to work on everything they wanted to. As for physical activities, our solution should offer support for walking, strength training, and running because those are the most popular physical activities. My questionnaire also reaffirmed my background research by linking higher amounts of physical activity to lower amounts of cell phone use.

Manuel

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Assignment Attribution Details

- Yufei - Worked on the social section of the research summary as well as part of the experience map, contributed ideas to the motivation and technology section
- Reece - Worked on the motivation section of the research summary, contributed ideas to the technology section
- Louise - Worked on the technology and exercise sections of the research summary, formatted the document, contributed to the experience map during the group meeting

- Kyle - Added information for the Technology, Motivation and Social aspects of the research summary. Collaborated on populating the experience map during the group meeting.
- Manuel -
- Yi -