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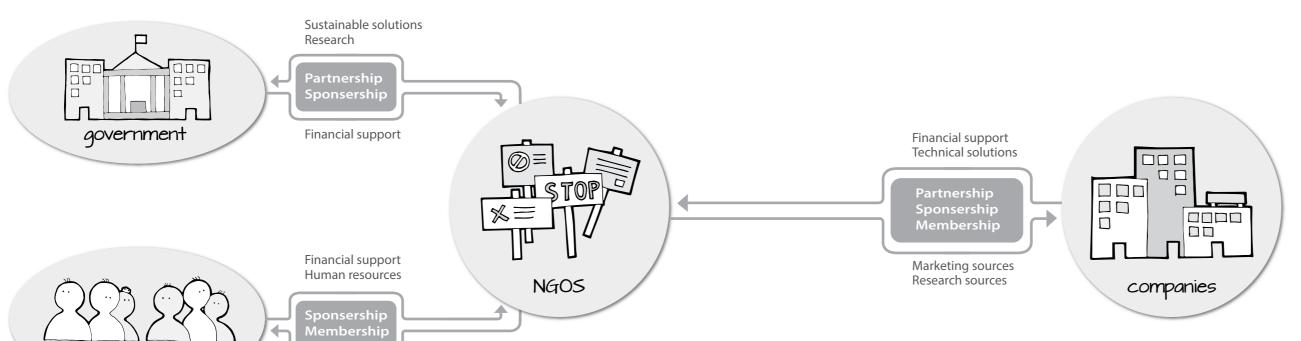


WHY ENVIRONMENTAL NGOS?

We often hear news of how the earth is suffering from ecocide. The temperature is increasing, glaciers are melting, the sea level is rising, etc. Maybe we have heard about this news too much so I would say we know about environmental issues. I guess everyone knows who has the responsibility for our environment. Yes it is on all of us and there are so many things we can do for a better environment in our daily life by changing small things. One old Chinese proverb says, "The best time to plant a tree was 20 years ago. The next best time is today."

We never realize how our valuable our environment is to our society and life before a natural disaster comes. Gregory Bateson who is a social scientist said, "The major problems in the world are the result of the difference between how nature works and the way people think." Environmental issues are so closely connected to our daily life and contributing to environmental issues in our daily life is not as hard to do as much as fighting for human rights. I want to challenge consumers to change their behavior to be greener and link that to financial support for environmental NGOs.





consumers

ACTORS' GENERAL RELATIONSHIP MAP

When we look at how NGOs get funding, there are three main actors involved financially with NGOs. They are connected through different needs with each actor. To make it clear, I came up with this relationship map. From this map, you also can see what kind of value they exchange with each other.

First, between governments and NGOs, NGOs provide sustainable solutions and information to governments within their partnerships and get financial support from them. Between consumers and NGOs, consumers give financial support and human resources to NGOs through their membership and consumers can get environment news and sustainable tips from NGOs. Lastly, between companies and NGOs, companies support NGOs financially and provide technical solutions and human resources depending on the partnership agreement. Companies get marketing and research sources through this partnership as well.

WHO IS THE MAIN TARGET AUDIENCE?

The target group for the project among the main actors is companies. The reason why I chose companies as the main target is because recently NGOs have changed their target group from end consumers to big downers and companies.

Medium to large companies especially, put more value and effort on CSR activities for their organization's image and employees' ownership. One interesting find, is that even though there are many collaborations or partnerships, most of them have nothing to do with a companies' employees. Companies spend huge amounts of their budgets on NGO funding and if they don't give their employees a part of these activities, how can they say it is a valuable and meaningful partnership with an NGO? Some companies try to engage their employees in their partnership with an NGO by encouraging them to participate in NGOs activities, however, it is normally a one time event.

So, I came up with this model and this green circle is what the concept will be. This new service is what NGOs will provide to companies to make employees participate through that service and create profits through employees' participation. "NGOs' target has been changed from end consumers to big downers and companies"

Joe Saxton Fundraising director at nfpSynergy

Make employees participate in environmental activities in daily life **SERVICE** NGOS employees companies

Create a profit for environmental NGOs through employee participation

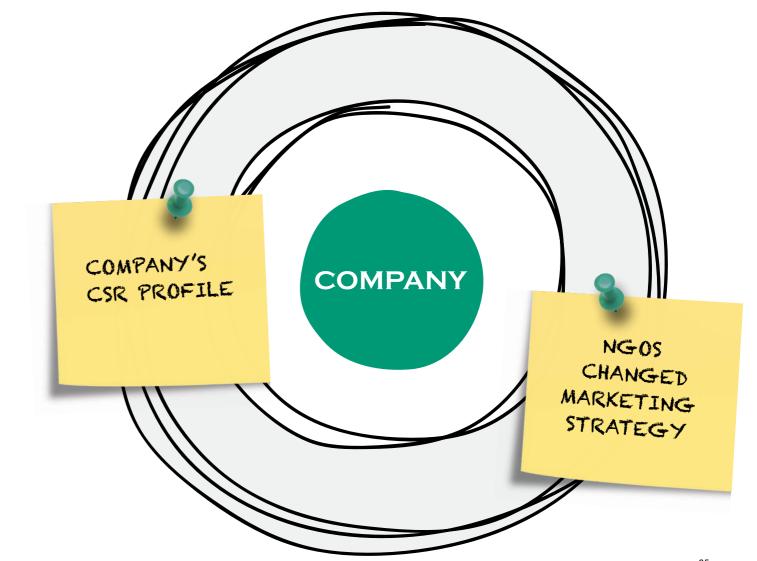
WHAT IS CSR?

"CSR is short term of Corporate Social Responsibility and it is a form of corporate self-regulation integrated into a business model." (Corporate social responsibility, 2001) "In crowded marketplaces, Companies strive for a unique selling proposition that can separate them from the competition in the minds of consumers. CSR can play a role in building customer loyalty based on distinctive ethical values."(Ethics and Brand Value: Strategic Differentiation, 2005) "Several major brands, such as The Co-operative Group, The Body Shop and American Apparel" (How To, 2008) are built on ethical values. "Business service organizations can benefit too from building a reputation for integrity and best practice. There are many aspects of corporate social responsibility; whether a company decides to develop one area of CSR, or multiple, the end result is a more profitable company experiencing a higher level of employee engagement."(Talent Management, 2007) The following is a list of common ways corporate social responsibility is implemented by organizations.

1. "Environmental Sustainability: Areas include recycling, waste management, water management, using renewable energy sources, utilizing reusable resources, creating 'greener' supply chains, using digital technology instead

of hard copies, developing buildings according to Leadership in Energy and Environmental Design (LEED)® standards, etc." (The Green Market Oracle, 2012) (Great Forest, 2013) "There is a business sector dedicated to specifically to environmental sustainability consulting for businesses of any size to utilize." (Environmental Leader, 2013)

- 2. "Community Involvement: This can include raising money for local charities, supporting community volunteerism, sponsoring local events, employing people from a community, supporting a community's economic growth, engaging in fair trade practices, etc." (Camden Community Empowerment Network, 2013) "Starbucks is an example of a company that focuses on community involvement and engagement; since these programs began the company has seen higher profits and greater employee engagement." (Workforce Management, 2003)
- 3. "Ethical Marketing Practices: Companies that ethically market to consumers are placing a higher value on their customers and respecting them as people who are ends in themselves. They do not try to manipulate or falsely advertise to potential consumers. This is important for companies that want to be viewed as ethical."(CSR)



SURVEY WITH CONSUMERS

I have done surveys with consumers (mostly students) to gather general thoughts about environmental issues and sixty-five people answered the survey. The survey questions were about how interested they are in environmental issues and what kind of activities do they do in daily life to help the environment.

According to the result of the survey, seventy percent of those surveyed answered that they have high to very high interest in environmental issues. But at the same time, sixty-five percent of responders have never participated in any environmental NGO activities. We can see that consumers don't participate in NGO activities as much as they are interested in environmental issues.

The first question was, "Which NGO do you choose and how do you participate?" Most answered Amnesty, UNICEF, Food for the Hungry, WWF, GreenPeace, Bellona, etc. by donating money or joining a protest. Responders are mostly interested in or think has the most problem in waste, water, air, energy, forest and wild animals in order to high percentage. Then I asked them, "What activities do you do in your daily life to help the environment?" Recycling, walking or taking public transport was the most

they do. Shopping less, reducing food waste, showering with their partner, turning off the lights when not in use, etc. were some common answers. The next question was, "If you don't do any activities in your daily life what is the reason?" The answers were mostly that they are too busy to care for all these things, it sometimes costs more money, or they don't see how their small acts can have any effect.

From the survey, I learned that most people believe they are interested in environmental issues but their actions are usually nothing more than basic activities such as recycling or riding public transport. The reason they are not acting these issues as much as they are concerned with them, is because many of the larger activities are often annoying, difficult, costly, or boring. So how we can make these activities more fun and interesting for people? This would be one of the tasks I will solve through this project.





Quotes about environmental activities

"The small things seem more of a hassle then they are worth." "I don't always to remember to think about others." "It's very easy to don't care."

Where are the most problems according to consumers.

"I don't care too much I guess. I feel too small to make a change." "why should I care when billions of others does not?."

KEY INSIGHTS FROM THE INTERVIEWS WITH NGOS

After interviewing several NGOs I got some important insights from them.

First, since Norway has a wealthy government, some NGOs get a lot of support from them, but they say it is risky to depend on government funding, because governments can change their views on certain issues or laws at anytime. These changes could result in NGOs losing their government as a source of funding.

Another thing was that environmental NGOs are not popular among companies, which is understandable and in fact most big companies partner with development or human rights NGOs such as UNICEF, Red Cross, and Save the Children. Saq Imtiaz who is an IT innovations director at UnaMesa said in the interview, "In a way all industries that cooperate with NGOs are doing it as charity work and they want the most visibility possible for their work and it's much more appealing to say, 'Oh we're supporting a cancer charity,' rather than, 'We're supporting these people who make our flyers to make people aware of the environment.'" Another related fact I found is that no environmental NGO is in the top 10 NGO list as far as money raised from private donors in Norway.

As we saw the result from the survey, most people say they are interested, but when we see how much they participate in green activities, it is really basic. Ina Toften who is the head of marketing and communications at WWF says "People also want to make sure that giving the money is worthwhile, which is very understandable. It's very important for us to try to show what we are actually doing, but working with environmental issues is often slow to show results." One of the biggest reasons is working to help the environment is not fully visible, another problems for us is that we don't see how small actions can change world issues. We know what is happening to the environment but we don't feel that it is a big problem because most of these problems are happening somewhere else in the world. This explains the third insight from NGOs.

lastly the way NGOs work has almost never changed. Joe Saxton who is the fundraising coordinator for NFP Synergy says, "To be a good NGO, they should learn how companies impress their customers and win their hearts." Seems like NGOs need a new solution or service to approach and find new donors or partners.

Depending on government's support is risky

Environmental
NGOs are not
popular to
companies for their
marketing

The Problems won't go away with just talking The way NGOs work hasn't changed much from the past

"To be a good NGO, they should learn how companies impress their customers and win their hearts."

Joe Saxton Fundraising director at nfpSynergy

KEY INSIGHTS FROM THE INTERVIEWS WITH COMPANIES

I also had interviews with representatives of tow large companies in Norway which were DNB(national bank) and Posten(national post serivice).

First of all, both companies have some cooperation with NGOs for their social responsibility profile and sustainable value project. DNB is cooperating with the Norwegian Red Cross but not with any environmental NGO at the moment. Posten also supports the Red Cross, Doctors without Borders, the Norwegian Handball team, and they are partners with ZERO(Zero Emission Organization) for sustainable solutions in all sectors. The companies' cooperation target changes every now and then depending on the relevance to company's current situation. Both companies are drawn more to NGOs that work for human rights when they want direct employee engagement through volunteering and other activities, rather than working with environmental NGOs.

When we see how they work for the environment in the workplace, they work on a lot through many different channels. They both are members of Eco-lighthouse, which is an environment certification consultancy, and using Eco-lighthouse's certification system for an

environmentally friendly workplace solution. They teach their environmental policy to employees through brochures, an e-learning system, and training. They also do campaigns with posters and signs in the workplace and monitor the employees' engagement through surveys and interviews.

These five things are the main tools that both companies use for their environmental projects under the certification system from Eco-lighthouse. Apparently, these large companies put a lot of effort into environmental issues in the workplace for both increasing employee awareness and reducing administrative costs. At the same time they have bigger issues that have to be monitored and followed up on a closer level such as employees' health and safety in the workplace.

Overall, they seem to have confidence in their environmental policy and activities in the workplace as Mr. Colin Campbell from Posten said "The one thing I can say about environmental awareness and environmental work in our organization is it's very positively loaded and very well received."

CERTIFICATION SYSTEM

Certification systems are what many major companies use for their standard of environmental work in the work-place. There are a few certification consultancies out there and Eco-lighthouse is one of them. Many companies in Norway are members of Eco-lighthouse such as DNB, Posten, and Telenor.

So how does the certification system work? When the company decides to be a member of one of these consultancies, a representative from the consultancy comes to the company and sets up "green routines" based on the company's work environment. They set goals and rules for the company to follow for the next year. Then they train employees to act on this project and the company has to monitor its employees' participation and submit an annual environment report. Then the consultancy revaluates and sets a higher goal for the upcoming year.

Mr. Colin Campbell from DNB describes the certification system and how it affects their work environment. "So, all our post officers and all our major terminals are certified and the reason I bring that up is that is the employee engagement aspect of the certification process is very good because there are very strict requirements in terms of

what you have to do with energy, waste, and transport. And you have to involve all the employees at the work-place in this initiative. So that is one good example and we notice that through the certification process the general awareness of what is good and bad environmental practice is raised."

Process of certification system

Follow up "green routines" Internal training Communications plan Submit annual repeorts

Recertification every three years

Ctreate environmental criteria

Set higher goals

MISSING POINT OF CERTIFICATION SYSTEM

When we look into the environment certification system from a different certification consultancy, they have almost a hundred different criteria that the company has to follow in the workplace and it covers waste, energy, transport, etc.

Most tasks are what the company has to do with criterion no.33 about transport from Eco-lighthouse, 'The enterprise's vehicles should be equipped with stud-free tires.' Even when it is closely related to the employees, it is the employees' decision. For example, criterion no. 37 about waste says, 'The use of disposable items must be reduced to an absolute minimum.' Of course the company can remove all disposable items from the workplace to reduce using them, but if there is an employee who decides to bring their own disposable products such as paper cups or plastic forks from home to, is there any way to monitor it and make them stop? Which means it depends on the employees and whether they follow the rules or not. Even if the company encourages its employees to participate through campaigns and training, it's not enough to change the employee's behavior.

When the company gives its employees a hundred lists

of follow up activities, when the workers are already busy and tired with their work, the follow up activities become a nuisance. Of course since it is not monitored individually and there are no rewards or punishment, it's easy to do nothing rather than bother to do the extra work.

One respondent from the survey with Posten employees said, "Because I expect others to do so. So I don't." All the environmental activities that companies encourage their employees to do are valuable for both the company and its employees, but the question is how can we make it more enjoyable too. Also, Helene Gallis who is a district politician from the green party said in an interview, "Using certification tools might change a company's policy, but I don't think it changes an employee's mindset."

What can change an employee's mindset and make them act on environmental activities in their workplace voluntarily? After the interview with the company representatives and the survey with some employees, I narrowed it down to two keywords that the company is missing from its environmental working system, they are personal monitoring system and individual feedback.

Companies have the sources and tools to create an environmentally friendly workplace. Even though they have the passion and vision for their sustainable profile, but those channels don't communicate with their employees on an emotional level. And I want to create values for the environment and environmental NGOs by connecting those sources.

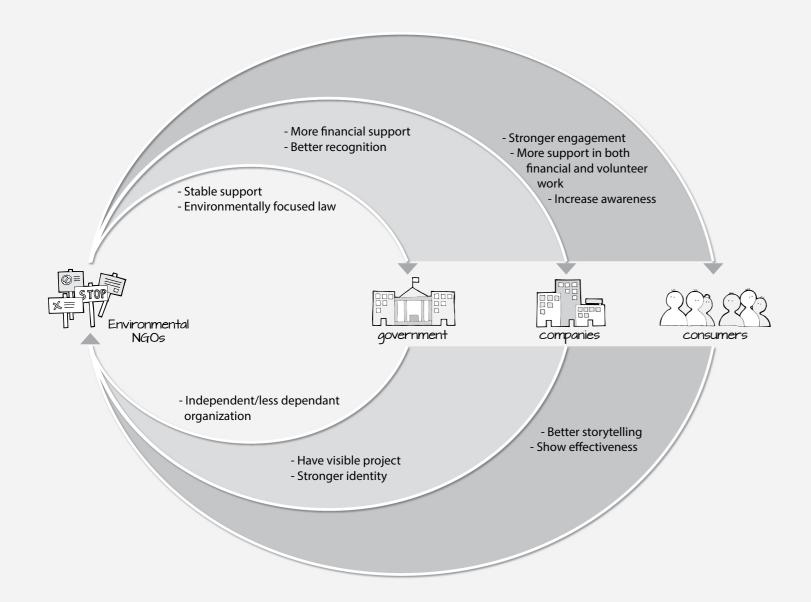
Personal monitoring system

Individual feedback to each employee

"Using certification tools might change a company's policy, but I don't think it changes an employee's mindset."

Helene Gallis
District politician

^{**} more info about 'Industry criteria: http://eco-lighthouse.org/statistikk/



OFFERS AND NEEDS FROM DIFFERENT ACTORS

Before setting a clear goal for the project, I mapped out a value exchange between the different actors one more time based on my research, surveys, and interviews to have a clear view of their needs and offers and what they expect from each other.

First, between government and environmental NGOs; NGOs want to receive more stable support from government and NGOs also want the government to change laws to be more environmentally focused and closely involve in environmental issues. However, governments can't guarantee their project direction to be more environmentally focused. Governments have many other important issues they have to focus on that are a higher priority than environmental issues. In a way, governments want environmental NGOs to be more independent and less dependant on their support.

Second, between companies and environmental NGOs; NGOs want to be more attractive to the whole range of companies in order to get financial support, not only attractive to energy, construction, and electronic companies as a project partner. Environmental NGOs want to have better recognition from companies like the human

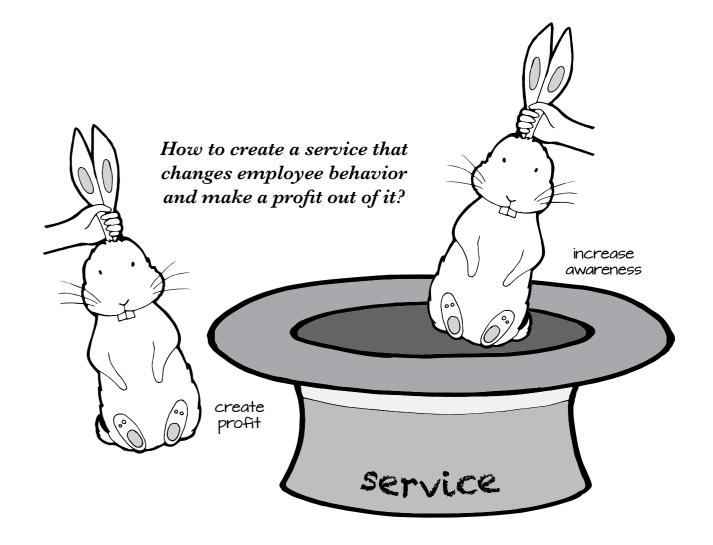
rights or developmental NGOs do, such as Red Cross and UNICEF. At the same time companies want environmental NGOs to have some kind of visible and quick feedback projects that companies can contribute and share the result with others.

Lastly, between consumers and environmental NGOs; NGOs want consumers to have a stronger engagement and more support in both finance and volunteer work. Also NGOs want to increase consumer awareness of environmental issues and act on it in their daily life. Consumers want NGOs to have better and emotionally touching stories rather than just showing some picture of dying animals or polluted water. Consumers want to see how much of an effect they made or how much they contributed to helping the environment when they act on environmental issues

GOAL FOR THE PROJECT

"Creating a service package for companies to increase employee awareness and make them participate in environmental issues in the workplace and create a profit for environmental NGOs through employee behavior."

In this goal, there are two separate issues. The first one is how to create a new service package for the environmental NGOs that will lead them to be a preferred CSR partner to companies in order to earn financial support from them. And the other one is how to increase employee awareness of environmental issues and make them act on it in the workplace. I tried to find a service platform that can link these two different goals and create the benefits for each actor through my project.





During the research and interview phase I held a workshop in order to get a variety of ideas for environmental friendly activities we can do in our daily life or in the workplace. It was planned for two hour workshop with ten minute breaks in between each hour. Ten interaction and service design students from The School of Architecture and Design(AHO) participated in the workshop. Participants got a task before the workshop to bring their own cup for coffee and drinks. It was a teaser to hint that the workshop was about environmental issues. First we made our own environmental hero nick names for the workshop and introduced each other with our hero names.

For the first hour, we listed all of the activities that we can do for the environment in our daily life on a prepared template. Then, I introduced emotional keys of different emotions that can be involved in those activities. After introducing the emotional keys, I divided the ten participants into four groups and asked them to pick two or three activities that were in the low emotional area such as 'annoying', 'boring', 'hard', and 'expensive'. The goal for the first hour was for each group to find a way to change these "annoying" or "boring" activities into "fun" or

"interesting" activities. Then each group presented their improved activities to the rest of the workshop participants.

For the second hour, I introduced general office worker's work schedules and touch points that are met in the workplace everyday, then I gave each group a card with a celebrities picture and name. These celebrities ranged from artists, sportsmen, IT company CEOs, and adventurers. The task was making the workplace more fun and exciting by using the specific personality of the character that each group was given.

The next task was drawing out all the environmental activities that we can do in the workplace. I prepared a large drawing of an office so that all the participants could draw different activities in the relevant place with relevant touch points. After drawing all the activities on the board, we came up with the name of the environmentally friendly office we created together. The last task of the workshop, we thought of ideas in groups to make those office activities more fun, easy, and enjoyable just like we did in the first hour with activities in daily life.

KEY FINDINGS FROM THE WORKSHOP

The first thing I can say about activities for the environment is they are not usually fun, actually, they can often be annoying to do. There are so many activities that we can do for the environment but these activities don't always apply to everyone's daily life. Another thing, is that most people are aware of what they should do for a better environment but since we can't see the effects right away, we don't usually take it seriously.

One of the findings from the workshop is that we can create fun environmental activities by adding entertaining elements to them. One of the groups had the idea of making a bingo bus or a karaoke bus to entice people to take public transport. Most of the keywords were from the task "What if your boss was.... how we can make the workplace more fun and exciting?" There were many ideas about playing games or competition with other colleagues. Rewarding, punishing, and sharing with others were also keywords from this task.



KEYWORDS FOR THE CONCEPT

The basic idea of the concept is creating a service that will provide a partnership for environmental NGOs and companies, also to increase awareness of environmental issues for company employees and to encourage them to take part in activities in the workplace through the service system. Through the employees participation in environmental activities such as reducing the use of disposable tools, paper, and save energy, the company can save administration budget. At the end of each year the company can take the money saved by employees' activities and donate it to the company's partner NGO.

Since the concept is a service for profitable behaviors I focused on how to challenge a company's employees to act on environmental issues.

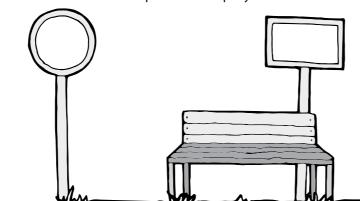
The first keyword is FUN. Since many activities that benefit the environment are not fun to do, making them more fun is important.

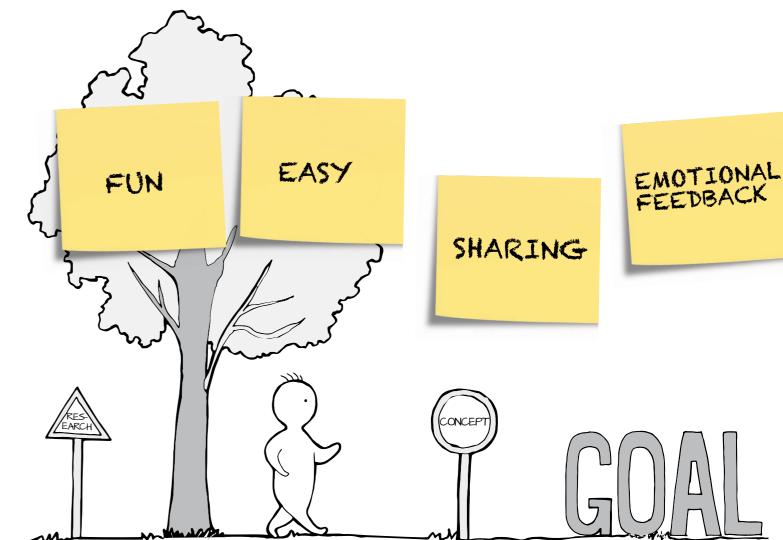
The second keyword is EASY. Normally in a company, there are many different people with different backgrounds, working tasks, and of course different ages. So the service should be designed as easy and

understandable for everyone.

The third keyword is SHARING. If we can pull those individual activities up to a social level so they can be shared, it will motivate and inspire employees naturally and make them more active.

The last keyword is emotional FEEDBACK. Many people are disinterested with environmental issues because they cannot see an instant change when they do something to help. Therefore, there should be some kind of feedback for employees to see how their contribution will help the environment or has even helped their company.





MAPPING

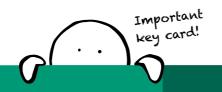
For the concept development, I mapped out all the insights and key findings from my research, interviews, and workshop and I found a few important questions that I have to answer in order to develop my concept.

Q. How to motivate people to engage more? If the service provides some kind of platform for employees to share their activities they will motivate and inspire each other to participate in environmental activities more often. By giving them emotional feedback the employees' awareness about environmental issues will increase. Since all employee activity will create a profit to donate to NGOs, giving credit to employees is very important.

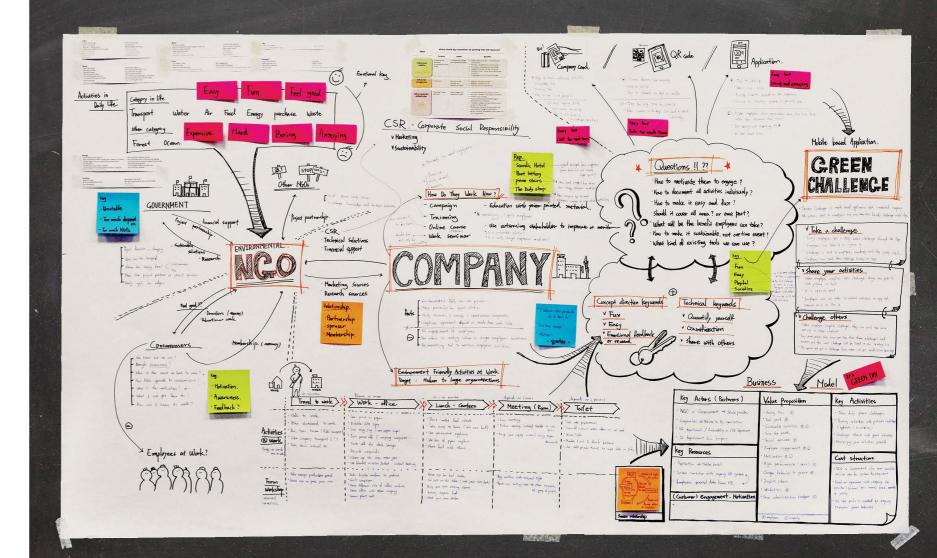
Q. How to document each activity individually? To give employees emotional or individual feedback, monitoring and documentation of the employees' participation in environmental activities is necessary. It should be done through an already existing system or if a new system for monitoring needs to be put into place then it should be done at a low cost.

Q. How to make it sustainable, and not just a one time event?

The service should be designed between the NGO and the company together, creating customized contents, the company can reach their sustainable goal and improve the working environment. Also, the contents/service should be analyzed once or twice a year and updated based on employee activity results and the company's vision.



"The service should be able to MONITOR & DOCUMENT employees' environmental activities through EXISTING SYSTEM and it should be FUN & EASY to use and gives users EMOTIONAL FEEDBACK to make them attach to the service."



THE CHALLENGE

The biggest challenge to develop this concept is that there are so many environmental activities we can do in the workplace. The activities cover different parts of an office such as the meeting room, canteen, restroom, work stations, etc. Since each activity interacts with different touch-points, the main challenges are whether the service should cover all areas with each activity or not as well as what kind of system should be used for the service platform.



TECHNICAL SOLUTIONS

After exploring ideas I narrowed it down to three technical solutions for the service platform that can cover all areas of environmental activities in the workplace.

The first is using a keycard. Using a keycard is easy to register by swiping or just touching the keycard to a card reader and it's something everybody carries around at work. However, it would cost too much to set up that many card readers in an office.

The second idea is using a QR code. It's easy and doesn't cost much because its just a piece of paper, but it is discursive that who is going to spend more than 30 seconds to register their activity by opening the capture app and scan the QR cord, when the activity itself doesn't take more than 5 seconds like recycling garbage.

The last Idea is a Mobile App. It's easy and many people already document their own behavior on apps such as drinking, walking, sleeping etc. It would become annoying and not to mention boring to document something with a hundred questions everyday that isn't even that interesting. It's easy to forget what you have done if you document everything at the end of day and that is going

FROM QUANTIFIED SELF TO US

While exploring technical solutions, I was able to find one reference that helped my decision for the service platform. It's called 'Quantified Self' and many products, applications, and services were introduced since 2007. Jawbone, Nike FuelBand, and Fitbit are some of the most well known service devices for Quantified Self.

"The true value of the Quantified Self movement lies far beyond the novelty of gratuitous data about ourselves and our past behaviors, which we might call a 'first degree of meaning.' The real promise of the Quantified Self is in a 'second degree of meaning,' where self-tracking helps motivate people toward self-improvement, and a 'third degree of meaning,' where people can use data to make better, more informed health decisions in the moments where they matter most. While we're beginning to see the Quantified Self move toward these second and third degrees of meaning, many of the tools and services available today that emphasize self-tracking are still largely rooted in the novelty of recording behavior and serving up daily data." (Quantified self)

"We're moving closer to those goals, but we're still not thinking rigorously about the challenges involved. It so happens that the rise of the quantified self coincides with the rise of Big Data, which has become a buzzword rapidly adopted in targeted marketing campaigns and recommendation engines that push products. But in between Big Data and Small Data, between the Quantified Self and the crowd lies a third way: It is called 'Quantified Us'. It's based on a select group of people who share similar goals, health conditions, or even similarities of emerging data patterns." (Quantified us)

From this reference I could see the possibility that a mobile application would apply to the service of my project with the theory of 'Quantified Us' as long as the service provides enough contents that employees can improve their behavior to become greener and track behaviors in both individual and groups of people in the company.

CHOSEN PLATFORM

From the research of "Quantified Us", I have decided to develop the service in a mobile application platform with a daily green behavior theme.

Using the mobile application as a service platform brings an easier solution for connection between company's human resource data, which is a basic necessity to send personal daily green missions. All the data from the application can be easily transferred to other screen based module such as a website.

Most office-based workers have smart phones for their work as well and using applications is a familiar experience for most people. The use of mobile phones is not a one-way interaction solution like a company keycard or a QR code. Mobile phones are a two-way interaction device with users giving notifications or information. Also, smart phones have many other possibilities that can interact with other technologies and systems. For many reasons and possibilities, I have chosen the mobile application as a realistic service platform.



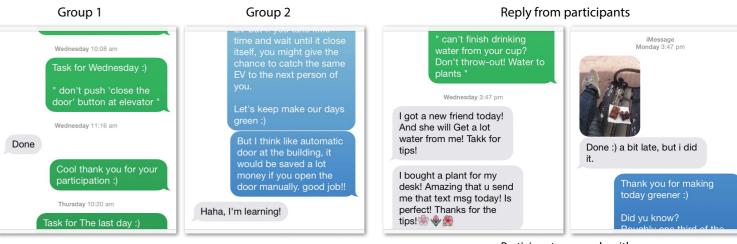
EXPERIMENT To build detailed contents for the application, I have done experiments. Sixteen people participated in my experiment, four of them were students and the other twelve were office-based workers, some worked for large companies while others belonged to small businesses. 16 Participants 4 Students & 12 Office workers 64 Missions for 4 Days

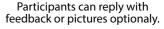
I simply sent an SMS to the sixteen people every morning and sent different missions related to the environment that they could do in the workplace. The rules were whenever they completed mission, they have to reply back and let me know that they have completed the mission. They could simply say, "done it" or message me with some feedback about how they felt and give details of what they have done in order to complete their mission. I set seven different missions for the experiment with two missions about waste, one mission each about disposable products, energy, air, water, and food. The experiment was held for four days and seven missions sent out to each of the sixteen participants.

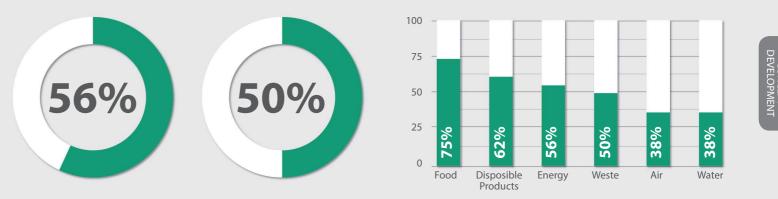
I divided the participants into two groups and gave good feedback to one group with some facts about the environment or how much they contributed to saving the earth that day by completing each mission. For instance, if the mission was "Don't make food waste! If you can't finish it, bring it home", my reply would be "Thank you for making today greener. Did you know? Roughly one third of the food production in the world for human consumption every year -approximately 1.3 billion tons - GETS LOST OR WASTED! Let's keep making our days greener."

And I just said "Thank you" to the other group when they completed a mission. I expected to see some different results between the two groups but since this experiment was only four days, I couldn't notice any difference. As you can see in the text message from group two, one of participant was happy with getting environmental facts so she can learn more about it.

Among the total sixty-four missions over four days, an average of fifty-three percent of missions were completed and they showed more interest in the food and disposable products category than on any of the other categories. They showed the least interest in the water and air categories.







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Missions should be developed together with NGO and company Feedback with environmental facts

Social elements

"I felt the tasks did not affect my daily life so much. Many of the tasks were things I do already, or things which were not so relevant."



"Maybe some reward or aware ness of what the effect of doing that task has to do with the environment."

"It makes it enjoyable if it is a shared task with colleagues with funny tricks."

> "I think the social elements of the tasks will make them more enjoyable."



KEY FINDINGS FROM THE EXPERIMENT

The feedback from participants was generally positive, actually, it was better than I expected. I wasn't sure if a four day experiment with simple SMS could affect the participants' work life and increase awareness in environmental issues and change their behavior. But if I found a general answer in the feedback that answer was a positive one.

Of all the environmental missions that related to the participants' work life, according to the results and feedback, the answer was both positive and negative. It pretty much depends on the company's working environment and the employee working situation. Therefore, the contents of environmental missions should be developed together between the NGO and the company based on the company's working environment and their sustainability goal. An interesting insight from a participant was when she got a mission and it wasn't related to her work, she started thinking how it could relate or how she could complete the mission outside of work when it came a related situation. So it seems to definitely apply to their working/daily life to some degree.

Giving participants back environmental facts and information is a good way to increase awareness.

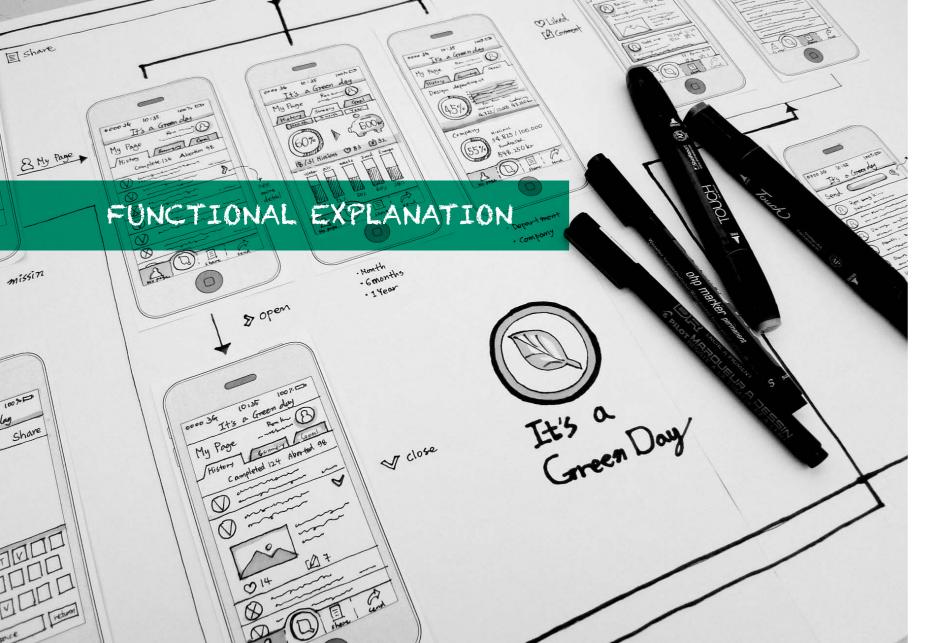
According to the feedback from SMS and surveys, participants could learn more from the feedback and it remains in their mind longer when they received feedback and when they met the same situation on a different day, they acted on it without needing to be pushed.

When I asked how we could make it more enjoyable, some participants answered that it would help if there were some social elements such as share with other colleagues or play with others as game.



IT'S A GREEN DAY

"It's a Green day is a mobile application that gives employees a random environmental mission everyday to increase their awareness of environmental issues and change their behavior greener in daily tasks."



The mobile application It's a Green Day consists of four main platforms.

Take a Green Mission

The first platform is "Take a green mission" that's where you take a daily green mission and receive feedback with environment facts and information.

Monitor Yourself

The second platform is "Monitor yourself". Users can track their mission history and see analysis of activities in different categories, this tells the user where they have contributed most and what areas they need to work in more. Also, users can check analysis of group activities and the whole company's activities compared to their set of goal.

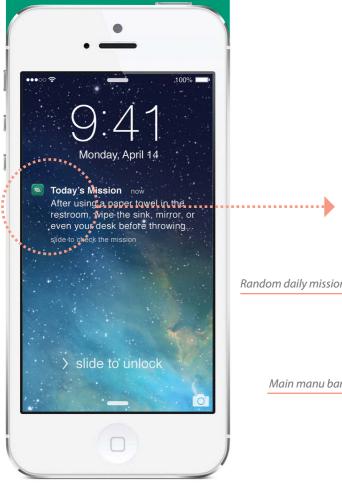
Share with Others

The third platform is "Share with others". Users can share their completed missions with others, all users can see shared activities and they can like and comment on them as well.

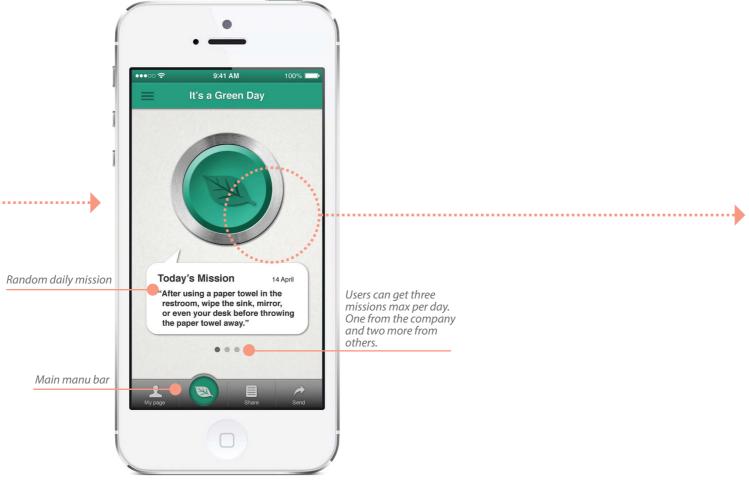
Send a Mission to Others

The last platform is "Send a mission to others". When users complete their daily mission, they are allow to send the same mission to other colleagues. It is a playful part of this application by challenging others with green missions as if it were a game. Only those who didn't get the same task on the same day, and who have gotten less than three tasks in a day will be on the sending list, so everyone can get different missions with equal numbers. Three missions is the maximum number that one user can get from the application and from other colleagues. Once the user has those three missions, their name will be removed from the sending list on other people's application.

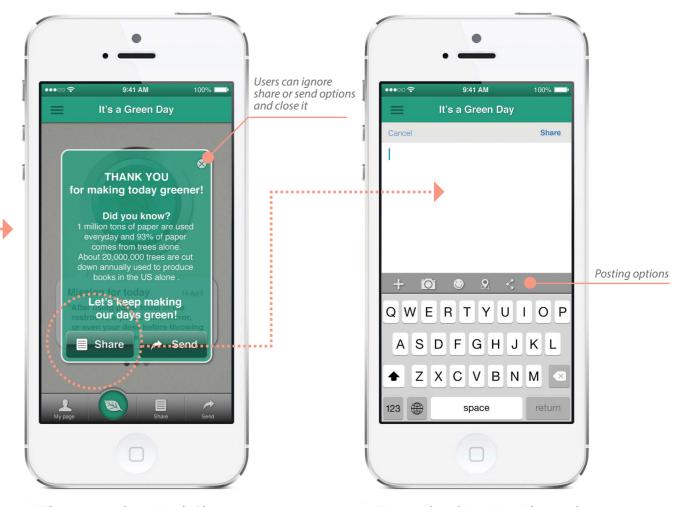
Take a Green Mission



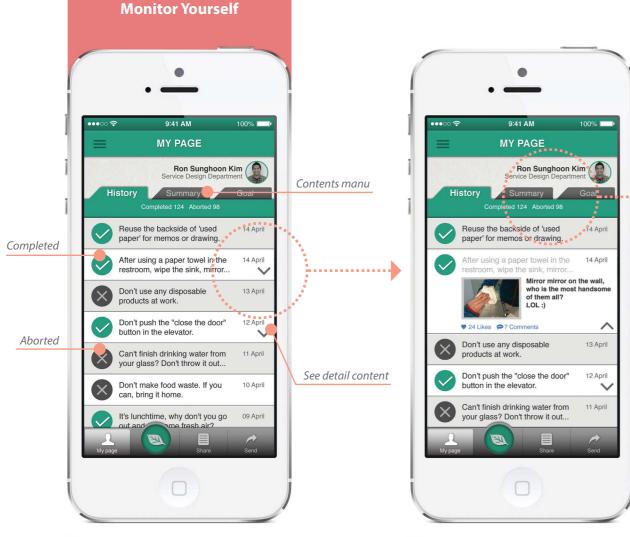
When users login to company's system he/she gets notification from application.



When users completes mission, he/she can register by pushing green button.

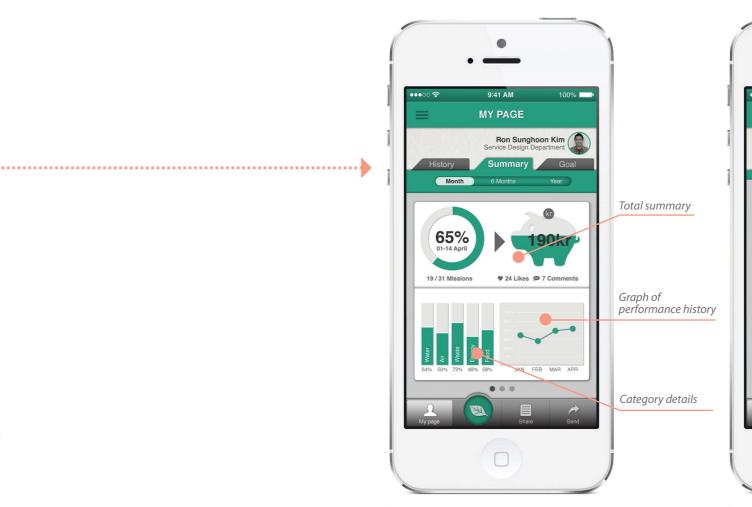


Users can share their activity with text and picture. Users can also link the post to other social service.



Users can check misson history at my page.

Users can review detail of activites.



Users can check summary of activities. It shows how much money was raised through how many activities and shows in different categories and periods. Users can check a department's or company's goal and total summary.

9:41 AM

MY PAGE

Missions 4,723 / 100k Fundraising 47,230kr

Design Department 27 Employees

Company 16 Units / 3,253 Employees

46%

01-14 April

54%

01-14 April

Ron Sunghoon Kim Service Design Department

JAN FEB MAR APR

53,825 / 98,000

538,250kr

100%

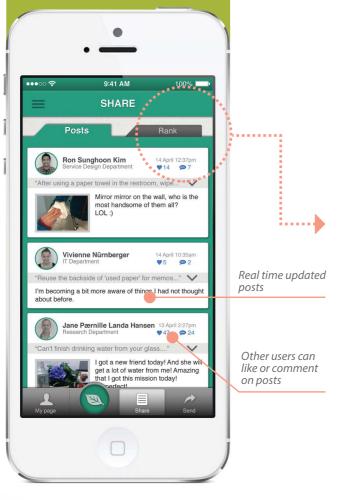
Graph of

Detailed

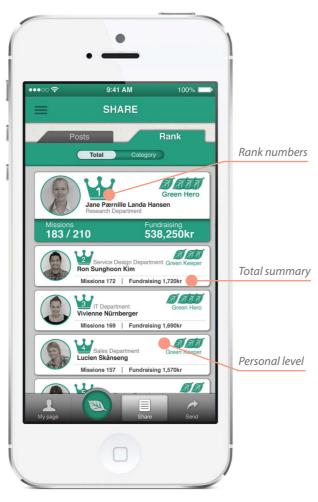
performance history

summary and goal

Share with Others

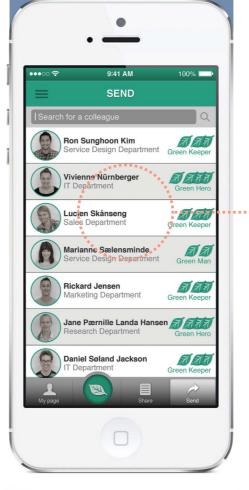


Users can see other users' posts and either like or comment on it.

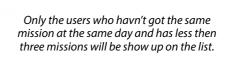


Users can check the rank list that tells who is most active and fundraised most money.

Send a Mission to Others



Users can send the same mission they completed very last to other users. Users can see the person's working department and performance level.



9:41 AM

SEND

Ron Sunghoon Kim
Service Design Department Green Keeper

Green Keeper

Ron Sunghoon Kim

cien Skånseng

Vivienne Nürnberger

Marianne Sælensminde

Research Department

Rickard Jensen Marketing Department

Daniel Søland Jackson

Service Design Department

Jane Pærnille Landa Hansen

100%

Green He

KKK

KKK

Green Keeper

Users can search

Send button



Mission receiver gets notification.

MONITORING THE WEB MODULE

For the Company

This is example of monitoring web modules that will be shown to companies. On the main page the company can see daily performance status and sort by periods, department, and environmental categories.

Main menu

Company can manage missions and create promotions/ events on the main menu. Company can overview of the environmental development and employees, employee's activitiy posts.

Total summary

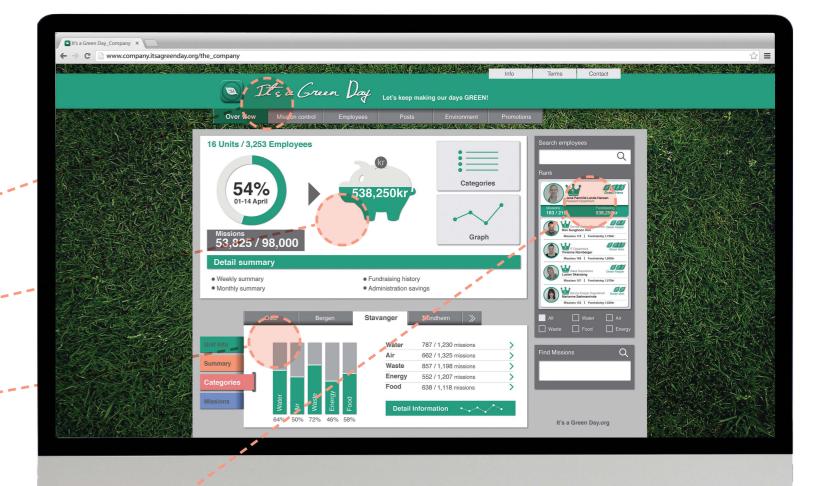
Company can review the total summary of activities. It shows performance statue and how much money fundraised in categorical order.

Detail summary of each unit

If company has more than one unit, they can overview and manage each unit with different options.

Other information box

Company can search for employees or missions through the search tool and they can see who performed best in each category.



For the NGO

This is an example of monitoring web modules for the NGO. On the main page they can see all the members of the NGO and their monthly performance status. When they click on each company, it shows detailed information such as terms of agreement and their membership contract, etc.

Main menu

NGO can manage missions and create promotions/ events on the main menu. NGO can review the environmental effects on their projects.

Total summary

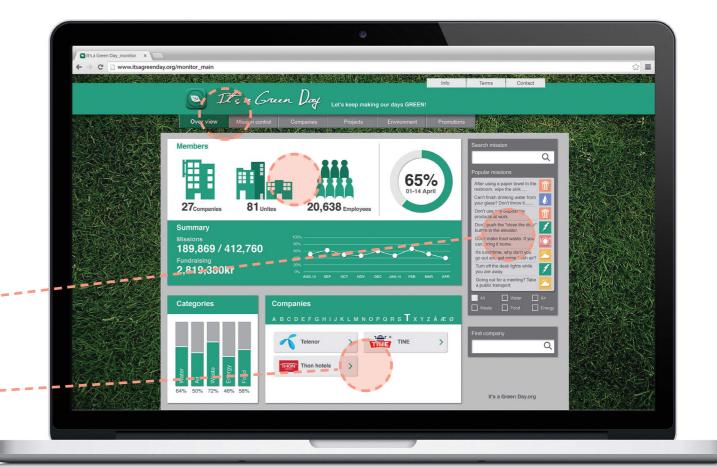
NGO can review the total summary of numbers of members and mission performances.

Missions statue

It shows popular missions in different categories. NOG can also search missions and see the rank of it.

Member's detail page

NGO can search their It's a Green Day members and go to a direct company's overview page.



USER SCENARIO

Here is a user scenario showing how the application can be used in the workplace.

Daniel is 35 years old working at an IT company. Everyday is pretty normal and he always works in the office. His company is a member of 'It's a Green Day' and all 540 employees at his company have the 'It's a Green Day' application on their smart phone.

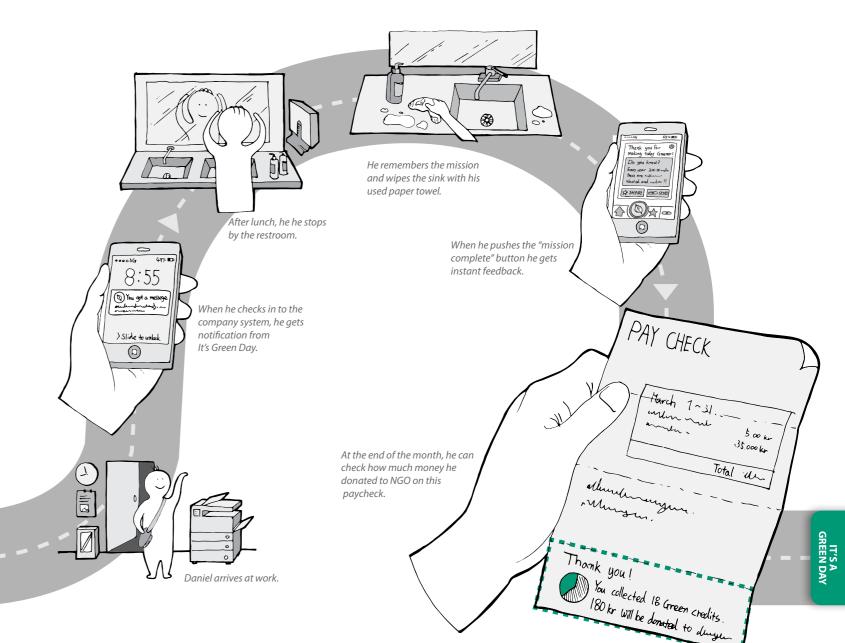
When Daniel arrives at work, he uses an ID keycard to open the main door. First thing he does when he arrives at his desk is log into the company online system. Right after he logs in to the company system, he gets a notification from 'It's a Green Day' with a daily mission. Today his mission is to "Wipe the sink or desk with a restroom paper towel after using it." He is a busy person and while he works he forgets about the mission.

After lunch he stops by the restroom to wash his hands. When he uses a paper towel to dry his hands, he remembers his mission and wipes the sink before throwing it out. He opens the 'It's a Green Day' application to register his activity and when he pushes a Green Day button, he gets instant feedback that says "Thank you for making

today greener! Did you know? 1 million tons of paper are used everyday and 93% of paper comes from trees alone. About 20,000,000 trees are cut down annually used to produce books in the US alone. Let's keep make our days green." He often wipes the sink when he uses paper towels even before he got the mission from the application but he didn't know how much it affects the environment, and he became more aware of when he uses any kind of paper products after the mission.

At the end of the month, when he gets a paycheck, it says how many missions he completed during that month and how much money he raised for an environmental NGO by completing missions. Daniel feels great because he feels like he contributed to environmental issues at work and donated money for the environmental NGO by changing his behavior. Now he became a more active person in environmental issues both at work and at home.





It's a Green Day creates many values for different actors. Here are some examples of what kind of values each actor can get from the It's a Green Day service.

NGOs

It's a Green Day gives NGOs a wider range of fundraising target groups with more attractive service. By adopting the service, NGOs can have more sustainable funding solutions as well. Since the service creates a profit and it comes back to the NGOs, they can be more financially independent from government support.

Companies

It's a Green Day is another opportunity for companies to improve their CSR profile for environment. By making all employees act on environmental issues in the workplace, companies can save on administrative costs. It's a Green Day can increase employee engagement by giving them opportunities to be more active at work. And through developing the working environment, companies can expect higher work performances from happier employees.

Employees

Employees can create a better work environment through taking environmental missions together. By having green behavior at work and especially when their green behavior becomes money for environmental NGOs, employees can have self satisfaction and credit for the profit they create. Since the service provides a sharing missions platform, employees can have better social interaction with other colleagues at work. And of course It's a Green Day can have extra fun elements for the employees.

Government

If environmental NGOs can be more independent by creating financial profits through It's a Green Day, the government can reduce its supporting budget for environmental issues and focus more on other issues. It's a Green Day can affect all users' daily behavior and this changed behavior will also increase their awareness of environmental issues so it helps reduce the government's environmental work in a way.

Environment

When more and more companies take the It's a Green Day service for their environment work, more people will act on environmental issues and it will affect and inspire their lives and give them stronger motivation with increased awareness, we can expect a better environment that is built by all of us.





Emvironment



Green butterfly effect (Inspiration) Stronger motivation to act Better environment, better world



Better work environment Self-satisfaction Green behavior Better social life at work

Employees

Fun at work

28

REEN DA

NGO the n

NGO and company develop the mission contents together. Connect HR data with application.

Train Employees

NGO visits business site and trains employess.

Take a Mission

Employees start using
It's a Green Day service.
Take missions at work place

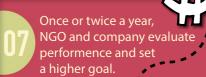
Monitoring

NGO, company, employees can monitor activities through service.

Fundraising

Money is raised by company through employee activities.

Eveluation & Set Higher Goal



BUSINESS PROCESS

It's Green Day has four main business processes between NGOs and companies around the service.

Develop contents

It is the first phase of the service when the company becomes a member of the service. NGOs and companies, especially the human resources and CSR departments will be closely involved in this phase because all the employee personal data should be installed in the service and developed environmental mission contents should be built based on a company's working/environmental situation. The NGO is in charge of developing the application to be customized in order to fit each company as a service provider.

The service platform will be provided from an NGO to a company without charging under an agreement and the NGO will get a profit that will be created through the service. The company will agree on detailed financial terms and it will be based on the company's size, number of employees, and number of missions. For instance, how much money will be raised per mission, how often will the company donate money to the NGO, how much is the minimum donation per month/year, etc. would an

example of a financial agreement. This business model is called service economy, meaning that the NGO provides a service platform for free and takes back any profit after the service creates a profit, just like Netflix and ITunes.

Train employees

When the application is developed the NGO will visit the company and give employees training on how to use the application, environment lecture, and how they can contribute to environmental issues by using the service. Training can be held several times depending on how many business sites, and employees a company has.

Monitoring

While employees using the service can monitor their own behavior and team or company's achievement through the application. At the same time the company and the NGO can monitor the service performance through their own monitoring module based on the web. The company can monitor individual, department, and the whole company's performance in order a set period and environmental categories through a sorting tool and they can track all user history to see how much money has been raised or donated. The NGO can also monitor the same

information that the company sees, also, they can monitor all information from every company they are partnered with.

Evaluation and set higher goal

Once or twice in every year(depending on the agreement), the NGO and the company have a meeting for evaluation of performance. They will look over collected data from the application and set another or higher goal based on the company's sustainable direction. Based on the evaluation, the NGO will upgrade the application and provide it to the company.

Through this process, the company can develop their environmental performance and the NGO can have sustainable financial support.

REEN DAY

SYNERGY TO ENVIRONMENT

It's a Green Day is not just a mobile application that sends random missions to employees everyday. It is an innovative service package to help employees change their behavior to be more environmentally friendly and eventually it becomes their habit in their daily life and changes their mindset. Also it brings many benefits to different actors who are involved in environmental issues in a suitable way. It can start in the workplace first, in a more organized system and set the stage, but it can be provided to every consumer to make our lives greener. In that case, there might be other feedback elements rather than money. It can be coupons for shopping or the lottery, using fun elements to make it more interesting.

One person can help the other in many ways and we can even save the lives of others. Saving the earth and making it a better world for our children is not something only one or a few of people can do. We need a synergy effect to inspire each other and start taking action from work, home, and eventually to entire of world.

