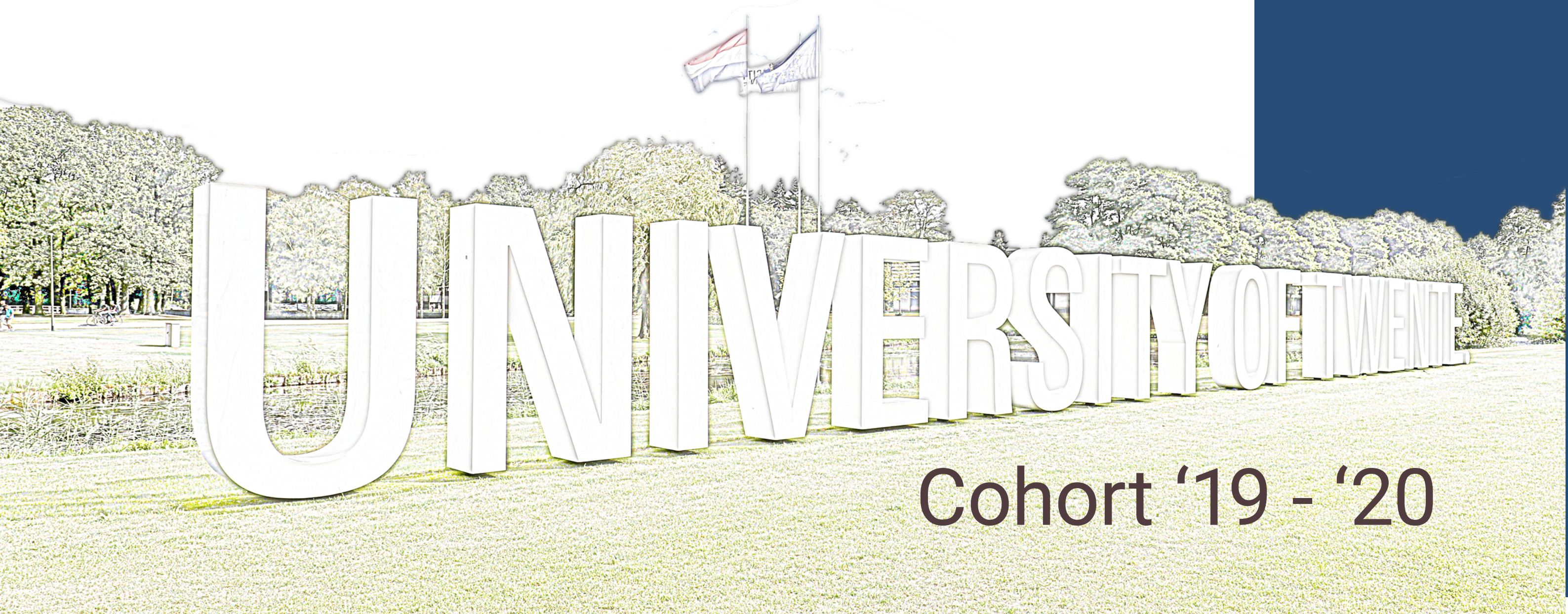
Final Publication

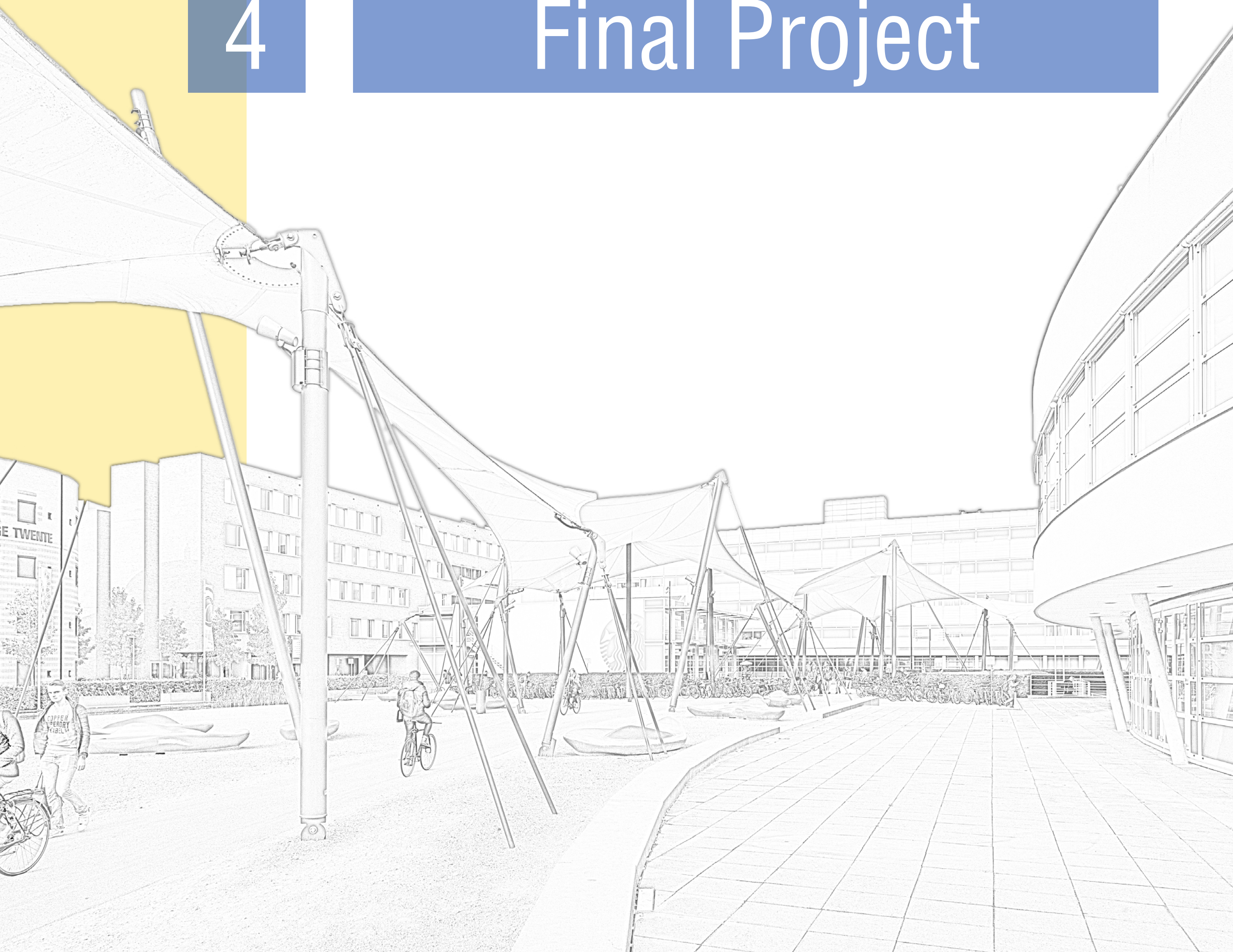
Bachelor Honours Programme

Processes of Change



Cohort ‘19 - ‘20

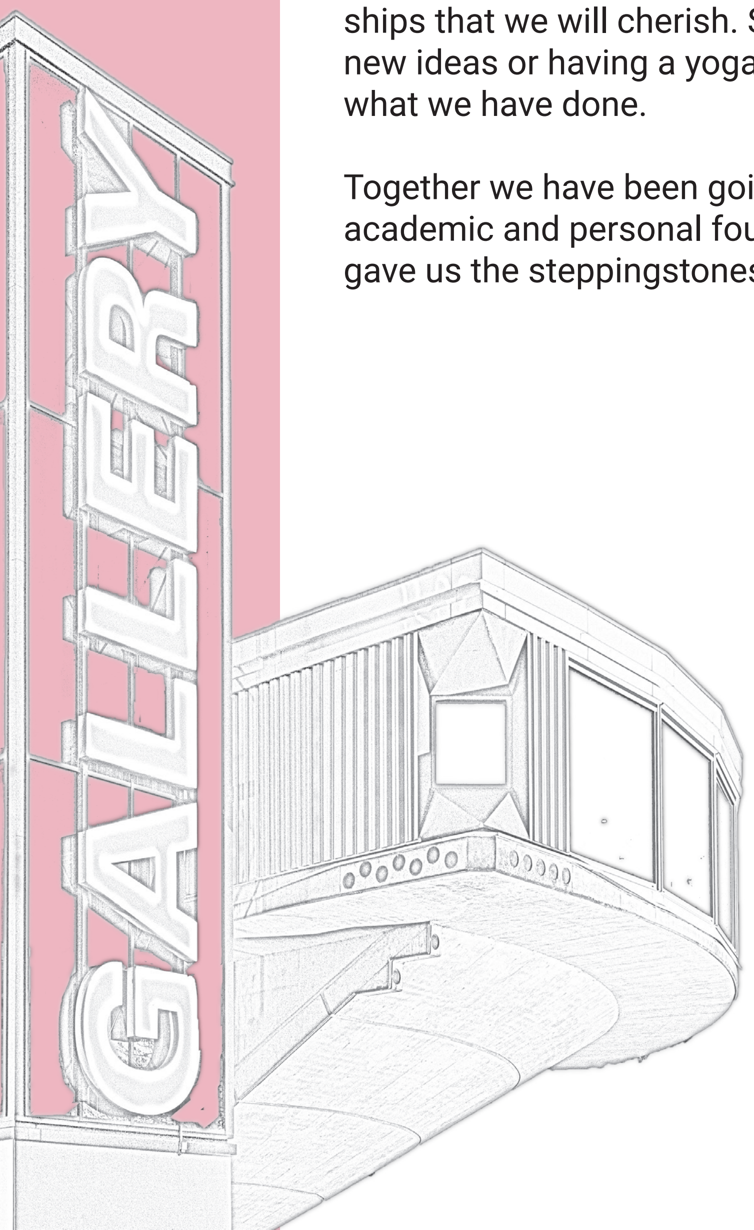
"Contents



“Foreword

For the past one and a half year, we have been coming together to gain knowledge on various sides of change. We have acquired knowledge on change in society, governments, management, leadership and on the individual level. We have seen the effects of change, the influence of change and the power of change. Endless discussions, critical projects and comprehensive presentations have brought us here.

Moreover, what has brought us here is the bond that we have developed throughout this whole experience. Next to learning about change, we have been able to go through change and this has manifested in great friendships. Whilst we were broadening our perspectives and knowledge beyond our studies, we gained skills through unusual methods and build relationships that we will cherish. Sitting on a chair and only thinking to come to new ideas or having a yoga lesson to bring focus are just two examples of what we have done.



Together we have been going the extra mile to develop our professional, academic and personal foundations. The amazing teachers of this track gave us the steppingstones and we helped each other to get to each next stone. Where change is unpredictable and varying, we were reliable and constant factors in each other lives. We complimented each other in our perspectives, knowledge, and teamwork and we gave rise to novel ideas and perceptive projects.

We are both proud and wistful in presenting the final results of our time in the Processes of Change track. We would like to thank our teachers, Dr Tsjalle van der Burg, Dr Desirée van Dun, Dr Wouter Keijser, Dr Julia Wijnmaalen, Dr Lara Carminati, and Prof. Dr Celeste Wilderom, for all their hard work, inspiring classes, encouraging mentoring, but most of all for bringing us together.

These past ten weeks we have shaped individual change projects in order to integrate all we have learned in the track. This booklet presents the results of these change projects in ten comprehensive reports. We hope that whilst reading these reports you discover some change for yourself. Enjoy!

Processes of Change
Cohort of 2019-2020

“The Class

Cohort 19-20

From left to right:

Thyne Scholte	Andriyan Aleksandrov	Ioana Ababei
Marlen Braun	Daniël Vernhout	Daniëlle Philipps
Rick Akkerman	Atis Kazaferi	Aninka Spekle
Daniël van der Weg	Elisa Dankers	Stefan Pozinărea
Theresa Höfker	Thijs Bink	

"From the teachers

DEAR PROCESSES OF CHANGE 2020 GRADUATING COHORT,

PROF.DR. C.P.M. Wilderom
Coordinator Processes of Change Track
Teacher of the course "Learning-By-Doing"

Realizing that another year has flown so fast is almost unthinkable, especially considering the very peculiar circumstances of the last few months. Through intense Monday's and Wednesday's evenings, sweetened by hot chocolates and birthday cakes during and after classes, your PoC journey has indeed come to an end.

It is also the end of a journey for us, the teachers. And that end is a very special one. One of us, whose main journey with you ended in November after his second course, hit the point early already when he said the end of his course was unusually frustrating. Your performance during the course was not the problem. He had also greatly enjoyed teaching you. But somehow, after just a normal start during early springtime, the group had become a unity while its individual members started growing at an ever-faster rate. And when a teacher has to say goodbye to a group just when growth is really accelerating, he or she mainly sees the large potential still unused.

That goodbye feeling resonated with all the other teachers: so many possibilities that we have barely seen come to fruition.
As the group, with you as its individual members, continued to develop into a real team, you were challenged in various ways. First of all, embracing new teachers, or other newcomers, is an underestimated task and we have seen you grow into this.

DR. T. Van Den Burg
Teacher of the courses:
"Major Changes in Society"
"Institutions, Decision-Making Processes and Change"
"Learning-By-Doing"

An important skill for any change leader is to courageously face the unknown, even though this may seem unpleasant at first. Learning can be tough. Also, during the course of the PoC track you have competed amongst one another to ‘win’ a UT change project and managed to find alternatives otherwise. Finally, in the last bit, you had to radically adapt to the challenging new tides of life, with some of you being far from home, and accepted individual coaching to work on yourself in relation to others. Finishing this Honours track is thus no small feat.

DR. J.R. Wijnmaalen MSC
Teacher of the courses:
“Change at the Individual Level”
“Learning-By-Doing”

Because of all these and other things, we would like to tell you how proud we are of you and express our gratitude for allowing us to do our job, our passion, in such a cohesive and welcoming atmosphere. Teaching is never unilateral. It is a two-way, mutual interaction through which we also enrich ourselves in our role as mentors. We are honored to say that it has been incredibly inspiring sharing our expertise and experience with curious and inquisitive minds like yours, thirsty for knowledge, developing and growing.

The beauty of your group, with all its kaleidoscopic and “colorful” personalities (some of them more introspective and reflective, other more vivacious and bubblier) has been reflected and has passed through the screen of a laptop, when our teaching became on-line due to this year “special” circumstances. We were glad we could still feel your active and constructive participation through spotted comments and relevant questions during these challenging times!
And every cloud has a silver lining. Many of you have taken up the pandemic to contribute to societal greatness, suggesting interesting ways for improving mental and physical well-being of various groups inside and outside the UT, or even across the world. This booklet thus represents the unique signature of remarkably motivated students who chose to leave their permanent mark by elaborating, promoting and implementing beneficial change interventions for numerous and different stakeholders.

DR. D.H. Van Dun
Teacher of the courses:
“Change at the Individual Level”
“Coaching and Consulting”
“Learning-By-Doing”

To the “crème de la crème” of the BSc students at the University of Twente, congratulations on graduating in this BACHELOR HONOURS PROGRAMME!

It is now time to carry on with your life, either continuing your studies or entering the professional world.

Whatever path you choose, do not forget the words of a great man:

DR. W.A. Keijser
Teacher of the course:
“Effective Leadership in Organisations”

“Remember to look up at the stars and not down at your feet.
Try to make sense of what you see and wonder about what makes the universe exist.
Be curious. And however difficult life may seem, there is always something you can do and succeed at.
It matters that you don’t just give up.”

~ Stephen Hawking

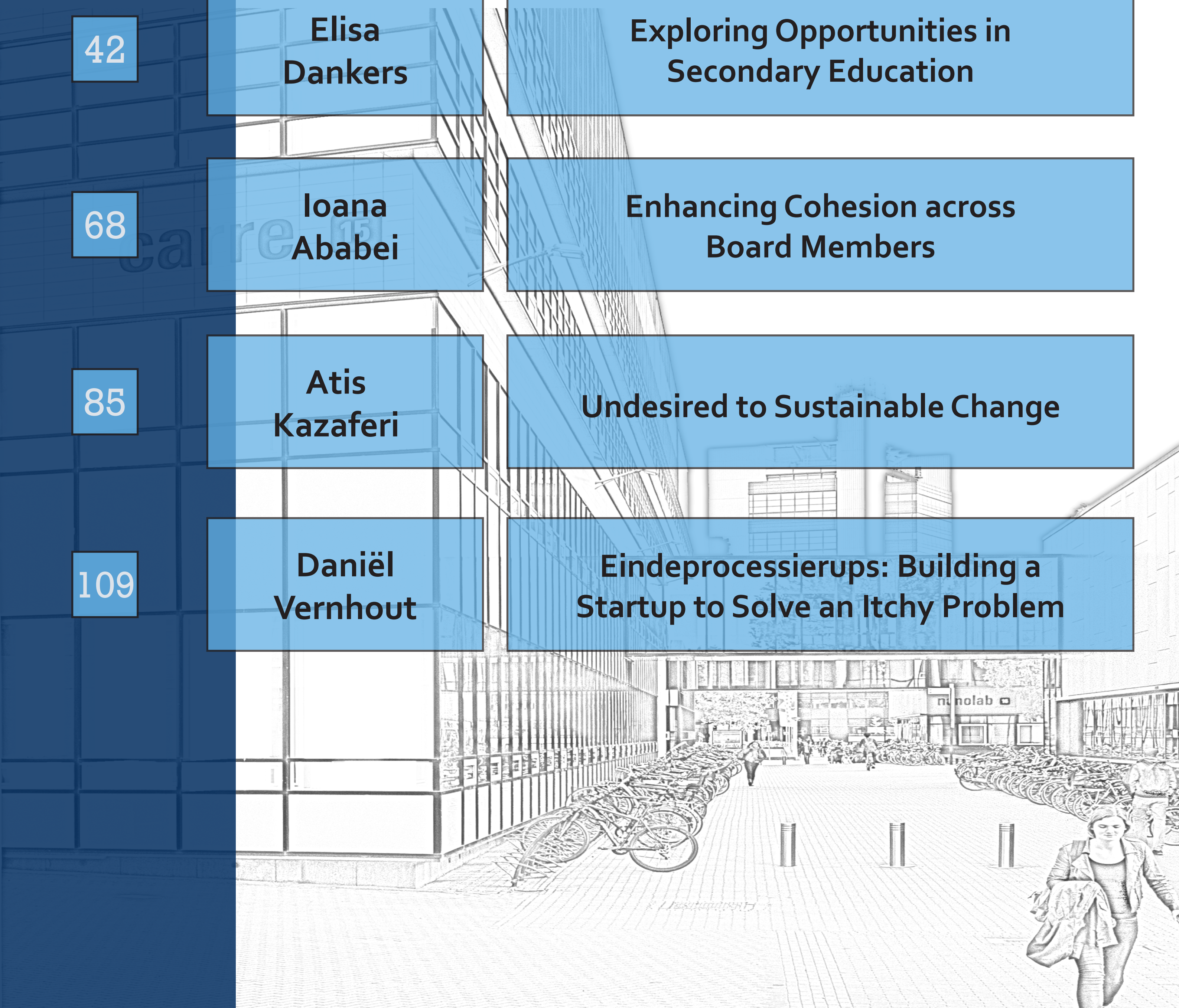
With the best wishes,

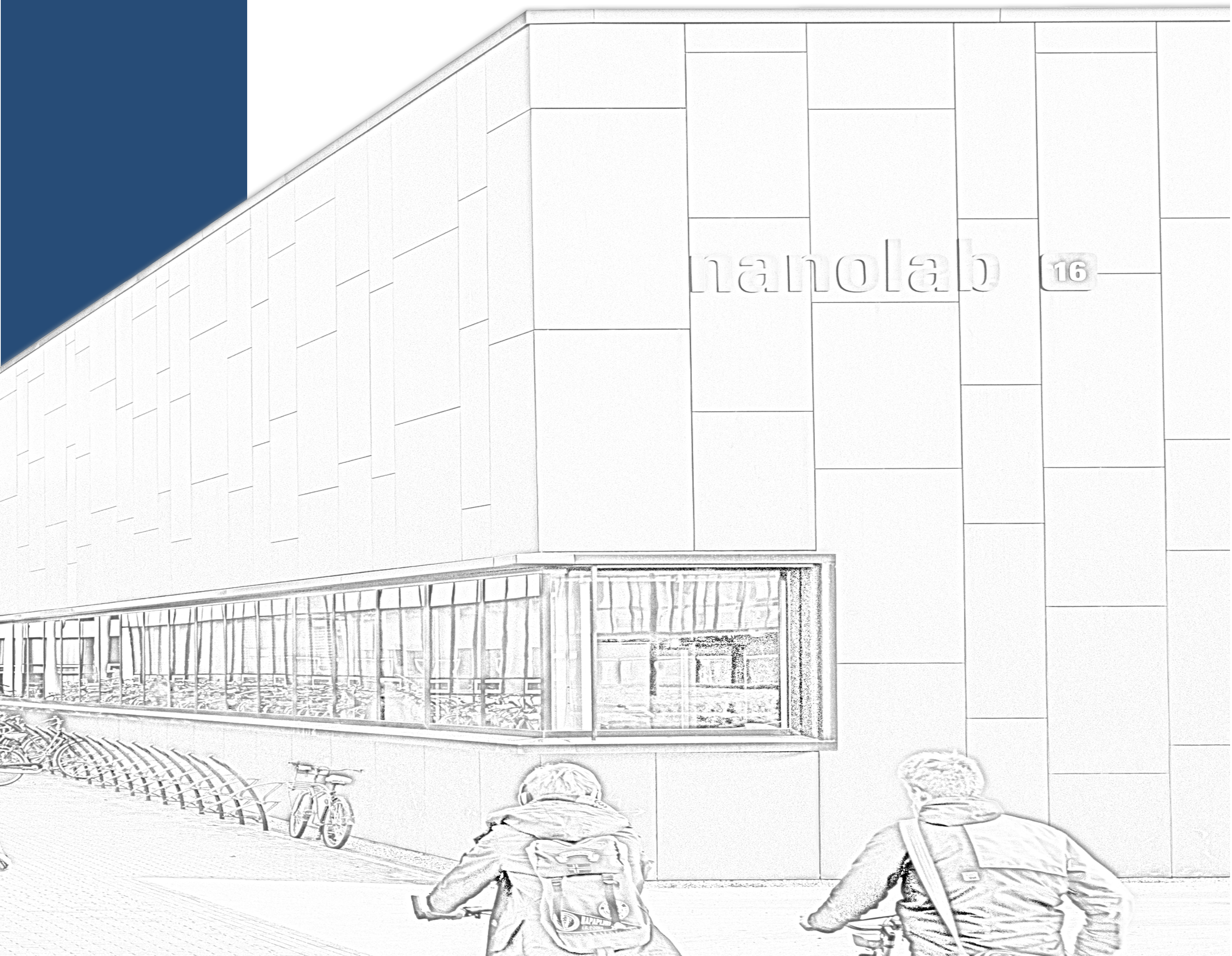
Prof. Dr. Celeste Wilderom, Dr. Desirée van Dun, Dr. Tsjalle van der Burg, Dr. Wouter Keijser, Dr. Julia Wijnmaalen and Dr. Lara Carminati

DR L. Carminati
Teacher of the courses:
“Coaching and Consulting”
“Learning-By-Doing”

“The Papers

Page Number





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16

Student Industrial Engineering and Management

"Andriyan Aleksandrov

"Meaning is the ultimate consequence of change, so we must observe and appreciate change. For the more we understand it, the more we will und erstand meaning."

Counteracting Anxiety Through Behavioural Change

Kintsugi Bowl[1]

Andriyan Aleksandrov

Process of Change

Learning By Doing

Submitted on 09/07/2020

[1] The Japanese have an artistic tradition, known as kintsugi, wherein the broken pieces of an accidentally-smashed pot are carefully picked up, reassembled and then glued together with lacquer inflected with gold powder. In kintsugi, there is no attempt to disguise the damage, the point is to render the fault-lines obvious and elegant. The precious veins of gold are there to emphasise that things falling apart isn't unexpected or panic-inducing: it creates an opportunity for us to mend – and mend redemptively.

Introduction

The overarching objective of this change project is to lower the anxiety levels of two students experiencing mild-to-moderate anxiety through self-regulation. I, as a change facilitator, will help them to self-regulate by assisting them in establishing certain behaviours in their daily routines. This paper elaborates on the relationship between the set of desired behavioural changes and the expected effect on the levels of anxiety. In other words, it comprises the theoretical background and my personal experiences supporting the change intervention, as well as the design of the intervention. Consequently, a qualitative conclusion on whether the behavioural changes actually had an overall impact on the anxiety levels of the people from the target group is reached.

The main motivation for this change project stems from my personal struggles with anxiety Being a goal-oriented, well-organized and very sociable person, who was never prone to sudden mood changes or irrational behaviours, I didn't believe that my mental health could ever be at risk. Apparently, I was wrong. Anxiety took over my life in a very sudden and unexpected manner. Moreover, I had to face it while being an international university student, having a part-time job and being active member of my sports team. Saying that this was a very difficult period of my life would be an understatement. However, I had the fortune to receive a lot of support and gradually start to recuperate. Though I cannot claim that I'm fully recovered, I made considerable progress and can now enjoy a perfectly normal life. The recuperation process is indeed long and arduous, but I now believe that if the right steps are taken, it is completely manageable. In my case, it took me quite some time to realize what truly enhanced my recovery, what didn't and what exacerbated the problem. Hence, my desire is to share the most crucial findings I had throughout the recovery process with other people, so that they don't have to struggle as much as I did. Thus, although most of the arguments in this paper will be supported by literature, some of them will be based solely on my experience with anxiety and should not be taken for granted. Last but not least, working on projects which truly help people live better and be happier is part of my Personal Development Plan(PDP). This is one more reason for my choice of change intervention.

On a more global perspective, this change project is worthwhile because it aims at contributing, though slightly, to the solution of one of the most significant public health challenges in the World Health Organization(WHO) European Region. Namely, mental disorders. Being the leading cause of disability and the third leading cause of overall disease burden (measured as disability-adjusted life years), only after cardiovascular disease and cancers(Vos et al., 2016), mental disorders have a detrimental impact on the lives of many people. This project will target anxiety related disorders, with an estimated prevalence in the WHO European Region in 2015 of 37 million, equivalent to 4% of the entire population at any one time(Vos et al., 2016). Of course, the focus will be on mild-to-moderate anxiety, which is the least dangerous anxiety disorder. However, if left untreated, it increases the chance of major complications, as well as serious long-term problems such as impaired peer relations and lowered self-esteem(Rickwood & Bradford, 2012).

Theoretical Background

Fear and stress are normal reactions to certain situations. They have been helping humanity to adapt and it is reasonable to assume that fear induced stress is one of the many factors that propelled the development of human civilization. Weren't the first human species afraid of animals and natural disasters they would have most likely become extinct, weren't the Chinese afraid of Mongol invaders, The Great Wall of China wouldn't have been built, wasn't Alexander Fleming afraid of sepsis he wouldn't have discovered the penicillin. Fear triggers a response to a specific threatening stimulus and stress reminds us to keep at it. There are a myriad of examples indicating the vital importance of fear and stress on societal as well as on a personal level.

However, an important distinction has to be drawn and that's the one between stress and anxiety. Despite both being linked to fearful emotions, their respective physical and behavioural symptoms vary significantly. Stress is how a person mentally and physically reacts to circumstances that are considered difficult or challenging (Beckner, 2004). In most cases, rational decision-making as well as proper evaluation of environment are still present when someone is under stress. Anxiety, on the other hand, is defined as "a painful or apprehensive uneasiness of mind usually over an impending or anticipated ill" (Merriam-Webster, 2012). An anxious mind is an irrational and not able t44o evaluate situations properly one. This distinction is crucial because it highlights the inherent difference between the two phenomena. Although prolonged periods of stress can eventually lead to Anxiety(Khan & Khan, 2017), the two conditions do not lie on the same spectrum. Acute and chronic stress could indeed boost anxiety(Bradley et al., 2010) but the symptoms of a stressed person and an anxious one differ substantially. Therefore, because of this apparent dichotomy, defining Anxiety as a highly stressful state of mind would be erroneous as it wouldn't cover all aspects of the condition.

All of this is relevant because it supports my observation that common cognitive stress-coping mechanisms such as: meditation, positive self-talk, viewing the problem through a different perspective, etc prove to be inefficient when it comes to counteracting anxiety when not combined with physical ones. The most probable reason for that is the fundamental difference between the condition they are intended to treat – increased stress levels, and the one they are facing-anxiety. Based on my limited observations these cognitive techniques are often suggested by people who have good intentions but haven't experienced or been educated on the topic of mental health. This doesn't imply that the latter mechanisms do not contribute to coping with anxiety. In some situations they might be crucial factors for proper recovery(Andrews,2006). Nonetheless, in my case, their sole and rather isolated application resulted in marginal improvements only. I figured that, maybe, if universal and irrefutable progress in recovery is to be achieved a more holistic approach to tackling the problem of decreased mental well-being is required.

Based on my experience with anxiety, in order for adequate and long-term solution to be pondered upon another term has to be introduced. Namely, self-regulation. Self-regulation is “the self-control of thought, action, and emotion” (Zelazo & Lyons, 2012, p 154). Defined as such, it leads us to the theoretical postulation that anxiety in people is a physical and mental state where a lack of self-regulation is present. Moreover, self-control as a trait is an important predictor of anxiety(Powers et al., 2020). In accordance with all of that, it also seems plausible that there is a correlation between the degree of missing self-regulation and the severity of certain types of anxiety (Kocovski & Endler, 2000). Hence, and more interestingly, it seems reasonable to assume that if self-regulation is instilled, anxiety cannot persist. Of course, the lack of self-regulation, though archetypal, cannot be considered the only relevant manifestation of anxiety disorders. However, from my standpoint, it appears to be a good(if not the best) starting point for those wishing to make progress in recovery. This raises the obvious question of how does one create self-control of thought, action, and emotion in order to counteract Anxiety.

That question could be addressed on many levels and a plethora of complex or ambiguous answers could be given. However, after many unsuccessful attempts of creating self-regulation I finally succeeded. During the process I found out that eventually it all comes down to one single factors - behavioural change. My personal experience is also supported by the following reasoning. The state of mental well-being ,determining the ability to self-regulate, is entirely dependent on the levels of hormones and chemicals in the human brain (Watson & Breedlove, 2012). Decreased well-being is correlated with the activation of the hypothalamic-pituitary adrenocortical (HPA) axis and the consequent production of cortisol. More specifically, with the increase in corticotrophin releasing hormone (CRH) and the increase in adrenocorticotropic hormone (ACTH) in the brain(Khan & Khan, 2017). Fortunately, there are a number of effective ways to control the hormonal and chemical levels, so that the desired balance is achieved – exercising, meditating, establishing better eating habits etc. What is essential is that the last-mentioned ways work on a very primal level and do not require one’s ability to self-control emotions and thoughts. A person, despite being anxious, can most likely choose his actions (Stein, 2019), even though he might not have the ability to choose his thoughts and emotions. The good news is that our behaviour shapes our emotions (Shpanser, 2010), so the most reliable way for someone to change how he/she is feeling is indeed for him to first change what he/she is doing. The aforementioned link between behaviour, emotion, thoughts and anxiety is represented in *Figure 1.*

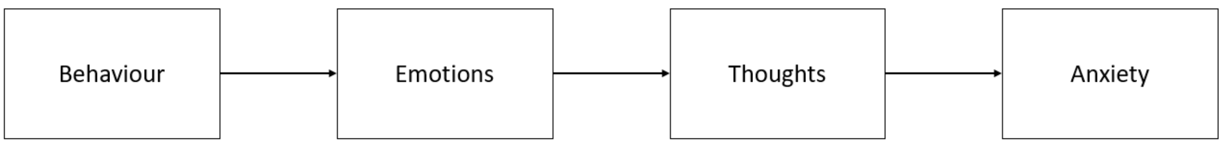

Figure 1. BETA(Behaviour, Emotions, Thoughts, Anxiety) model

All of this is also in line with my observation that common cognitive emotion stress-coping mechanisms, often suggested by family members or friends, are ineffective in managing Anxiety on their own. Because Anxiety is regarded as a mental disorder, most people who experience it seem to first focus solely on the cognitive aspects of recovery(self-control of thought and emotion), neglecting the importance of behavioural adaptations(self-control of action)(Stein, 2019). Nevertheless, this change project will be based on the perspective that in order to enable self-regulation, truly reframe the way of thinking and counteract anxiety, a positive change in behavioural patterns has to be the very first step.

Attracting the Target Audience

As far as completing the change project is concerned, I first had to ensure that I could indeed attract my target audience. Initially, I was struggling to convince people that I'm not a scam. Despite posting on a number of social platforms and forums full of people struggling with mild-to-moderate anxiety, I was not able to get participants. Moreover, by not being able to provide proof of being a psychological professional I pushed back the very few people that actually were interested and got in touch with me. This was frustrating because I knew how many people wanted to change and how I can help them. Yet, I was not able to convince any of them to trust me. As a result, I had to adapt and alter my approach completely. I realized that despite my immense desire to help, I wasn't appearing as credible nor reliable source of support. I reached the conclusion that what I was lacking was authority.

Thus, I got in touch with known and respected Youtubers making videos on the topic of anxiety. These people were already credible, had a big following and had most likely gone through the same process of attracting target audience as me(though quite some time ago). This very last point was the one I focused on when convincing them to promote me to their followers. I emphasized on how I have recovered from anxiety, how much I want to share my experience with other people and how hard it is to find proper target audience. All of them agreed. I also made it clear that I don't want to make a YouTube channel or promote myself as a therapist, so that they don't see me as a competitor or a detrimental factor to their own business. After the rapport was already established, I first asked them for a very small favour, such as giving me a single tip on fighting anxiety. The purpose of that was for me to learn, but also to introduce a way for a bigger favour. Namely, promoting me to their followers. Asking for small favours changes self-perception introducing ways for big ones (Goldstein et al., 2017). Although I still didn't receive a lot of support, mostly due to my lack of professional experience, two of the Youtubers decided to help me by sharing my story and change project idea to a couple of their followers. Basically, not doing anything different than what I did so far. However, this time, due to their prominent name, the principle of Authority(Cialdini, 2018) was applied. As a result, convincing the prospective target audience became much easier. Ironically, authority was the aspect of my presentation that lacked the most and yet was the one that eventually brought me my target audience. After that, I was approached by a number of people and was able to gather the following target group:

Target Group

The target group consists of two university students who meet the following requirements:

1) Aged between 19 and 28 years old.

The size of the target group is rather small(only two people) so that enough support and attention is allocated to each and every one of them. The age range and type of participants(university students) are such so that they share more similarities with the person facilitating the change(me) so that the Mere Liking effect is applied(Bocian et al., 2018). As a result, the change facilitator would appear more moral and trustworthy, which will contribute to the successful subsequent change implementation. Moreover, the age range contains the median age of onset(the first time that symptoms appear) of anxiety for four out of the six major types of anxiety disorders (Kessler, Berglund, et all., 2005). Thus, working with these people would most likely mean that they hadn't been struggling with the condition for many years. So, based on my interaction with people dealing with anxiety, they will be less sceptic about recovery.

2) Experience mild-to-moderate anxiety symptoms, as defined by "The Recovery Village"[2]

Severe cases of anxiety are not considered in this change intervention, since I'm not a trained psychological professional. Thus, giving advice to people in such a condition, regardless of the intentions, might result in deterioration of their mental health, which is a responsibility I cannot take.

3) Currently do not follow a routine same or strikingly similar[3] to the one defined in "Change Goals" section.

Participants should not follow a routine same or similar to the one planned to be actualized so that there is an actual process of development and personal growth during the intervention. It stands to reason that if they follow the outlined routine already, I cannot really change anything in their behaviour.

4) Their anxiety is not a result of any other psychological disorder[4] and not accompanied by any other psychological disorders.

Though difficult to meet, since anxiety is often intertwined with depression or other mental health impairments(Goodwin, 2015), requirement 4) is set to ensure that the focus of the change intervention would be solely on one mental health condition, which is not exacerbated by any others.

Change Intervention Design

After having access to my target audience, my prime focus was on working out the change intervention design. The design of the change intervention is based on the conclusions reached in the "Theoretical Background" section of this paper, on my own personal strengths according to my Insights Discovery Profile(Look at Appendix A), and on the knowledge acquired throughout the Process of Change honours track.

Change Goal

The overarching goal of the intervention is the creation of self-regulation in each of the participants as a means to counteract anxiety. The change will revolve around the establishment of behaviour which is self-controlled. Again, because self-control of emotion and thoughts is more difficult than self-control of action, the anxious person would most likely benefit by first starting with self-control of action(Stein, 2019). As a result, the self-regulation

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[2] https://www.therecoveryvillage.com/mental-health/anxiety/related/levels-of-anxiety/

[3] By strikingly similar is meant that they already do more than three out of the five routine activities.

[4] For a complete list: https://www.verywellmind.com/a-list-of-psychological-disorders-2794776

in this change project will be realized as a daily routine. Therefore, the change goal can be defined as follows:

Display of self-regulation through following a predetermined daily routine.

The predetermined daily routine is entirely based on the activities that helped me make progress in my anxiety recovery. Although I did a variety of other things in order to boost my mental health(taking supplements, drinking more water, sleep more, etc.) the selected activities are the ones that truly enhanced my recovery. All in all, the daily routine comprises the following goals:

1) Consuming less than 36 grams (men) and 25 grams (women) of sugar per day
2) Exercising 30 minutes a day
3) Getting up before 8 am every day.
4) Practicing deep breathing and mindfulness 30 minutes a day
5) Being exposed to stoicism 30 minutes a day

The implication is that by establishing this routine the people from the target audience will display self-regulation. Of course, there is a risk that they might simply do it in order to please the change facilitator and not because of innate desire to get better. However, this would not change the fact that the participants still managed to stick to a schedule and control their actions for a period of time. Therefore, some degree of self-regulation is instilled and its subsequent effects on anxiety can be measured.

The activities from the daily routine are easily measurable so that the participants can track their progress. All of the activities included in the routine have a variable associated with them(either grams or time), because goals such as “have a healthier diet”, “workout every day”, “wake up early” are too vague. In addition, the presence of easily measurable goals will provide concrete evidence of whether the participant is making progress or not. Also, the ease of measurement is especially important for the overall evaluation of the change project. The evaluation will be achieved via a simple questionnaire where the participants will note down the exact number of days they followed each of the activities. When it comes to analysing the results, if the respective participant followed four out of the five activities for at least five days the change intervention will be considered successful. Sticking to all of the activities for a week or more would be perfect, but based on my previous efforts of establishing such a routine it seems not very feasible. On the other hand, if they follow three or less activities, it would be an indication of one of two things. I either didn’t construct the change intervention properly and overloaded the participants with responsibilities or I wasn’t a good enough change facilitator.

Structure and Methods

The structure of the change intervention, as well as the methods used, are selected in order to facilitate the successful completion of the already outlined change goal. The intervention will consists of four guided online meetings, each designated to a specific sub-goal contributing to the overall change objective. The idea is for gradual exposure to every one of the activities that needs to be performed as part of the Daily-Routine. Corresponding to the persuasive principal of Consistency(Cialdini, 2019). The principle is activated by looking for small initial commitments that can be made. Hence, making a small commitment in the first meeting, will enable making another commitment in the second one, etc. In a nutshell, over the course of the intervention the participants would like to be consistent with the things they have already done. Moreover, because change is associated with a sense of unpredictability and uncontrollability it is often resisted, whereas non-change is perceived as relatively safe(Arkowitz et al.,2007). Hence I will try to reduce the sense of unpredictability and uncontrollability by introducing the activities one by one.

The sessions will be individual ones because this will enable me to pay full attention to only one participant at a time. Moreover, the participants will get clear feedback on their progress and I will have a more complete understanding of their development as well. Lastly, by hosting one-on-one meetings I will assure the participants that confidentiality will be kept and hopefully create a sense of trustworthiness and mutual understanding, which I feel is harder to achieve in a group setting.

The choice of platform for the meetings is Skype, simply due to its suitable functionality: chat, computer-to-computer video calls and computer-to-phone video calls. Moreover, it is available for all widespread operating systems(IOS, Windows, etc).

Every meeting, besides the introductory one, has a specific tagline and addresses a certain topic. A comprehensive description of every meeting will not be given since the style will be semi-formal and they could unfold in a variety of ways. However, the basic persuasive techniques used, as well as the goals will remain fixed. Therefore, The Time Span, Goal and Persuasive Techniques used, are provided per meeting.

1) **Introductory Meeting:**

Time Span: 60 minutes to 90 minutes

Goal: Get to know the participant, Establish good rapport, Create a safe environment, Establish similarities between change facilitator and test subject

Persuasive Techniques Used:

The very first technique applied in the introductory meeting will be for me to be a good listener and encourage the other person to talk more. Most often than not people don't want an entertaining conversation partner, but someone who will simply listen to them(Carnegie, 2009). What is essential during this process is for me to defer from judgement as well as show that I'm truly engaged by using proper body language. In addition, trying to become the type of leader who listens more instead of directs, is part of my Personal Development Plan(PDP).

The next technique applied by myself during the first online meeting(and not only) is simply smiling more. Smiling is shown to have multitude of benefits such as lowering stress levels, boosting immune system and lifting up mood, even when the facial expression is fabricated(Kraft & Pressman, 2012). The best part is that smiling back is a natural response of the human body, so all the listed benefits will most likely be shared between both the test subject and the change facilitator. Moreover, it is also indicated as one of six ways to make people like you since you appear more trustworthy and make other people feel better(Carnegie, 2009). Hence, it is a crucial step in establishing good rapport and creating a safe environment.

Subsequently, I will apply the principle of Liking(Cialdini, 2018). In a nutshell, people prefer to say “yes’” more often to those that they like. I will implement this principle by outlining the similarities between my past struggles with anxiety and the current ones of the participant. In addition, I will define the goal of his/her recovery as a mutual one and pay compliments to what he/she has achieved so far in terms of recovery as well as personal development. This ties well with the last principle I will use, which is to show appreciation to what the person has done so far in order to cope with Anxiety. By giving honest and sincere appreciation of what the participant has achieved so far in recovery, one of the fundamental techniques in handling people is applied(Carnegie, 2009). The simple fact that he/she is willing to make the effort and take part in this change project indicates that he/she didn’t gave up and wants to improve. Thus, finding areas where I could show my appreciation for his/her past decisions and efforts will not be difficult.

2) “Food is fuel” meeting

Time Span: 45 minutes to 60 minutes

Goal: Introduce participant to goal 1) and get his honest opinion on what he/she thinks about it, Discover the eating habits of the other person, Motivate him to make gradual progress towards completion of goal 1)

Persuasive Techniques Used:

I will ask for the recipe of a single healthy meal that they have cooked in the past and promise to cook it myself. If they haven’t really done that before, I will simply ask them for their favourite healthy meal regardless. I will then send pictures of the prepared dish after no more than three days, so that the other person has enough time to prepare his/her dish of choice after seeing my pictures. Here, a number of principal are used. Firstly the principle of reciprocity is applied (Cialdini, 2018). Simply put, the method says, that people are obliged to give back to others the form of a behaviour, gift, or service that they have received first. In this case, the other person will feel obligated to prepare a meal as well, simply by knowing how much effort I put in. Secondly, showing respect for the other person’s opinion (in this case in terms of food), is one of the twelfth ways of winning people to your way of thinking(Carnegie, 2009).

3) “Move and groove” meeting

Time Span: 45 minutes to 60 minutes

Goal: Introduction of goal 2), Introduction of goal 3), Try and find a suitable time slot in the participant’s schedule when he/she can exercise, Together pick the type of sports that will suit his/her bodyweight, style of living, monetary requirements, etc., Discuss benefits of exercising and link them to anxiety recovery

Persuasive Techniques Used:

During this session the types of persuasive techniques used will largely depend on whether the participant seems completely unwilling of introducing exercise into his routine or whether he just seems uncertain of doing so.

In the first case scenario, I will not emphasize on how easy it is to exercise but rather on how hard it is and how limited time we all have in our schedules. By doing so, the principle of scarcity will be used. Simply put, people want more of those things they can have less of(Cialdini, 2018). This will also trigger another principle of persuasion, which is the one of throwing down a challenge. By saying that something is difficult and unachievable by someone, they will often rise to meet the challenge (Carngie, 2018). Moreover, If the other person is completely reluctant in introducing exercise into his daily routine I will start by asking questions on why is that the case, instead of giving direct orders. We will try and look for the exact reason, and try to come up with a sort of activity which is independent of that reason. In general, I will try to let the person reach the conclusions that exercising will bring a lot of benefits in his anxiety recovery as well as his personal health in general by him/herself. That is also one of the ways of bringing people to your way of thinking (Carnegie, 2018).

If the other person is partially motivated or eager to start exercising but still uncertain, the principle of consistency will be applied. In a nutshell, when people are uncertain they will look to the actions and behaviours of others to determine their own(Cialdini, 2018). In this case, I will explain what I did and how it helped me recover from anxiety. I will also give examples of other prominent people who managed anxiety through consistent exercise or sports practice

4) “Time for a present” meeting

Time Span: 45 minutes to 60 minutes

Goal: Introduction of goal 4), Introduction of goal 5), Raise curiosity about mindfulness, meditation and different philosophies

Persuasive Techniques Used:

Most importantly, I will complement the person on whatever progress he/she has made so far during the change project. This will have two purposes. Firstly, giving the other person a fine reputation to live up to is one of the ways to change people without giving offense or arousing resentment(Carnegie, 2009). If we give someone a great reputation to live up to, he/she will desire to embody the characteristics with which we have described them.

Consequently, he/she will work with vigour and confidence if they believe they can be better. Secondly, by paying compliments I will again apply the principle of Liking(Cialdini, 2018).

YouTube videos sent in between the meetings

Between meeting 1 and 2: https://www.youtube.com/watch?v=AiM9YcE0LT4

Between meeting 2 and 3: https://www.youtube.com/watch?v=o_kHj-6qsMw

Between meeting 3 and 4: https://www.youtube.com/watch?v=-XvI6Y5Yq8o&t=174s

The latter videos are used as a means to transfer relevant information between sessions, simply because they are concise yet informative. They summarise well the most important points while also do not require much effort on behalf of the participants when it comes to watching them. However, these videos will neither be sufficient in educating ones on Stoicism nor in instilling stoistic habits and notions. However, their goal is to raise curiosity and stimulate further reading and exploration on that philosophy or any other one.

Incorporation of PDP goals

The most crucial part of my personal development plan(PDP) is to become a more inspired person, especially when working on school/work related projects. This goal of mine was well incorporated into the change intervention and was the primary reason for my choice of topic. Despite having a number of other ideas, related to business start-ups, I opt for helping people with anxiety because I knew that my motivation and drive to do that would be much higher. Throughout the intervention, I never felt bored and I was always looking forward to putting more effort into the project. In addition, the meetings I had with the participants increased my inspiration levels even more. In my mind, I was doing something worthwhile and meaningful. Although I believe many types of jobs allow you to do that, not so many allow you to see the positive influence you have on someone else's life immediately. I was able to see the participants' progress in recovery and directly communicate with them. This also made me feel better and more motivated. Eventually I figured that being a sort of inspiration for others, helps being inspired yourself. In the future, I will try to get involved in more project that keep me inspired.

The second goal from my PDP was also considered when designing the change intervention. The goal was to be a better listener. The change intervention was of such nature that I was able to improve on my attentive listening skills on many occasions. I knew that hosting coaching sessions would provide me with a great opportunity to work on that skill. Even though in each of the sessions I had to present some information to my target audience I also had the opportunity to listen carefully about their current situation and the progress they have made. While doing that I had to extract only the most relevant information, while being objective and providing a nice setting for them to share more and more.

Lastly, my personal development plan included the goal of becoming a more altruistic, empathetic and coach-style type of leader. This was an important part of my PDP because so far I have always strived for being the autocratic/ pacesetting[5] type of leader, which brought more stress and responsibility into my life than necessary. Again, I designed the change intervention in such a way that I had a lot of opportunities to practice the coach-style type of leadership. Throughout the span of the project, I was constantly trying to put myself into the other persons' shoes and not explicitly tell them what they need to do. Instead, I wanted for them to reach the correct conclusions by themselves and take the appropriate corresponding action.

Results and Discussion

The aim of this intervention was to lower the anxiety levels of two students, experiencing mild-to-moderate anxiety. This was to be achieved by them following a set of activities and hence establishing self-regulation. Two types of results can be distinguished – quantitative and qualitative. The quantitative results were obtained via an online questionnaire created with the "Smart Survey" platform and sent to the participants at the end of the change project. The quantitative results were then aggregated in excel and presented in a graphical format, look at *figure 3* and *figure 4*. The qualitative results were collected during the final feedback sessions with the participants and also influenced by my observations throughout the entire intervention.

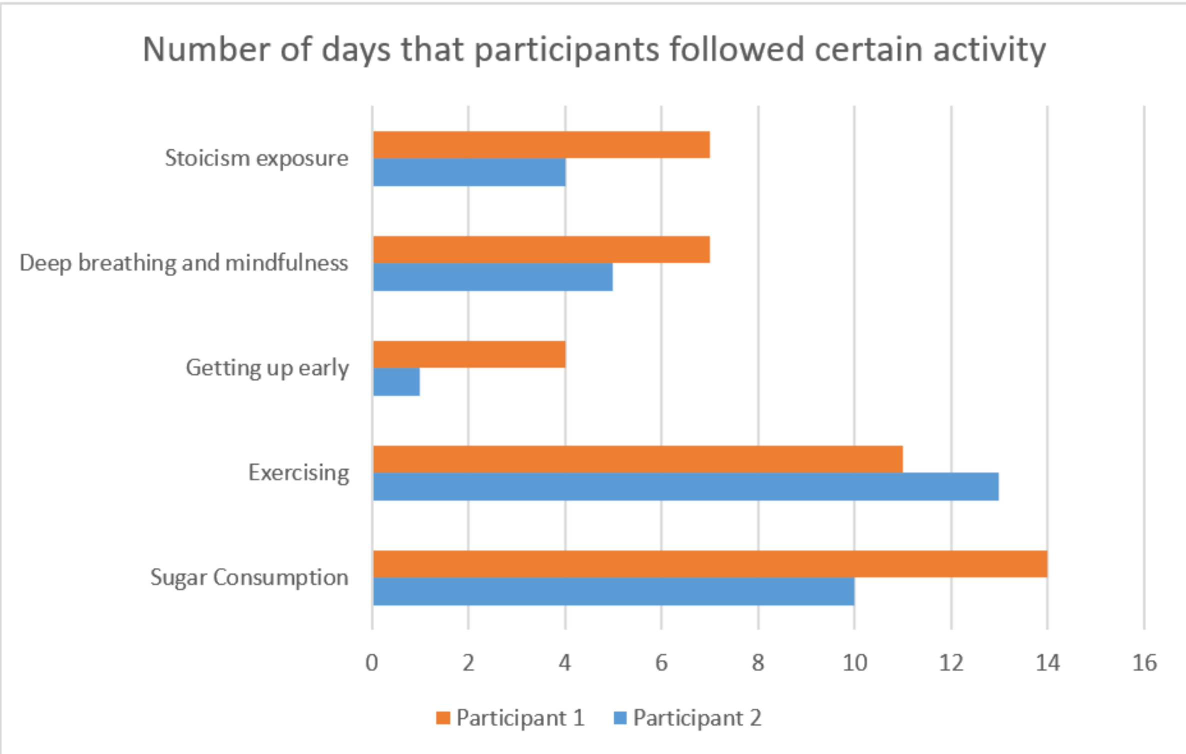

Figure 2. Number of days that participants performed certain activity

[5] https://blog.hubspot.com/marketing/leadership-styles

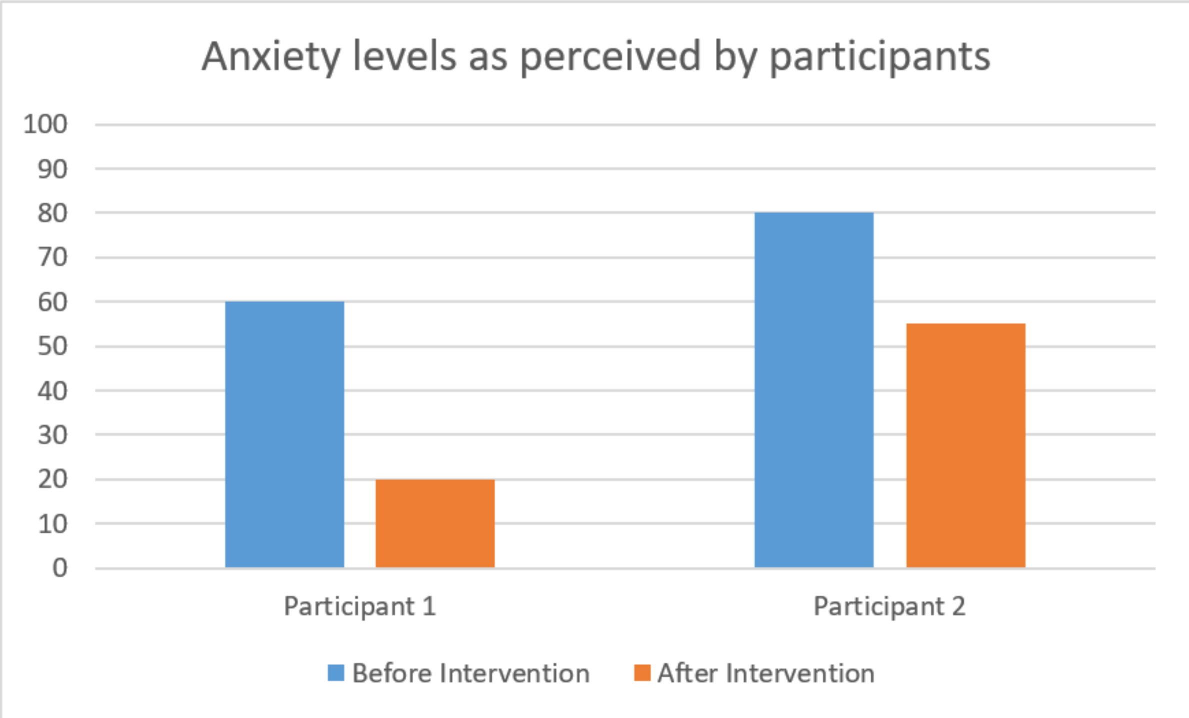

Figure 3. Anxiety levels as perceived by participants

Figure 2 servers as a good indication on which sessions were successful and which weren't. It stands to reason that the successful ones were these performed for larger periods of time. What should be kept in mind is that some goals were established before others, so it is natural for them to be followed for longer periods of time. For example, although the "Exercising " and "Getting up early" activities were introduced in the same meeting, the participants performed the former activity a total of 24 days in comparison to 5 days for the latter one. This might simply be because I was much more passionate when presenting exercising or just because the activity fits better with their daily-routines, living styles and mentalities. It's not a surprise that the "sugar consumption" goal has been followed for the largest number of days overall, since it was set in the very first session, whereas "stoicism exposure" and "deep breathing and mindfulness" were introduced in the last one. In a nutshell, the change intervention was successful for participant 1(followed four out the five activities for five days or more), and unsuccessful for participant 2(followed three out of the five activities for five days or more). This is also consisted with the information provided on Figure 3 – it looks like the person who was performing more activities experienced bigger decrease in anxiety levels. However, it should be noted that another relation is also possible: the person was more diligent, simply because he had lower anxiety levels in the very first place – Figure 3.

In general, Figure 3 shows that there is an overall decrease in the anxiety levels of both of the participants. However, a certain number of biases have to be taken into account. Firstly, the anxiety levels are the ones perceived by the people going through the intervention and not an objective third-person or a professional. Since the people put a lot of effort into performing the activities, they would most likely not be prone to admitting that the efforts were wasted. Therefore, they are likely to report that they feel better now. In addition, it is plausible that the participants simply experienced the placebo effect(Cherry, 2020) when it comes to the reduction of their anxiety levels. Moreover, the participants might have felt pressured to report a change in the positive direction in order not to discredit all of my efforts as a change facilitator. This is relevant, especially because we were able to establish a very good rapport and a sort of a friendship.

An important observation is that the decrease in anxiety levels is bigger for the initially less anxious person(participant 1) than the initially more anxious person(participant 2). A reduction of 66% against a reduction of 31%. This might be an indication that the change intervention is much more suitable for people with really mild anxiety. Slightly higher levels of anxiety might be too high for this intervention to be effective. However, a bigger sample is needed so that this relationship is confirmed.

As far as qualitative results are concerned, a couple of things can be said. Based on my interactions with the members throughout the intervention and the feedback discussions we had during the final meetings I noted down certain revelations. First and foremost, giving the participants a sense of direction seemed to be the most important part of the entire intervention. In other words, for them to take action in order to counteract anxiety, not just dwell on it, was the biggest step in the right direction. According to the participants, It didn't even matter what sort of activities they were supposed to perform. As long as they had something scheduled for the next day and they believed that it would enhance their recovery. This provided stability and consistency to the participants lifes. Hence, their overall happiness increased, just because they were able to complete small predetermined goals each and every day. On the other hand, although they enjoyed incorporating certain activities in their daily-routine, both members of the change intervention felt as if their schedules were getting too hectic. This was especially true after the "Time for a present" meeting. All five goals were introduced after that session so the set of activities got very wide. As a result, next to the feelings of productivity and achievement that the participants have been experiencing some stress and extra pressure was introduced.

Ethical considerations

A very important aspect of this change project are the ethical considerations inextricably linked to working with people who experience some sort of mental health impairment. As someone who is not a psychological professional this consideration was even more relevant to my intervention. I knew that I had taken on a very large responsibility and that despite having plans and goals as part of the intervention, my most important task was to not affect the mental health of the participants in a negative way. I tried to achieve that by making very slow, gradual progress and always receiving feedback by the people I worked with. I were to receive the slightest indication of their mental health being compromised I would have stopped the intervention. This was communicated with the participants and agree upon. Moreover, I made it clear to them that though I have personal experience with anxiety, I have none in treating other people. I also ensured that all the communication that happened between me and the participants is kept confidential.

Moreover, I had to schedule two extra meetings(one per participant), where I could bring the change intervention to a close. These meetings were important because they allowed me and the participants to establish clear boundaries for after the end of the intervention(something I didn't facilitate in the very first meeting, although I should've). We agreed that after the intervention is over, they could still get in touch with me for a small tip or advice, but no more sessions will be held.

Reflection

Looking back on the entire project I have a number of important considerations. Firstly, I heavily overestimated my own capabilities and took on too many activities. This is also in line with my predominant Insights colour – red. I was confident that I could handle the entire project on my own and that I can achieve amazing results in the given time frame. Though my enthusiasm might have been helpful, this cannot be said for the lack of proper planning and forethought I exhibited.

Secondly, I learned how crucial proper guidance is. Prior to the start of the intervention I had never worked with a supervisor. Therefore, I wasn't sure how to make the most out of being coupled with one. It was only after I realized that I couldn't meet my initial targets for the intervention that I started consulting with her. This was obviously a mistake of mine. The supervisor helped me with keeping targets realistic, proper scheduling and a lot of advice on practical matters. It was also a great source of creativity. For my next project of such nature I will try to keep the intervention objectives small yet more thought-out. Also, I will constantly keep in touch with my supervisor so as to ensure that I'm on the right track.

In addition, I discovered that achieving change in practice is not as easy as it seems in the books. Despite using the appropriate literature as a basis, I observed that change was not necessarily happening as planned. This might be simply due to the fact that each situation in real-life is unique and different so there are infinite number of factors that have to be considered. As a result, I had to improvise a lot when I felt that simply following the literature wouldn't yield the expected results.

Reflecting back on the intervention, by designing too strict of a daily routine, I put slightly more stress and pressure onto the participants than needed. Since increased levels of stress and psychological pressure should be avoided at all costs, when counteracting anxiety, this was a weak point of my intervention. In retrospective, It would've been much better if I received some input from the participants on what it is they enjoy and are passionate about. Then incorporate all of that into the daily routine so that the participants have more motivation to actually execute it. Another option was to simply reduce the set of activities so that performing all of them doesn't induce as much stress as it did.

Last but certainly not least, I should've set clear boundaries with the participants at the beginning of the intervention, not at the end. Although I had a very good rapport with them throughout the intervention, stopping the sessions was not easy for me. Reason for that being that initially I didn’t specify what our relationship was going to be after the project is over. I felt as if the participants expected we would continue to meet regularly even after the regulation is over. This had to be anticipated and resolved in the very first meeting not the final one.

All in all, I’m happy with how the intervention played out despite the difficulties and shortcomings I faced. Hence, I look forward to my next change project, where I could implement everything I learned in the Process of Change Honours Programme as well as this project in particular.

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Appendix A

Strengths

This section identifies the key strengths which Andriyan brings to the organisation. Andriyan has abilities, skills and attributes in other areas, but the statements below are likely to be some of the fundamental gifts he has to offer.

Andriyan's key strengths:

- Has a well developed sense of urgency.
- Competitive and wants to win at all costs.
- Pragmatic, rational thinker.
- Practical, agile and spontaneous.
- Action oriented - rises to the challenge.
- Analytical and systematic.
- Runs a “tight ship”.
- Embraces change readily.
- Bold and energetic.
- Values truth and high ideals.

Figure 4. Key Strengths of Andriyan

Student Communication Science

"Daniëlle Philipps

"Always remember: True commitment to small changes will, one day, help you attain even greater accomplishments. After all, that's Evolution!"

Final Honors Report

PUTTING THE ‘DEMOS’ BACK IN DEMOCRACY

Helping citizens of Sint Maarten realize their power in shaping their small-state political environment.

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Program:
Processes of Change

Bachelor Honors

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July 10th, 2020

Introduction

As of 10 October 2010 (hereinafter: 10-10-10), the constitutional ratios within the Kingdom of the Netherlands have changed dramatically. The country of the Netherlands Antilles has been dissolved and Curaçao and Sint Maarten have joined Aruba as independent countries within the Kingdom and Bonaire, Saba, and Sint Eustatius are included as overseas municipalities in the Dutch state system. The development of the two youngest Caribbean countries has not gone without a fight. The new countries are expected to maintain a democratic rule of law within the limits of the Statute of the Kingdom of the Netherlands. While at the same time, having public funding in order. In doing so, Sint Maarten must push to ensure good governance and also monitor the cohesion between the people and the state. The constitutional restructuring of 10-10-'10 provides a vast field of research across a range of jurisdictions and scientific disciplines. In state- and administrative law, this applies mainly to the areas of tension that arise as a result of the changed constitutional relationships (Sandholtz & Koetzle, 2000) .

Sint Maarten is now responsible for their affairs independently. In so doing, the country has become independently and jointly responsible for meeting the requirements of democratic rule of law, as laid down in the Statute. The Guarantee of the Democratic Rule of Law has been entrusted to the Kingdom by the Declarant. To be able to carry out this task effectively, several instruments of financial and administrative supervision have been granted to the Kingdom. However, this enforcement toolbox is not the same for all countries. More specifically, Sint Maarten is supervised more extensively (financially) than i.e. Aruba, and the powers of the Netherlands, in this area, are very limited. The developments mentioned above led to tensions between the Kingdom and the Caribbean countries over the autonomy, the institutional framework, and the implementation of the supervision over those countries. There are some issues and dilemmas in this area of tension. These hot spots regularly appear in political debate, but little thought goes towards deeper problems (Roitman & Veenendaal, 2016). Some of these are the result of the small-scale nature of the islands. Other problems transcend the level of everyday governance and therefore are not discussed enough, although they are fundamental to the future of the Caribbean islands.

Problem statement and -analysis

Given the above mentioned, Philipps (2020) saw it relevant to conduct exploratory research aimed at understanding the political climate was. So, the question arises of how the demos regards their contribution within this democratic electoral model and if they are truly aware of their power within it. This will present the scientific findings of Philipps (2020) to nationals in a relatable way, thus potentially inspiring change to secure an unflawed democracy. Therefore, a change intervention is developed to inspire citizens to take a less active part in this issue. An example of a pressing issue that goes undiscussed is the fact that earlier this year, Sint Maarten went to the polls for the ninth time in ten years. From a change-oriented perspective, it is best to analyze the social dialogue to truly gain insight into matters of public interest. More specifically, this intervention is of great relevance because Sint Maarteners deserve an opportunity to give their candid viewpoints on the islands' political climate in a controlled setting.

More precisely, since Sint Maarten is a democracy, residents are an active part of political decision making and are, therefore, essentially the key to any major changes that are to happen since they actively form their collective futures (Bourguignon & Verdier, 2000, p. 289). The motive behind researching this topic is the upcoming tenth anniversary of the constitutional transformation of the islands in the Caribbean Netherlands on 10-10-10. Sint Maarten as a non-sovereign territory within the kingdom of the Netherlands has not yet had a sitting of parliament remain for the full term. Furthermore, democracy is an enduring quest for a human climate, which is constantly threatened and must be restored. It is a spiritual force that makes us aware that we are responsible for each other.

Intervention Design

Over the course of 6 weeks, 8 Sint Maarteners over the age of 18 will participate in a longitudinal intervention that consists of both qualitative (focus groups) and quantitative (survey) measures. These participants are all required to have participated in at least three elections in the last decade. The research design consists of a moderated group discussion and a pre-, interim-, and posttest. Philipps (2020) revealed several perceptions on the current political climate, these topics are presented as discussion points, during which participants are required to share their personal opinions on them and speculate on why things are currently so. During the primary round of the intervention the instrument is filled in prior to the group discussion, to properly gauge the participants' initial standpoints free of external effect. However, in the interim and final round of the intervention the instrument will be given after the 90-minute discussion. This instrument is a 10-item survey, custom made for this study, which measures results on a 5-point Likert scale.

This instrument measures participants' readiness for political change (*e.g.: Do you believe change is necessary to insure prosperity on Sint Maarten?*), current views on the situation (*E.g.: Do you find elected officials to have high integrity?*) and their general standpoint on whether the political situation can be fixed (*e.g.: do you believe that points discussed today can actually take place?*). The true intervention, however, occurs in the interim round, during which respondents will receive a summary of the scientific findings of Philipps (2020) which explains the in seriousness of the matter in an easily comprehensible way. The main goal of this intervention is to have the participants gradually record a greater level of urgency to see a change in Sint Maarten's politics.

Change objective(s)

Based on the abovementioned problem analysis two change objectives have been identified. The first change goal is that:

- ***After the intervention participants should be more aware of their power within the democracy of Sint Maarten.***

Anckar (2002) and Srebrnik (2004) consider small islands to be places filled with democracy and democratic procedures. They tend to be relatively harmonized, creating a high degree of sympathetic identification among inhabitants and "a greater effort to feel others out" (Srebrnik, 2004). Srebrnik (2004, p.332) states that citizens of small island states have greater opportunity to participate in choosing their leaders and in decision-making; there are fewer layers of the administrative system, and "*open channels of communication exist between those who govern and those who are governed* [...]". In light of the first objective, the second change objective focusses on:

- ***After participating in all rounds of the intervention there is an increase in sense of urgency for long-term political change amongst participants.***

If this small-island state were to continue functioning in this manner, there would be several consequences. Firstly, parliament exercises independent supervision over the members of the executive. The coalition parties, in practice, form a front that in always agrees with the intentions of its political leaders. Roitman & Veenendaal's (2016) historical analysis warns that under these circumstances, this wild application of the Dutch political dual model gives the executive a lot of room to maneuver on improper grounds and to use her powers. The second effect would be the ever-growing loyalty scheme behind a supporter. Kiewiet and Lewis-Beck (2011) presents the argument that voting is largely socio-tropic in nature. So, families, friends and other major campaign donors benefit because their ally in parliament will not get out quickly. Moreover, with fewer opposing members upon forming a coalition, these members most likely hold a controlling interest, this may be an incentive for more people to cast their votes for that person. Particularistic politics are bad for economic development, which Sandholtz and Koetzle (2000) agreeingly claims, means that the problematic socio-economic prospects of large sections of the population hardly improve. As a result, the electorate remains prepared to enter political-paternalist relations, so that political parties that advocate honest governance will not gain a foothold (Sandholtz & Koetzle, 2000).

Change approach

To measure whether the change objectives were indeed met this study required multiple moments of measuring change, namely a longitudinal study. Longitudinal research is described as socio-scientific research in which measurements are repeatedly taken at different times at different times to map a particular development (Denzin & Lincoln, 2005). The benefits and strength of longitudinal research were already demonstrated by Campbell and Stanley in 1966 (Campbell & Stanley, 1966). In contrast to empirical research in which social phenomena are approached from a more "static" perspective, longitudinal research is based on the dynamics and complexity of social change, which best fits the goals of this research. This can be apparent since this research methodology is used in a variety of disciplines: economics (currency developments), medicine (disease spread), planning (traffic jams) and criminology (victim trends).

In addition to the advantage of the multiple measuring moments, this form of research offers the possibility of involving the examined – or other stakeholders – in the research and interpretation of the results (Denzin & Lincoln, 2005). The disadvantage of longitudinal research is that it is costly since it requires a lot of time from the researchers, organization and participants. Moreover, the circumstances of the participants in the research groups can change dramatically (e.a. change of job, relocation) so that they may no longer appear in follow-up measurements.

Overly large changes or shifts in the research groups make the research data unreliable. This can be partly overcome by additional *cross-sectional* research, thus making it possible to validate the longitudinal study.

Results

After conducting both the pre- and posttests, results showed that there is no increase in urgency to better the current state of Sint Maarten. Participants mention during the discussions that the situation is generally *important* and requires attention, their personal levels of urgency remained roughly at 2.7 out of 5. Furthermore, respondents reported an adequate level (3/5) of optimism in the pre-test. However, after being presented with the article of Philipps (2020) there was a slight increase in how much control citizens perceived over the situation. Respondent 2 states:

"*If the general public or a significant part of it feels that it cannot find itself in the system, or feels that it has no influence, then it is unlikely that the system will attract us. But this help me to realize that this system really can represent us if we do it right.* ". Other respondents also actively mention that the administrative system should consist of a creative and effective composition and cooperation of the state, interstate connections, the private sector, civil society and external parties. "*This is particularly important in our context where there are relatively low levels of development and underdeveloped, few diverse production structures" – Respondent 4.* While there was no statistical improvement on this change objective, was little improvement in terms of believing that the situation can get better. As a result, while analyzing the discussions there was one central reoccurring theme: *Only in cooperation with each other (citizens and authorities) will Sint Maarten become ready to respond to the increasingly complex environment.* ,

Discussion

Many citizens in the Caribbean are distancing themselves from a government that does not commit itself sufficiently to the citizens. One of the tasks of governments is to increase the participation of citizens in the political system. In many Caribbean countries, but specifically for Sint Maarten. there is cause for concern in this area. "*The integrity of a democratic political system is dependent its citizens to participate in the political process in order to promote the public good and hold political authorities accountable; their willingness to show self-restraint and exercise personal responsibilities in their economic demands, and in personal choices which affect their health and the environment; and their sense of justice and commitment to a fair distribution of resources. Without citizens who possess these qualities, the ability of liberal societies to function successfully progressively diminishes*" (Anckar, 2002; Bhargava, 2018;4; Corbett, 2013; Veenendaal, 2018a).

The main aim of this study is to motivate citizens to take a more active role in the islands' local development. On Sint Maarten, many deprived areas can be identified on the islands where no one seems to feel responsible for economic development. This is confirmed by the literature which states that the Caribbean countries are characterised by a highly centralised government (Roitman and Veenendaal, 2016). The decentralisation of central government functions will enable local communities to be further strengthened (Anckar, 2002). For this purpose, local governance systems could be introduced enabling the local community to participate actively and effectively in formulating and implementing development plans. Of course, adequate resources should be made available so that the projects considered to be important by, and for them, can actually be financed.

Finally, this intervention was a practical implication of the BA research of Philipps (2020) which reflected on the citizens' perceptions of Sint Maarten's alignment with Good Governance. It is clear that democracy and socio-economic development are central goals. According to Aguilera & Cuervo-Cazurra (2009). These goals cannot be achieved without the promotion of good governance. Despite differing views on the scope of good governance and the relationship with socio-economic development, it is clear: good governance means building institutions with sufficient legitimacy. The health and stability of a public administration system depends not only on the viability of political institutions and the capacity to implement policy (the hardware of the system). Attitudes and attitudes of citizens are just as important.

Personal learning experiences

It has been proven that one of the most effective ways to gain insight into yourself is to reflect on your behavior. By taking an impartial, disconnected, look at yourself, you will not only gain a better sense of self-knowledge but also be able to draw better conclusions for the future. After reflecting on the situation, my new-found insight will give me much insight into who I am as a person, scholar and change leader. Moreover, by reflecting on the 'not so good parts' of it all I will hopefully learn what should be done differently if I were to be in a similar setting in the future. By doing this, I will gain a better understanding of the past situations and learn something for the future. Firstly, my individual project offered me the new opportunity of working with my fellow natives as both a communication professional and a change leader. This was a first for me, since all researches I previously carried out were all within the controlled setting of the University. It gave me great satisfaction to devote my time to researching a situation so close to my heart both for my bachelor thesis and change intervention. However, this also brought about one of my greatest challenges, which was: being a researcher, and not a radical.

This is because I am deeply connected to my heritage and culture and knowing the dire state of politics sometimes colored my vision during the research process. However, due to great guidance and hard work, I was able to eventually learn to let go of what I love, to discover what is needed to make improvements. An example of this is can be seen in when I decided to let another researcher moderate the preliminary rounds of discussion during the intervention. During the discussion I was only connected to audio and had such a hard time not being in control of the discussion, because I was eager to dig deeper and begin asking participants additional questions than originally on the topic list. But, in hindsight I was able to obtain useful and unbiased information from my respondents, which definitely would not have been the case if I were leading it myself. After the discussion was over, I was able to realize that the 'controller' in me, does not (always) yearn for hands-on control, but control of the outcome. However, controlling an outcome is almost nearly impossible for a situation that involved more people than myself. After realizing this, one of my personal goals in life became letting go of this desire, to know what the outcome is, and learning to accept and enjoy the randomness of it all.

Equally as important to this personal discovery, I gained much professional discovery into myself as a communications scholar and future leader of change. For three years, I have been taught interview training and interview protocol. One of the things you learn there is how your attitudes, statements, looks, etc. can affect respondents. As far as looks are concerned, I learned to always stick to the protocol. This means that you are not allowed to wear clothes that radiate a certain identity because this can influence the respondent's mood and stature. I stick to this quite strictly because I am aware that I have a rather intimidating demeanor, when I'm formally clothed. As a result, I usually opt to wear a neat blouse or jacket. I have not experienced a negative reaction to my appearance. However, to set up an interview with my fellow natives, coming across overly formal all of a sudden became quite condescending, for them. By over-dressing is exuded a demeanor of: "we're from the same place but I am now better than you" to them, which I never even began to think about prior to the first round. But this did reveal to me that while these years at the UT have taught me how to act professionally, these rules are interpreted a lot different elsewhere. So, as a change leader, I should always stay open and stay flexible to altering my demeanor for different target groups.

On the other hand, during my brief introduction, I immediately adhered less strictly to the protocol on behavior regarding verbal communication. I have always studied this as "false", when conducting a more informal discussion like that of mine. And if I feel that way, the respondent also senses it, which makes it more difficult to gather information. I am always interested in what a respondent has to say and am actually always open and sincere in what I say to them. My experience is that it is sincerely appreciated by respondents, although it is not always in accordance with protocol. That's a tradeoff you make. In three years, I have also rarely had a verbal or non-verbal negative reaction to this, other than during professional presentations. I experienced the fieldwork itself as intensive as I was conducting research for both my Bachelor Thesis and this change intervention. For example, with two appointments in one day, which involves 5 hours of discussing time and 3 hours of transcribing, it is quite tiring. At the second appointment it is also quite difficult to remain fully concentrated, especially under time pressure. Because punctuality is not necessarily a core skill of Sint Maarteners time pressure of some participants also occurred during a round, this may have caused that less information has emerged than if the respondents had extensive time for an interview or survey.

In addition, it is also very tiring for a respondent to give an interview of more than one hour, which in turn could have had an impact on the results. Despite the intensity, I found the fieldwork a very welcome change from the theory, and I can now admit that I prefer to work with people rather than books. Especially when something is done with the outcome of the practice. I also think that practice can be just as educational as theory. Personally, I prefer to conduct interviews and focus groups. In my opinion, there is more room for personal contact with these methods, which makes it easier to build a relationship with the respondent. I also think that because of its more open character, you can collect data that provides a better answer to your question than a survey. No matter how open a survey is, it remains a questionnaire that you have to complete. The greater variety in the possible questions to ask an interview also means that interviewing me fascinates longer than taking a survey for the umpteenth time. If a respondent senses this, it can also influence your research results. In addition, I find an interview more interesting for a respondent because the respondent can express his personal story and feelings more. However, I find it more intensive to conduct focus groups because you have to listen, write at the same time, moderate the discussion, weigh up which information you are still missing and formulate good questions.

Something I, however, personally underestimated is finding respondents. It took more time than I, and I think the rest of the research group initially expected. As one of the respondents indicated, the Sint Maarten community is a small community, which made it difficult to find participants. I was lucky that the snowball method worked very well for me. Referring to individuals from the community itself greatly helped find respondents. As a result, I obtained almost all my respondents from others. This has had consequences for the representativeness of the research. Because of the snowball method, I'm pretty sure the sample is less diverse than it would have been without the snowball method.

Looking back on my entire time as an POC student, I must say that I have seen great improvement in myself. Not just in terms of a scholar, but also when it comes to dealing with change. Unlike most of my classmates, I had to end up taking three modules off to focus on my former board year. By having to leave my original class, I forfeited the familiar dynamics of my former group and had to grow accustomed to a very different class dynamic. Where I was once in a class full of people who pretty much thought, like me and were in the same age group and life phases, I am now in a class that had more holistic values and is a lot more youthful than me. At first, I approached my new class from a satirical perspective finding everything they do to be quite cute and a bit unnecessary (e.g: celebrating each other's birthdays in class). But after accepting that this is what is important to them, I began to realize that POC was for most students the only opportunity to experience a true close-knit class like setting. As they had very big groups, unlike my study which consists of a relatively small group.

As a student who was fortunate enough to learn the processes of change in two different groups, I feel as if I can offer future students the following advice: Change is complicated process and, no matter the context, it remains a quest to find the most suitable way to be comfortable in the process. In any case—albeit professional, organizational or interpersonal—it is important to look at each change on its own, there will not be one universal formula for adaptation success. In order to survive in a constantly changing environment, your attitude and openness towards the change are very important. Gaining confidence as a leader in change, it can contribute to the readiness to change and willingness for others to change. This allows everyone more adaptability room in an ever-changing environment.

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"Elisa Dankers

Student Mechanical Engineering

"Isn't it funny how day by day nothing changes but when you look back everything is different"

University of Twente

Honours Programme

Learning by doing

Exploring opportunities in secondary education

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Contents

1 Introduction

When I was a little child, I was already eager to learn new things and to be challenged. When I started attending secondary education, I had the opportunity to develop myself and gain new knowledge on all kinds of topics. In general, I enjoyed paying attention to the explanations of my teachers and at a certain point being able to perform difficult calculations myself. In other words, I enjoyed the process of learning new things. However, I also noticed that not everyone felt this way at school. During the lessons quite some students were busy with chatting, playing games and doing other unrelated things instead of paying attention. Not only does this result in gaps in the knowledge of these students, but it also bothers the teacher, who is trying to explain the material, and the students that are actually trying to follow this explanation. Furthermore, once students lack behind, it will become even more difficult to pay attention during the next lessons as they already miss a part of the information needed to understand the things that will follow. All in all, a lot of students do not feel sufficiently engaged in their own learning process.

How nice would it be if students would be more engaged in their learning process? I think that quite some improvements can be made in the current educational system in order to stimulate students more and make them enjoy the processes of learning new things more. Nowadays, there are lots of ways to stimulate a student's engagement, for example, YouTube videos and online learning platforms. Besides that, during the weeks that secondary schools were closed due to the covid-19 virus, students had to be taught from a distance. Perhaps this situation introduced new aspects that are beneficial to the learning experience of students. Of course, teachers play a essential role in the learning process of their students. Therefore, a change intervention with secondary school teachers as target group will be performed with the goal to stimulate them to enhance student engagement in the learning process.

Firstly, this report includes some research done in order to explain the need for change in the current Dutch educational system. Secondly, the target group of the change intervention and the change goals that should be reached by means of the change intervention will be discussed. Furthermore, the structure and preparation of the change intervention will be discussed in detail. A reflection on the change intervention and its effectiveness will be done when the change intervention has actually taken place.

2 Theoretical framework

Before we dive deeper into the actual change intervention and its goals, we should first take a look at the current situation and the urgency to change this situation.

There is growing concern about levels of student engagement in learning at secondary schools. Not only does disengagement influence the achievements of students, but a lack in engagement also has negative consequences for a students' future as the current society demands adaptable, lifelong learners (Price, 2012). Furthermore, disengaged students risk a cascade of a process of disengagement that leads to dropping out of school (Zollars, 2018). Shernoff (2014) mentioned that unhappiness and disengagement are actively created by the educational system. This system focuses a lot on results rather than the learning process. Therefore, a change in the current system is highly desirable in order to increase the engagement of students in their learning process.

Exploring different ways of educating is important in order to find ways that make school and learning more enjoyable for students. Research revealed that the preference in teaching method is different for different personality types. This shows the importance of tailoring and adjusting the way of teaching to accommodate the needs of the students to increase student engagement (Parkman, 2020). Teachers play an important role in this as they contribute to this by the structure of their classes and behaviour with respect to the student. Showing empathy when students are not interested in the learning material and stimulating the development of new interest has a positive effect on the engagement of students (Kennisrotonde, 2017).

Quite some digitisation has taken place in the education past decade and it is currently more relevant than ever before due to covid-19. The use of digital devices offers a lot of opportunities to interchange different teaching methods. Thousands of instruction videos and learning platforms are online accessible. These can be used to stimulate self-regulated learning and make students actively participating in their learning process. Furthermore, researched showed that online social media used for collaborative learning had a significant impact on interactivity with peers, teachers and online knowledge sharing behaviour. Additionally, interactivity with teachers, peers, and online knowledge sharing behaviour has seen a significant impact on students' engagement which consequently has a significant impact on students' academic performance (Ansari, 2020.

All in all, it is important to explore the opportunities in secondary education in order to find ways to increase student engagement and thereby reap the associated benefits of increased learning, persistence, and academic success.

3 Target group & Goal

In this section, the chosen target group that will participate in the change intervention will be discussed. In addition, the change goals that should be reached by means of the change intervention will be set.

3.1 Target group

The target group of the change intervention will be Dutch secondary school teachers. This has been done for several reasons. First of all, teachers are the ones responsible for educating students. By their way of teaching and structuring the lesson, they highly influence the learning process of students. Of course, teachers have to follow several guidelines, but they have quite some freedom in how they arrange their lesson and learning environment. Teachers can increase the extent to which students take responsibility for their own learning process by their behaviour and enriching the learning environment.

Furthermore, it has been decided to perform the change intervention with secondary school teachers instead of, for example, teachers at an university. The reason for this is that students at an university already have a lot of responsibility and freedom regarding the way they learn. Attending lectures is not compulsory in most cases and one can choose to go to tutorials or just make exercises by himself. This is not the case for most secondary school students. They are obliged to go to school and are therefore highly dependent on the teachers and their way of teaching. Because of the important role that teachers have, not only in the daily school life of students, but also in their learning process, this group has been chosen to be the target group of the change intervention.

The invitation that will be sent for the change intervention will specifically aim for teachers that are interested in the topic. On the one hand they can be interested because they do not see the need for change. On the other hand they might be interested because they agree that there is indeed a need for more student engagement and are curious how to achieve that. I expect that latter group will be most likely to participate in the change intervention. Furthermore, the change intervention is tailored down for teachers that teach at a school that practices the conventional way of educating. There are schools in the Netherlands that already use different methods than the majority of the schools in the Netherlands. There is a wide variety in different kind of schools. However, this change intervention is really aimed to the regular, conventional way of teaching.

3.2 Change goals

The main goal of the change intervention is raise more awareness among teachers about the possibilities and ways of educating that enhance student engagement in their own learning process. This will be done by letting them explore different opportunities to implement those different ways of teaching in the current educational system. Every teacher wants to be inspiring and make their students enthusiastic about a certain topic. In other words, they want to reach their students. Once they are aware of the possibilities to engage students more, they might be more likely to actually experiment with different ways of teaching in their own classrooms. Therefore, another goal of this change intervention is to stimulate the teachers to be more open minded to try different ways of teaching that allow students to be more involved in the learning process. The idea behind this is that when students feel more involved in their learning process, they will have a clearer idea of the relevance of the things they learn. This will motivate them to actively participate in lessons and be cognitively involved. Moreover, it will make the process of learning new things more enjoyable.

4 Preparation & Structure change intervention

In this section, the thinking process behind the preparation and the structure of the change intervention will be discussed in detail, including the practicalities that had to be taken into account.

4.1 Inviting teachers

Inviting the teachers will be done by mail as this medium allows me to easily approach multiple teachers and school in a relatively personal way compared to, for example, placing on a website. The actual mail can be found in Appendix A. In the mail, I started by complimenting the teachers about their flexibility in their way of teaching in this current situation regarding corona. Furthermore, I emphasized the importance of their role as a teacher, especially currently. By doing this before asking the question whether they are willing to participate in the change intervention, I am trying to create an environment in which 'yes' is the only socially accepted answer. I chose to address the teacher in the informal 'you' form to make the message more personal. Besides that, the principle of consistency, which is provided in 'Pre-suasion' (Cialdini, 2016), has been used to convince people to join the video conference. By asking questions, the teachers most likely will answer with yes. Therefore, they will be more likely to join as it is in line with what they already think. Such a question can for example be 'Do you think student engagement is important?'. In addition, I shortly mention why I am doing this project and what we will be doing during the session. I explicitly chose to send the invitation from my university mail address and not from my private mail address. Using my university mail address might indicate that I am working on a serious project. A day before the change intervention will take place, the link to the video conference will be send to the participants. This mail will also function as a reminder.

When signing up for the session, they are also asked at which school they teach, which course they teach and at which level (VMBO, HAVO or VWO). This is done because the way of teaching and structuring a lesson is of course very different for, for example, mathematics compared to French. Furthermore, the level of the students and the school might also influence the way in which students are taught. By knowing the background of the participants, I am able to create groups consisting out of people with different perspectives on the way students are taught. I have also considered to make groups consisting of teachers that have a similar teaching background or teach the same subject. Putting these people together might last in a more sustainable collaboration between teachers of different schools. However, the goal of this change intervention is not to create or stimulate collaboration between different school. They can, of course, learn from each other's way of teaching or stimulating students, but the main goal is to raise awareness and inspire about different ways of teaching that might enhance student engagement by means of an online focus group. Therefore, it might even be beneficial to create groups consisting of teachers with different teaching backgrounds and perspectives as it will enhance the creativity in their ways of thinking.

I am planning to have a total amount of maximum nine participants from three or four different schools. When having more people it might be more challenging to involve every participants. Also regarding the time available it is beneficial to have less people in the conference in order to give everyone the opportunity to speak and share ideas. It might also increase the barrier to share their thoughts and findings. Therefore, it would be ideal to have even less participants than the maximum of nine. During the session, the people in a group have the opportunity to discuss several aspects that will be elaborated on later.

4.2 Setting and platform

The change intervention is in the form of an online video conference. This has been done regarding the current situation and the restrictions due to corona. Even though I did not have much of a choice, an online video conference also has some advantages over a life conference. Having an online session allows the participants to easily join without asking too much of their time. It also enlarges the chance that people are available and perhaps it lowers the barrier to participate.

Different online platforms have been considered to be used for the online video conference. Each platform has its own advantages and disadvantages, but after comparison Big Blue Button has been chosen to be used during the session. The most important reason to use this platform is that is allows to have all participants on the screen at the same time. Some other platforms only show several people or only the person that is speaking. Being able to see all people was a very important point for me for several reasons. Firstly, it allows me more easily to involve everyone in the conversation that we will be having. Also for the participants themselves it is convenient to be able to see everyone. Having an online conversation already limits the body language that is visible to others, so being able to see everyone's face was one of the prerequisites I had for the platform to be used. Furthermore, it is relatively easy to quickly create breakout rooms in Big Blue Button. It also has useful tools that can be used by the presenter. For example, it is very easy to upload a presentation or document and to create polls on which people can vote. As I will also be using polls during the session, this is very beneficial. Most online platforms have time limits for the video conference. Big Blue Button allowed a video conference of 60 minutes, and Zoom, for example, only 45 minutes.

4.3 Structure of the video conference

I start the conference by welcoming everyone and introducing myself. Then, the participants have the opportunity to introduce themselves to me and the other participants. As all participants have more experience with teaching than I have and I do not want to offend them in any way, I will explicitly mention that I will not be telling them how to teach as this is not my expertise, but theirs. Added to that, I will mention that they should just mention it when they have to add something or do not agree with what I say. Of course, I will also tell what we will be doing, namely brainstorming about ways to stimulate the engagement of students in their own learning process. I will also shortly mention the structure of the evening, so they will know what to expect.

After that I will tell something about my personal experiences as a student at secondary school and my motivation for this project. I think it is important to mention this again for several reasons. First of all, I want the follow the 'heart, head, hands' structure proposed by Victor Deconinck. In this way the session is tailored for different types of people with an affinity for emotional, analytical or practical information. By sharing personal experiences and therefore making an appeal at their emotional side, the participants might recognize certain situations and perhaps even identify themselves or their students in the story. Secondly, I would like to create safe environment for sharing experiences or thoughts. By starting myself with sharing personal experiences, I hope to make the participants feel invited to do that themselves as well.

When I am sharing my experiences I will use some polls on which they can vote. In this way the teachers will be invited to actively take part in the video conference. The polls will be about ways of learning I used myself and that inspired me. By letting them vote on these polls, I also immediately now whether the participants are familiar with those methods. In case they have not heard yet of the method, I will quickly explain it. By giving some information about those various concepts I will appeal the theoretical or analytical side of the participants. The polls will be showed on the powerpoint that I will put on the screen. Before the participants will be split in different break out rooms, I will give some bullets points they can think about in their breakout room. These points will also be displayed on the powerpoint They do not necessarily have to follow these points precisely, but it can help them to not drift off to much of the topic. The following questions have been given to consider:

- What can be done within the current Dutch educational system to stimulate the engagement of students in their learning process more?
  - How can this be implemented?
  - How can the extent to which students feel responsible for their learning process be enhanced?

Perhaps corona has been a source of inspiration:

- What surprised you in a positive way while teaching at a distance? Why?
  - How can we benefit from the advantages of teaching at a distance in the normal situation?

The first set of questions should stimulate the participants to think about alternative, but feasible ways of educating. The sense of responsibility of students is an important factor and has also been mentioned for that reason. The second set of questions responds to the situation of the past couple of weeks and the possibly positives experiences the teachers might have had with the abrupt change in their way of teaching.

In the breakout rooms the teachers have the opportunity to exchange ideas with teachers with different teaching backgrounds and from other school. This will hopefully stimulate the creativity. The discussion in the breakout room also contributes to the 'hand' part of the 'heart, head, hand' structure. After the breakout rooms, I would like the different groups to share some of their ideas. Others will have the chance to react on this. I will try to involve every participant in the discussion that will follow. To give the participants something memorable, I will conclude the session by summarizing the main lines of the discussion. I will also thank them again for their participation and kindly request them to fill in the questionnaire that I will send afterwards in order the measure the effectiveness of the change intervention. In this questionnaire, the participants can indicate to what extent they think the topic is suitable for them, the target group, and to what extent they are more aware about the possibilities in enhance student engagement and willing to implement ways to do so. In the questionnaire, I will also ask their opinion on the structure of the change intervention and on my role as moderator. Of course, I will end the session by wishing them a nice evening.

5 Execution & reflection change intervention

In this section, a look will be taken at the conduction of the change intervention and the reflection on the change intervention. Not only will this be done from my perspective, but also from the perspective of the participants.

5.1 The course of the video conference

The change intervention has been conducted on the 8th of June. The change intervention took place in the evening. As the last couple of weeks of the academic year are very busy for teachers in secondary education, the evening was the best moment of the day to perform the change intervention. More than a week in advance the invitations have been sent by mail. Two school have been approached by sending a mail to the headmaster of the school. In this mail I explained what I was planning to do and I kindly requested to send the invitation to several teachers. I also used some of my connections to invite teachers from other schools.

As expected was the available time of teachers limited in this period of the year. The number of registration for the session a couple of days after the invitation was sent was lower than I hoped for. Therefore, another mail has been sent to remind the teachers of the session and to emphasize that there were still people needed. Perhaps I should have included an option to indicate availability in the mail. Now, I did not know whether people did not have time to join or whether they did not read their mail yet. Though, sending a reminder did help as some people indeed had not read their mail. It might also have helped to send the mail more than two weeks in advance to give the teachers more time to read their mail and to increase the chance that they are still available at the specific time slot.

Four participants from three different secondary schools signed up to join the video conference. Three of them mentioned beforehand that they were very eager to join and that they really liked the initiative. The session would start at 20.00, but I opened the online conference a bit in advance to upload my powerpoint and in case people would show up early. One of the participants was a couple of minutes late. However, this allowed me solve some technical issues. Even though the platform and technical aspects had been tested extensively beforehand, there were some unforeseen technical issues with the cameras. Besides that, I used this time to let the participants socialize with each other and me. This created a casual and nice ambiance from the beginning on. When everyone was present, I started by introducing myself and invited the participants to introduce themselves as well. Because we were with five people in total we were able to do this without spending too much time on this part of the session. Giving every participant the opportunity to introduce his/herself also contributed to a nice ambiance in the group.

As mentioned in section 4.3, I stressed that I am not an experienced teacher and will not be telling the teachers how to teach as it is not my expertise. It was clearly noticeable by their facial expressions and reactions that the teachers understood this and respected it. When I was sharing my own experience and motivation, it was nice to see and hear the recognition of several aspects and situations I mentioned. I made sure that my story was not too long in order to keep the participants attentive. Some of the participants immediately started telling about similar situations, which showed that they felt free and invited to share their stories. Using the polls allowed me to involve everyone from the beginning on and the people liked this aspect of the session in which they could actively join.

After this first part of the session, the participants got the opportunity to start discussing and sharing ideas in breakout rooms. All participants taught different subjects, which allowed me to divide the participants into two duos with different teaching backgrounds. The time set for the breakout rooms was fifteen minutes. Halfway I checked whether everything was going alright. This was the case, so I did not feel the need to interrupt the duos in their discussion. After fifteen minutes, the participants were automatically sent back to the main conference.

After the participants returned from the breakout rooms I started the discussion by asking if someone was willing to share one of the things that had been discussed in the breakout room. I was a bit afraid that I would not get the discussion started. However, the participants were all eager to share ideas and thoughts and reacted a lot on each other. So, in general the discussion run smoothly without too much interference. It was not necessary to support the discussion extensively. I only had to bring them back to the topic once because they were drifting off a bit in their enthusiasm. When I got the idea that participants were not sure what to say anymore, I shortly repeated what they said and asked a follow up question. By shortly repeating what they say, I not only made sure that I interpreted them in the right way, but it also served as a sign of appreciation as it shows that I was actively paying attention to what they were saying.

All participants were actively involved in the discussion. Some were a bit more dominant then others. However, I tried to make sure that everyone could say what they wanted to say as I think this was an important aspect in my role as moderator. I do not have a lot of experience in leading conversations or discussions in groups. When preparing the change intervention I gained more knowledge about strategies on leading discussions to be prepared for several situations. I discussed these kind of situations with my coach and did some research on the internet to find out more about leading discussion. Firstly, it could have happened that the participants would have been less open or less eager to share their ideas. In that case I would have tried to involve them more by listening attentively to what they have to say, summarize it and ask a follow up question. I only had to do this once or twice during the actual change intervention. When doing this, I followed the dialogical leadership approach (van Loon, 2015). Besides that, I asked open questions. Attentive listening combined with posing open questions is defined as 'respectful inquiry' (van Quaquebeke, 2018). In my opinion, dialogical leadership and respectful inquiry are great assets to a leader that is confronted with challenges. I also prepared for the case that people would be speaking too much or would stray from the topic. To not directly offend people, I would have fallen back on the structure of the session and the time frame we had instead of abruptly interrupting someone and directly mentioning that he was speaking too much. This had to be done only once as the participants were are very friendly and cooperative. They gave each other the chance to speak.

As the participants were also curious about my opinion about the things being discussed, I decided to also add some things from my perspective, the perspective of a student. At the end of the session, they mentioned that they really liked hearing my experiences in secondary education and my perspective on their ideas for the improvement of the educational system. I ended the discussion by asking what the main take-aways were for each participant. Every participant was inspired in a way and motivated to actually make a difference. Brainstorming with each other also made them realise what could be learned from the past couple of weeks when they had to teach at a distance or with only a part of the students present.

Actively discussing these kind of things made them more open minded to implement aspects of this in their way of educating. They realised that there are many more possibilities than are currently used. Not only within their own subject, but also cross-curricular. They also mentioned that it was very nice to be able to brainstorm with teachers from other school. This something that does not happen a lot in the educational sector. I closed the conference by wishing them a nice evening.

5.2 Results of the questionnaire

Directly after the video conference, I sent the participants a questionnaire in order to measure the effectiveness of the change intervention. The questionnaire consisted of several statements. The participants had to indicate the extent to which they agreed with each statement with 1 meaning 'fully disagree' and 5 'fully agree'. The questionnaire and the results can be found in Appendix B. The answers obtained from the first three questions show that the topic of the change intervention suits the target group. The extent to which the participants were already actively working on stimulating the engagement of students in their learning process, was different for each teacher. However, every teacher indicated that the discussion has encouraged them to think more about the topic. The effectiveness of the change intervention has been measured by questions 6, 7 and 8. The results of the questions are very positive, meaning that the change goals have been achieved. In addition, all participants agreed that the structure of the change intervention contributed to the goal of the conference, meaning that sharing my own experience to explain my motivation and using breakout rooms for discussion were appropriate means to reach the change goals. At the end of the questionnaire, the participants had the opportunity to leave a comment. The comments I received were all very positive and can also be read in Appendix B.

6 Personal learning experience

At the start of the module I made a personal developmental plan (PDP). In this PDP I wrote down which skills I would like to develop during this module and this project. As I am, in general, quiet and reserved and do not have a big personal desire to dominate and control others, I often observe and listen a lot before I give input in, for example, a group discussion. Therefore, the main developmental goal I had, was to be more assertive and take more initiative during group projects or discussions. During my project I organised a webinar in which I was the moderator and the one leading the discussion. During this project I also worked on some sub goals such as feeling more confident in approaching other people and improving my skills in conducting conversations.

Prior of the actual change intervention, I had to approach people in order to find participants for the session. Even though the invitation was sent by mail, it was quite a step for me approach people I (barely) knew and ask something of them. Furthermore, I had regularly meetings with my supervisor and coach. It was my own responsibility to take the initiative to contact them and plan meetings. Not only did I grow in taking initiative, but I also approach others more easily now. The barrier I experienced when contacting people, has been lowered.

During the main part of my project, the change intervention, I would be leading a discussion and creating an environment in which people would feel free and invited to share their ideas and thoughts. I am not used to having this role in a group conversation and I usually prefer to integrate slowly in these kind of situations. Making sure that the attention of the participants was focused on my was rather a challenge as I do not prefer to be in the centre of attention.

In order to make the discussion would run smoothly, I discussed and prepared for several cases with the help of my coach. During the session I had with my coach, I gain more knowledge and skills on how to act and behave when on the one hand people would talk too much or on the other hand would reticent in sharing their thoughts. In both cases I had to take initiative as moderator of the conference. This was very important because we had limited time to discuss everything and I wanted the change intervention to be successful. Not only was it required to take the lead in the mentioned situation, but already from the start of the conference it was up to me to create a nice and safe ambiance. This started by welcoming people and showing my appreciation and interest in them. During the session I tried to preserve this ambiance by listening actively, making sure that I interpreted the participants correctly and asking follow up question.

All in all, I feel proud of the development path I have been through. Being out of my comfort zone by having an assertive role during a group discussion and taking initiative gave me some great insights. I did not have any group members on which I could rely during this project, so I was in forced, in a positive way, to take initiative and give more input than usually did. This made me realise and experience that this is not as ‘scary’ as it sometimes seemed to me. I also improved my communication and conversation skills. When preparing the discussing and during the discussion itself I found a nice balance that works for me between observing, listening and giving input. Moreover, I even notice that I feel more confident in taking initiative and approaching others in my daily life. This is something in which I grew a lot over the course of the past one and a half years. The honours programme taught me a lot. Not only content-wise, but also on the individual level.

I hope to keep developing myself on these areas and have more opportunities to practice the skills I gained in the last couple of weeks. Even though I am already proud on the progress I made, I hope to feel even more confident in approaching people. I really admire people who approach and contact others without any difficulties and I would like to be able to do this myself as well.

7 Conclusion

All in all, it can be concluded that the change intervention was successful and satisfied the change goals based on the reactions of the participants, the questionnaire and my own experience. The intervention was tailored for the target group and the structure of the intervention contributed to the achievement of the change goals. Even though there are always points of improvement, the change intervention was a success and the reactions were very positive. I really enjoyed the process of organising and executing such an event despite the difficulties or uncertainties I encountered. When I applied for the honours programme one and a half years ago, I wrote the following in my motivation letter: "I like to challenge myself and I learned that a lot can be learned by experiences". I still fully agree to this and I think that 'learning by doing' is a very powerful way to improve and develop skills. I am glad to have accepted this challenge.

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Appendix A: Mail invitation

Goedendag,

Afgelopen maanden heb ik gezien dat de huidige situatie veel creativiteit in mensen naar boven heeft gehaald. Ook heb ik met bewondering ervaren hoe flexibel en veerkrachtig docenten zijn, met name tijdens deze coronasituatie. Het is een uitdagende periode als docent in het voortgezet onderwijs en er zullen ongetwijfeld nog meer uitdagingen te wachten staan nu er weer lesgegeven zal worden op anderhalve meter afstand. Ondanks dat het online lesgeven wellicht belemmeringen met zich mee heeft gebracht, heeft het misschien ook geïnspireerd om de lesstof op een andere manier over te brengen aan de leerlingen. Oftewel, we kunnen een hoop leren van én tijdens deze tijd.

Daarom zou ik je graag willen uitnodigen om deel te nemen aan een online videoconference waarin zal worden gebrainstormd over innovatieve manieren van onderwijzen (eventueel geïnspireerd door de huidige situatie) die de betrokkenheid van leerlingen in hun leerproces stimuleert. Dit zal gezamenlijk worden gedaan en in 'breakout rooms' met docenten van diverse middelbare scholen.

Ik organiseer deze online sessie als onderdeel van mijn eindproject voor het honoursprogramma dat ik afgelopen anderhalf jaar heb gevolgd op de Universiteit Twente.

Vind jij betrokkenheid van leerlingen ook belangrijk? Klik dan op onderstaande link om je aan te melden.

https://forms.gle/wfWinJ7qWwzwVkDWA

De link naar de videoconference wordt een dag van tevoren toegestuurd.

Wat: online videoconference

Wanneer: maandag 8 juni 20.00 – 21.00

Waar: online

De sessie wordt gedeeltelijk opgenomen. Deze opname wordt uitsluitend door mij gebruikt om te reflecteren op het verloop van de sessie.

Mocht je vragen hebben, stuur me dan gerust een mailtje!

Met vriendelijke groet,

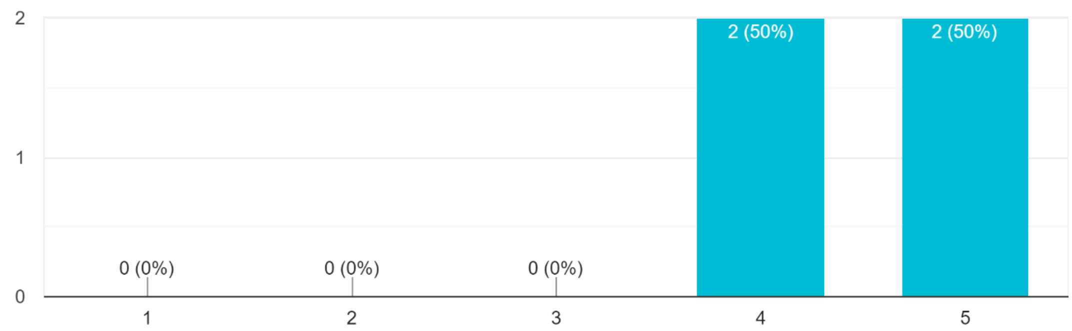
Elisa Dankers

student Universiteit Twente

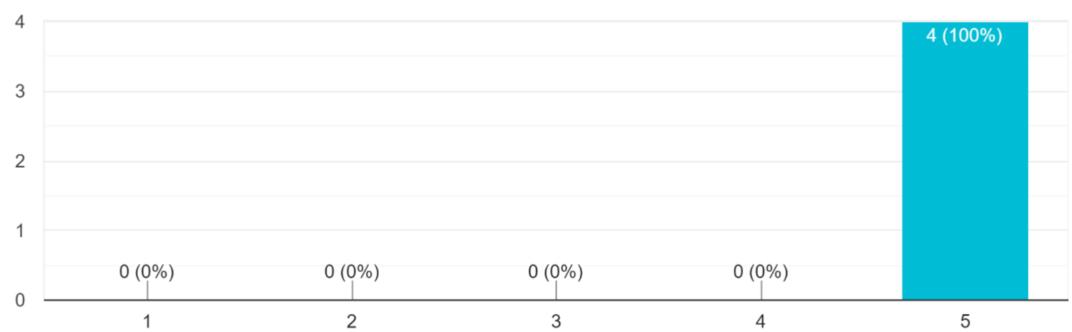
e.j.c.m.dankers@student.utwente.nl

Appendix B: Questionnaire and results

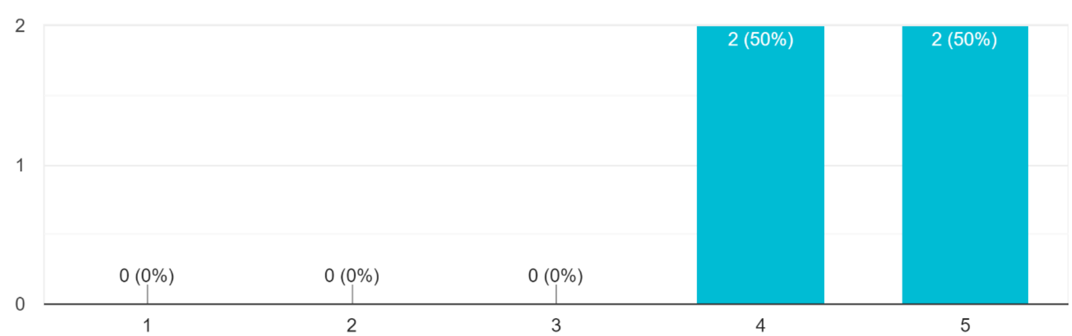
1. Ik ben geïnteresseerd in het onderwerp.
4 antwoorden



2. Ik denk dat dit onderwerp relevant is voor mij als docent.
4 antwoorden

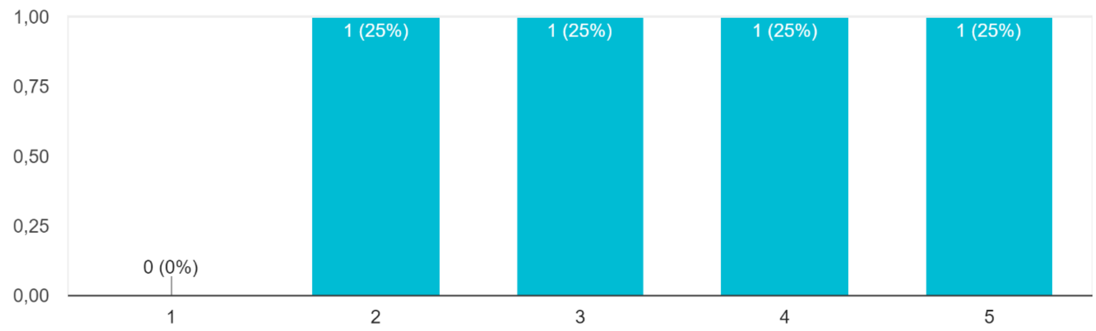


3. Ik vind dat er behoefte is aan verandering binnen het huidige onderwijssysteem.
4 antwoorden



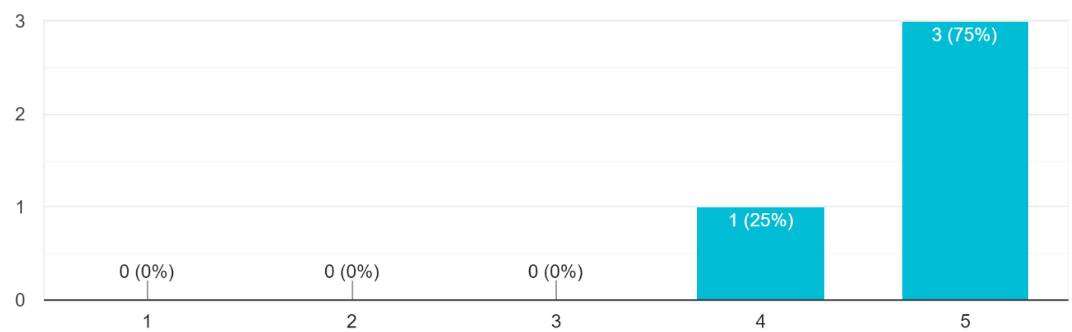
4. Vóór de online conference was ik er actief mee bezig om de betrokkenheid van leerlingen in hun leerproces meer te stimuleren.

4 antwoorden



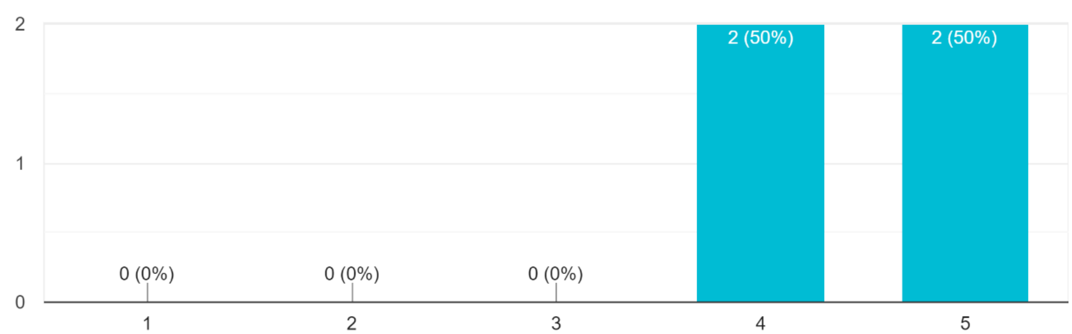
5. De discussie heeft me gestimuleerd om meer over het onderwerp na te denken.

4 antwoorden



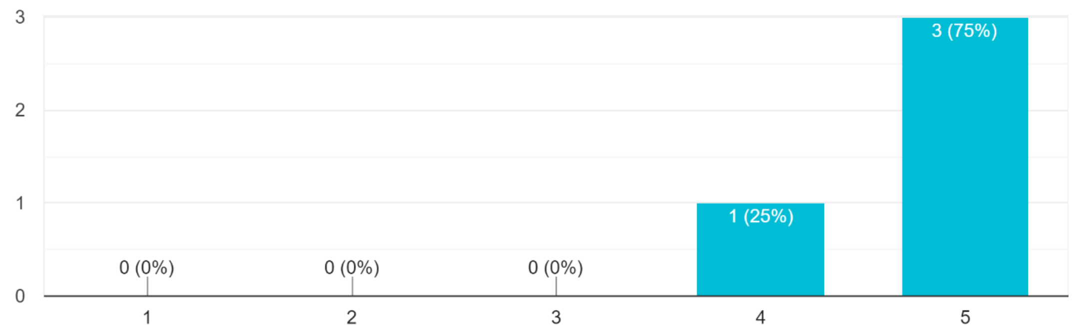
6. Door de video conference ben ik meer te weten gekomen over verschillende onderwijsmethodes/systemen.

4 antwoorden



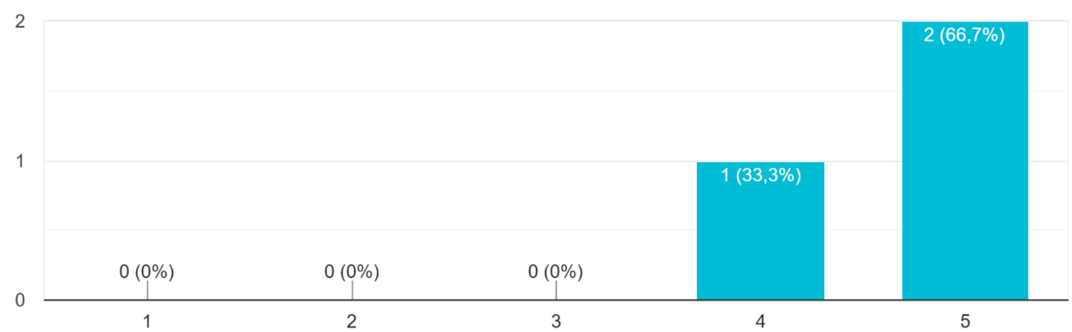
7. Door video conference ben ik bewuster geworden van de verschillende mogelijkheden die er zijn om leerlingen te stimuleren meer betrokken te zijn in hun leerproces.

4 antwoorden



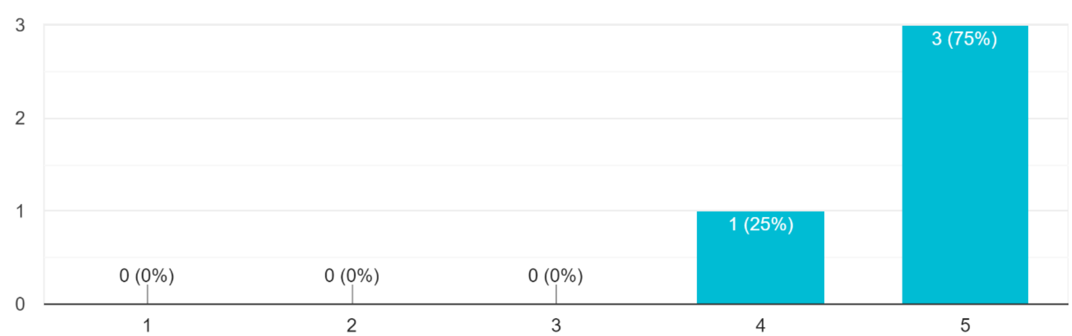
8. Ik ben van plan om (sommige van) de besproken ideeën in praktijk te gaan brengen.

3 antwoorden



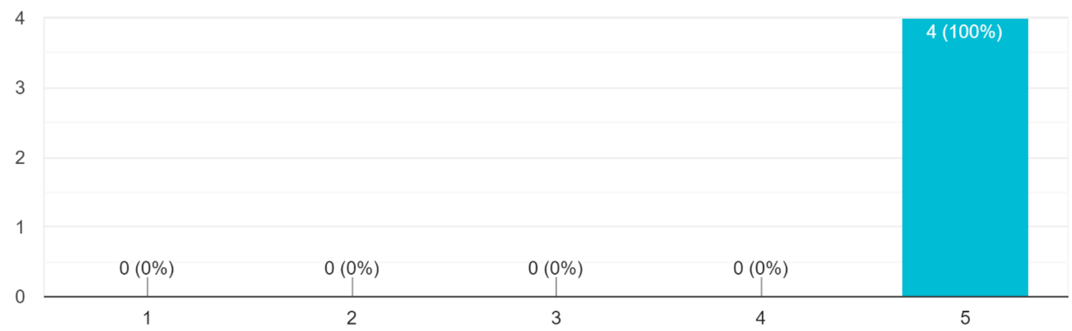
9. De opbouw en structuur van de video conference droegen bij aan het doel van de conference.

4 antwoorden



10. De moderator gaf de indruk dat ze goed voorbereid was

4 antwoorden



Bedankt voor je deelname! Als je verder nog opmerkingen hebt, kun je die hieronder kwijt.

3 antwoorden

Was een leuk webinar, even lekker vrij ideeën spuien. Hoop dat ik ze ook uit kan gaan voeren

Ik vond het erg interessant! Succes met je studie!

Goed bezig Elisa! De uitwisseling was erg inspirerend en heeft zeker geleid tot aanmoediging om dingen anders te gaan doen. Heel leuk en origineel dat je dit georganiseerd hebt. Ook leuk om van jou te horen hoe dat bij jou is gegaan in je schooltijd. Goed ondernomen!

"Ioana Ababei

STUDENT PSYCHOLOGY

"I believe change is a beautiful metamorphosis that expands the self. However, change without a base of authenticity is painful and unsustainable. But when someone stays true to himself, growth has no limits."

Individual change report

Online Team Building

Enhancing Cohesion across Board Members for the Brand-new Romanian Student Association

Student: Ioana Ababei
Coordinator: Lara Carminati

-

Introduction

Traditionally, the university is a place of formal education. However, from another perspective, the university does not offer only study experiences but is also a "playground". Students are privileged to live before entering adulthood in a supportive and full of resources environment, where they can explore their passions and interests, try, experiment, make mistakes, fail and succeed. Therefore, students find and, at the same time, develop themselves into the adults they dream to be.

Supporting the idea of all-round learning, during the university years, students are introduced to the notion of activism, according to which learning is not only the result of formal education, but is also supported by extracurricular activities. As stated by Bowman, Brandenberger, Lapsley, Hill, and Quaranto (2010), volunteering activity during university years is correlated with personal development, environmental mastery, life purpose and life satisfaction. Additionally, activism in college has a positive effect on self-efficacy, social empowerment and commitment to forthcoming civic activities (Knapp, Fisher, & Levesque-Bristol, 2010). Therefore, as a response to the needs of extracurricular activities for international students, the Romanian Student Association was founded.

Romanian Student Association (RSA) is a brand-new association at the University of Twente, founded in June 2019 by a group of six Romanian students. The aim of the association is, first, to enrich the multicultural background of the University of Twente, where all students, locals and internationals, can benefit from a different cultural experience, broadening the perspective over the world. Second, the association has the purpose to create a strong community to support the new international students coming each year.

Unfortunately, at the beginning of 2020, COVID-19 pandemic interfered with the regular activities in all types of associations and organisations. The new regulations imposed by the government to limit the spreading of the virus influenced drastically the activity of RSA. Therefore, RSA faced big challenges in the very first year of its activity. On the one hand, the first year of activity is essential for creating the community and reaching members. Thus, the restriction for events on campus was an impediment to developing the association, a fact that had a negative impact on the motivation and enthusiasm of the board. On the other hand, the new regulations caused supplementary stress for individual board members. As full-time students with part-time jobs, their attention was dedicated to adapting to changes in studying online and keeping their job, so that activism was not considered a priority.

In order to resum the activity after months of stagnation, it is essential for the RSA board to reconnect. In this way, the association can get ready for the arrival of new international students, offering them support and creating contexts where they can meet other students and use the social life to cope with the stress of relocation in another country.

Change Goals

The overall aim of this project and its change intervention is to raise team performance of the board members of the RSA with a particular interest in boosting team cohesion. Indeed, enhancing board members' performance would have a great influence on the evolution of the association. The achievement of this goal is personally important because being a board founder member myself, I am interested in the accomplishment of the goals of the association per se, accomplishments that can be achieved with a performant team.

In general, teams are an incredible tool for creativity, problem-solving, innovation and maximization of benefits and incorporate the competencies and experiences of all their members (Stagl, Burke, Salas, & Pierce, 2006). However, for a team to perform well, it requires more than just skilled members (McEwan, Ruissen, Eys, Zumbo, & Beauchamp, 2017). The literature presents various models to support team performance. Mach, Dolan, and Tzafrir (2010) suggest that the performance of a team is improved by an environment that promotes clarity, reliability, openness, with high degrees of group cohesion and harmony.

Based also on the situation in RSA, the spotlight of the intervention is on team cohesion. According to Mach, Dolan, and Tzafrir (2010), the cohesion between team members is an important element in determining the level of performance. Guzzo and Shea (1992), as stated in Liang, Shih, & Chiang (2015), refer to the cohesion in a team as a force that connects the members to each other and to the group. Also, team cohesion can be defined as the extent to which the members of a team collaborate to achieve the team target (Mach, Dolan, & Tzafrir, 2010). Severt and Estrada (2015) identified two functional properties and four facets of cohesion, as seen in Table 1. The goals of the intervention are based on the facets of group cohesion as reflected in Table 1.

Table 1
Structure of Team Cohesion

Cohesion		
Functional Properties	**Facet**	**Definition**
Affective	Interpersonal	Interpersonal attraction and positive attitudes towards group members
	Group Pride	The esteem that the member gain as being part of the group
Instrumental	Social	The social bonds between group members
	Task	The interest and commitment to achieve the common group objectives

Goals

1. After the change intervention, the awareness about individual personality traits and values is higher for the members of RSA board.
2. After the change intervention, the positive attitude towards the other group members will be enhanced for the RSA board.
3. After the online team building sessions, the RSA board will experience enhanced esteem related to the appurtenance of RSA community.
4. After the online team building sessions, the RSA board will feel more socially connected to the other members.
5. After the online team building sessions, the RSA board will feel more committed to the goals of the organization.

Change Approach

As a response to the needs of RSA, and taking into consideration the restrictions imposed by COVID-19 pandemic, to conduct the change intervention a team building online programme was designed to enhance the group cohesion. As stated by Stagl, Burke, Salas, and Pierce (2006), an effective team intervention contains a combination of elements about individual behaviour, team behaviour, cognition and affective states. Therefore, the programme has three core steps, as it can be seen in Table 2, aiming to foster overall positive attitudes and understanding towards the group members.

Table 2

Overview of the online team building programme

Online Team Building

Phase	Date	Duration	Materials
Phase I Know yourself	5th of June	30 - 50 minutes	Big Five Inventory-10 (BFI-10) Work values test Core Quadrant
Phase II Know the others	8th of June	50 - 60 minutes	Theoretical framework Group discussion
Phase III Know the group	13th of June	30 - 40 minutes	Lost at Sea game Group discussion

'*Know yourself*' Phase

The initial core step of the intervention is about the individual, as a prerequisite for the following two steps. The aim of this step is to help board members to discover information about themselves and to reflect on their personality and values, step connected to the first goal. For the personality, it was used the 10-item short version of the Big Five Inventory, as shown in Appendix A, which has reliability and validity close to the original BFI-44 (Rammstedt & John, 2007). For assessing work values, it was utilised an online tool with similar measures as the theory of Dr Edgar Schein and Dr Shalom H. Schwartz (123test n.d.). Moreover, the model of Core Quadrant developed by Ofman (1995), as illustrated by van Brussel and Semeijn (2018), was used to bring awareness towards individual core quality, pitfall, challenge and allergy. The practicality of the core quadrant (see Appendix B) makes it suitable in counselling areas, especially related to work and career (Brussel & Semeijn, 2018).

'*Know the others*' Phase

The aim of the second phase is to bring awareness towards the other members' personality, values, strengths and weaknesses. To offer support for the discussion, the first ten minutes was dedicated to presenting a short theoretical framework about personality, fitness and flexibility of traits and the role of experience in shaping our frame of references, based on the book *The Individual - custom Reader* for the University of Twente (2016). Afterwards, taking turns, each participant shared the findings from the personality tests with the group and discussed real-life examples when the person showed those traits in the board setting. The '*know the others*' phase aims to orient the group towards accomplishing the first and the third goals by offering support for the ideas of unicity, strengths and individual frames of reference shaped by experience.

'*Know the group*' Phase

The final step of the team building was to explore group dynamics. In order to reveal the group dynamic, it was played the game Lost at Sea, the instructions being available in Appendix C. The last fifteen minutes of the meeting was dedicated to a discussion about dominance, submission, persuasion, manipulation, common goals. The '*know the group*' step is connected to the and fourth goal, by bringing awareness of the ideas on personal and group goals. At the end of the team building, it is expected also a change in group sense of pride, connected to the second goal, as a result of all activities.

Results and Discussion

The evaluation of the change intervention was assessed through a short survey, disseminated pre and post the online team building programme. The ten items were created by myself and were developed based on the facets of the group cohesion illustrated in the Change Goals section, Table 1. The items measured the attitudes of the participants on an 10-item, 5-point Likert scale, anchored at 0=*Disagree* and 4=*Agree*. The minimum possible score is zero, while the maximum possible score is 40. The survey can be seen in Appendix D.

Table 3
Pre and Post-test scores

Item category	Pre-test mean scores	Post-test mean scores
Total group cohesion	19.50	24.50
Interpersonal	6.50	7.50
Group pride	2.25	2.75
Social	3.50	4.25
Task	3.50	7.25

Table 3 illustrates that the mean scores of the post-test show a slight improvement of the team cohesion after the change intervention in all item categories. Therefore, it seems that the intervention had a positive effect on the attitudes of the members towards the other members of the group. These results confirm the effectiveness of a team training based on multiple elements like individual and group behaviour, cognition and affective states (Stagl, Burke, Salas, & Pierce, 2006).

The survey items representing “interpersonal,” “group pride,” and “social” facets of group cohesion slightly increased in the post-scores. The biggest difference in mean scores was found for the “task” items, a result that seems to support the idea that only job commitment can be truly boosted by a team-building intervention, as found in a study by Suharnomo (2019). Thus, the shift occurred, in particular the attitude of the group members regarding task and goal commitment.

Additionally, to get more insights into how the participants experienced the activities, it was asked via email to share some informal opinions on the change intervention. The response rate was 50%. One of the participants said:

> “*Even if I prefer group live interaction, I like that your programme focused on the individual person and made me think about who I am in a group context*”

Also, another participant mentioned that:

> “*It was interesting to listen to the personal characteristics of everybody and how they see different situations. I usually like to express myself verbally and*

through my activities, but sometimes this leaves small room for others to do the same"

Indeed, group cohesion is positively influenced by self-disclosure, in which team members understand each other better and find similarities between them (Steen, Vasserman-Stokes, & Vannatta, 2014). Therefore, it appears to be a congruence between the quantitative and qualitative results.

Limitations and Future Research

However, even if the intervention had indeed an effect, it cannot be guaranteed a lasting positive change (Rusk, Vella-Brodrick, & Waters, 2018). The results may show a momentary bust that the team had as a result of re-established connection. Also, the time between intervention and post-test might influence the results as well, since as a group, we had social get-togethers in the meantime, allowed by the modified regulations about COVID-19 prevention. Thus, it is not clear if the positive results are associated with the change intervention or with the social informal meetings the group had in between. It might be the case that, as stated by Suharnomo (2019), the formal team building does not influence group cohesion at all.

At the same time, the validity and reliability of the questionnaire to measure group cohesion are questionable. Developed by myself, it was intended that the items were to be congruent and aligned with the facets of group cohesion as described by Severt and Estrada (2015). However, no factor analysis was performed to establish the actual underlying factors of the items. Also, the items in the questionnaire reflect attitudes, not behaviours, thus making it possible that the questionnaire is not stable over time or is highly dependent on external circumstances.

For further investigation, it might be useful to explore whether the team building activities achieved the overall goal of enhancing team effectiveness through well-established scales.. Lastly, if this type of intervention seems to have a positive effect on group performance, methods of enhancing and maintaining lasting positive change are necessary.

Advice for the target group

The overall experience showed that this target group is willing to improve personally and professionally. In particular, teams are created by individuals. Consequently, a prerequisite in an effective team is a team member who reflects on his/her behaviour in the group environment and constantly improves and adapts to the new situations the team constantly encounters. Therefore, an important following-up step would be focusing on individual reflections, as well as further assessment of personality and values.

Also, group cohesion is considered an essential element for team performance (Mach, Dolan, & Tzafrir, 2010). Hence, it is very important for the team to dedicate resources into enhancing group cohesion. In this regard, a point should be noted: whilst an improvement in team cohesion could be seen already after an intervention conducted by an internal board member (i.e. myself), a future idea could be of having team training with an external coach. Indeed, the change effect might be higher if the promoter of change does not have a personal relationship with the group and his/her involvement is established only on professional interaction. On top, the relationship between coach and coached team would be built up based on the professional authority and expertise.

Learning Experience

As the entire Processes of Change track, my final change project from the Honours Programme was a fun challenge. As I stated in the introduction, I like to think at university as a playground, a place where I can learn through experiments and play. Therefore, the choice of the project came to incorporate the knowledge and experience I gained during this track about leadership, individual change and coaching, and my regular study programme, psychology, but I allowed myself to play further and exercise an attribute that I would like to enhance in myself. Thus, my choice for the final change project was aligned to my personal development goal, being assertive.

As being a board member myself, I chose to participate in the activities as well, without taking part in the pre and post-tests. Therefore, I was in a position where I had a leadership role, being part of the team at the same time. My decision to participate is subscribing to my preference to covert leadership, where I feel comfortable leading by mediating and facilitating activities.

Also, I constructed my change intervention based on my preferences for structure, clarity and formality. From this aspect, it can be easily deduced that I am inclined through introversion and thinking, as it can also be seen in the Insights Report where the characteristic colour for me was blue. One important personal discovery is that I demonstrated to myself that I am capable and actually enjoy showing assertiveness in personally relevant contexts. Thus, even if it is considered being a characteristic of extroverted people, I assumed the role in an authentic manner, showing that is indeed a skill that I can exercise.

Overall, the feedback from my team was positive. However, in the future, I would like to take into consideration the individual preferences of the people. As seen from the personality test results, four out of five board members are actually extroverted. Therefore, since the intervention is aiming to help the entire group, I consider now that the activities should fit at least the majority of the preference. In this manner, I would tailor my intervention based on the target group, enhancing the chances for a successful change process.

Another important element that I would like to improve in the future is how professional my change program appears. Since I am considering a career in coaching, I am serious about improving the materials to the extent that I can provide training in real-life situations, for teams in need.

In the end, my learning experience offered me the opportunity to demonstrate the main takeaways I have from the Processes of Change track, the ones that are personally relevant and built on top of my strong points and preferences.

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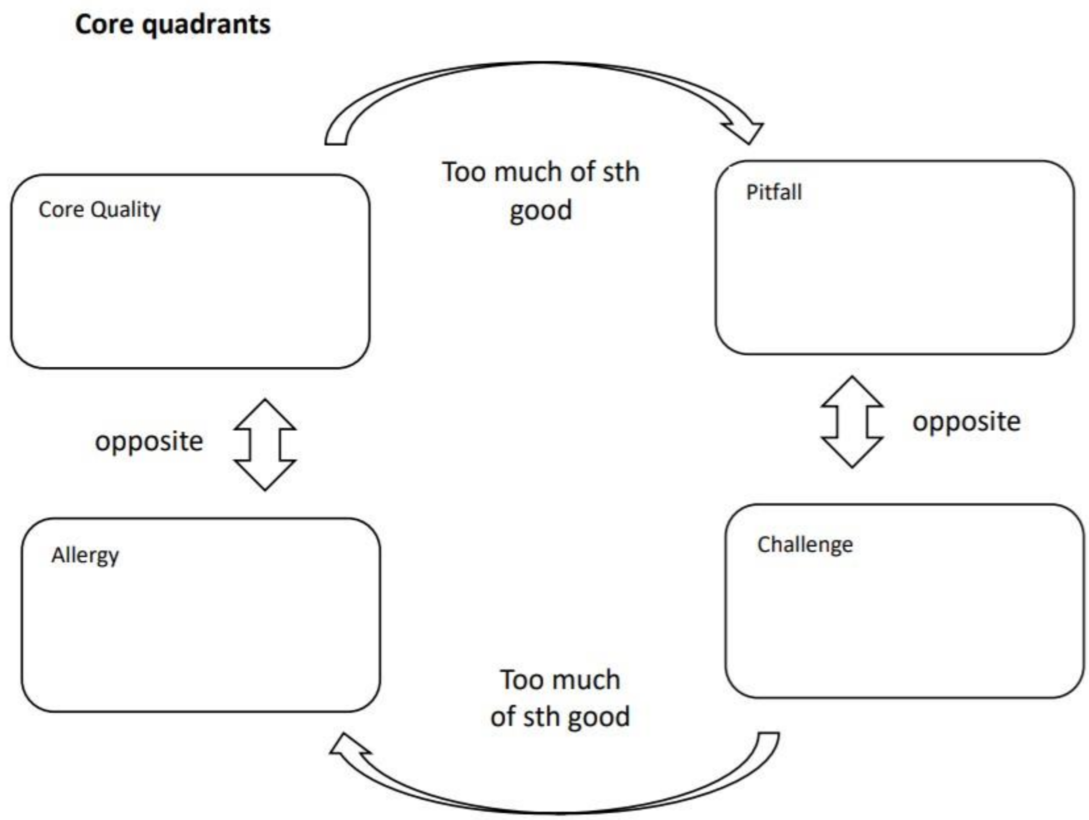
Appendix A

Big Five Inventory-10 (BFI-10)

Instruction: How well do the following statements describe your personality?

I see myself as someone who …	Disagree strongly	Disagree a little	Neither agree nor disagree	Agree a little	Agree strongly
… is reserved	(1)	(2)	(3)	(4)	(5)
… is generally trusting	(1)	(2)	(3)	(4)	(5)
… tends to be lazy	(1)	(2)	(3)	(4)	(5)
… is relaxed, handles stress well	(1)	(2)	(3)	(4)	(5)
… has few artistic interests	(1)	(2)	(3)	(4)	(5)
… is outgoing, sociable	(1)	(2)	(3)	(4)	(5)
… tends to find fault with others	(1)	(2)	(3)	(4)	(5)
… does a thorough job	(1)	(2)	(3)	(4)	(5)
… gets nervous easily	(1)	(2)	(3)	(4)	(5)
… has an active imagination	(1)	(2)	(3)	(4)	(5)

Appendix B


Core quadrants
Too much of sth good
Core Quality
Pitfall
opposite
opposite
Allergy
Challenge
Too much of sth good

Appendix C

Instructions

1. Provide a 'lost at sea ranking chart' for every member of your group.

2. Ask each person to take 10 minutes to decide their own rankings, and record the choices in the left-hand **Step 1** column.

3. Invite everyone to get into teams of 3/4. Encourage the group to discuss their individual choices and work together to agree on a collaborative list. Allow 20 minutes for this section. Record the group rankings in the second column (team rankings).

4. The correct answers were suggested by the US Coastguard. Display the 'expert' rankings on a PowerPoint presentation, whiteboard or photocopy. Compare your individual and group answers with the correct answers and determine a score.

5. For each item, mark the number of points that your score differs from the Coastguard ranking and then add up all the points. Disregard plus or minus differences. The ***lower*** the total, the better your score**.**

6. As the groups work together, sharing thoughts and ideas, this *should* produce an improved score over the individual results. Discuss with your group why the scores were different? What changed their minds? And was this enough to survive?

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Appendix D

Group Cohesion Survey

1. I have positive feelings towards my team members.

   (0) Disagree (1) Somehow disagree (2) Neutral (3) Somehow agree (4) Agree

2. I am looking forward to the next meeting with my team.

   (0) Disagree (1) Somehow disagree (2) Neutral (3) Somehow agree (4) Agree

3. I trust the members of my team.

   (0) Disagree (1) Somehow disagree (2) Neutral (3) Somehow agree (4) Agree

4. I consider that my team members are my friends.

   (0) Disagree (1) Somehow disagree (2) Neutral (3) Somehow agree (4) Agree

5. The goals of the association are important to me.

   (0) Disagree (1) Somehow disagree (2) Neutral (3) Somehow agree (4) Agree

6. I make sure I dedicate time to the association activities.

   (0) Disagree (1) Somehow disagree (2) Neutral (3) Somehow agree (4) Agree

7. I would like to collaborate with my colleagues in future projects.

   (0) Disagree (1) Somehow disagree (2) Neutral (3) Somehow agree (4) Agree

8. I can count on my colleagues when organising an event.

   (0) Disagree (1) Somehow disagree (2) Neutral (3) Somehow agree (4) Agree

9. I am interested that the association grows and develops.

   (0) Disagree (1) Somehow disagree (2) Neutral (3) Somehow agree (4) Agree

10. Being an RSA board member makes me feel important.

    (0) Disagree (1) Somehow disagree (2) Neutral (3) Somehow agree (4) Agree

UNIVERSITY OF TWENTE
ROMANIAN STUDENT ASSOCIATION

Group Cohesion Survey

Please rate your attitude regarding the following sentences:

I have positive feelings towards my team members.

	0	1	2	3	4	
Disagree	○	○	○	○	○	Agree

I am looking forward to the next meeting with my team.

	0	1	2	3	4	
Disagree	○	○	○	○	○	Agree

I trust the members of my team.

	0	1	2	3	4	
Disagree	○	○	○	○	○	Agree

I consider that my team members are my friends.

	0	1	2	3	4	
Disagree	○	○	○	○	○	Agree

The goals of the association are important to me.

	0	1	2	3	4	
Disagree	○	○	○	○	○	Agree

I make sure I dedicate time to the association activities.

	0	1	2	3	4	
Disagree	○	○	○	○	○	Agree

I would like to collaborate with my colleagues in future projects.

	0	1	2	3	4	
Disagree	○	○	○	○	○	Agree

I can count on my colleagues when organising an event.

	0	1	2	3	4	
Disagree	○	○	○	○	○	Agree

I am interested that the association grows and develops.

	0	1	2	3	4	
Disagree	○	○	○	○	○	Agree

Being an RSA board member makes me feel important.

	0	1	2	3	4	
Disagree	○	○	○	○	○	Agree

Trimiteți

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Formulare Google

Figure 1. Google forms group cohesion survey

Student Industrial Engineering and Management

"Atis Kazaferi

"Separating the people from the problem"

A Change Management Report

UNDESIRED TO SUSTAINABLE CHANGE

AUGUST 31

Processes of Change Cohort 2019-2020
Atis Kazaferi
Industrial Engineering and Management

CONTENTS

Introduction

The past six months have been life-changing to our society, but more importantly to our individual growth and development. We are taught about the role of leadership, management and hierarchy in organizations and there is a lot of literature in different fields that support change management under different circumstances. However, with the pandemic of COVID-19 at sight, a lot of companies have found themselves struggling, particularly on employee satisfaction, while employees see both benefits and drawbacks of the current situation in an individual perspective. Research on the area is limited and a lot of curious individuals are moving fast on evaluating employee well-being mixed with business survival.

And today more than ever, it is easy to imagine a world with less human contact in the workplace, given that organizations are resilient to the undesired and forced changes of the past few months. One of these organizations is Nubis, a digital agency located in Amsterdam. Parts of the company still behave like a typical start-up, and yet there are other components that are more mature and transformed into the more traditional business model. The tech-based company has been wanting years to try remote working, and the opportunity has risen that in a year they will be moving to a bigger office space, with new undetermined policies. To the management, remote working seems fashionable and they can sense that it is the future, however the past six months are a unique experience to the employees and their values and belief systems.

Taking into consideration the startup culture of creative problem solving, open communication and flat hierarchy, how can a company like Nubis survive the current **crisis situation** and the **forced decisions** that come with it, with the **least damage in employee well-being**, by also applying a *proactive approach* to future situations in this *constantly changing* environment?

Literature Enrichment

As the Sars-Cov-2 pandemic hits the mark of 6 months, including the lockdown and the policies taken from different countries and states, a lot of research is going towards crisis management and organization behavior. However, it is a fact that during disaster little research goes to all phases of what is defined as a crisis, and research itself depends on such a definition (Doern et al., 2019). As it is highlighted in this paper there is a six-stage event sequence: Pre-crisis/Incubation; Event; Crisis Response Management; Investigation; Organizational Learning; Implementation (Doern et al., 2019). This change management project focuses in the investigation and organizational learning phase, while highlighting implementation, all during a recurring crisis.

Recent papers on the topic highlight this research gap, and overall take note on the entrepreneurial crisis management and policy responses (Kuckertz, A. et al., 2020). Every research so far, on which decisions of companies are based, consider resilience, resource utilization, and contextual external factors. Deloitte recently published a report on agile change management, emphasizing the remote working shift of different companies, as well as the leadership and communication role in it. However, what this report was lacking was a hands-on approach in individuals on organizations, putting the responsibility on the shoulders of leaders, without considering possible individual changes that have internally affected each organization.

While the definition of the crisis itself shapes research and management response, particularly in entrepreneurial areas, a pandemic of such a scale has never been present in the current world. So, all research and response are based on previous crisis definition, focused on the surprising and unpredictable aspect of the event. However, as some consultancy groups have reported, and a lot of professionals are realizing, the pandemic is not the usual definition of a crisis leading to an economical one. It is as unpredictable in nature, as it is predictable and continuous in its consequences, resulting in emergent decision-making as well as planned decision making

Remote working is one of the many opportunities, as well as drawbacks of the current situation, and many companies are switching towards that, just as Nubis is. However, little is done in terms of work intensification and work-life balancing in remote working, although there are known benefits. Research prior to the crisis highlighted job-related well-being on remote working (Felstead & Henseke, 2017). However, more must be done regarding individual well-being in an organizational level during and after a crisis, when the crisis definition itself is ambiguous and does not necessarily fit with the distinctions made before in different articles.

In this report, as well as throughout the project, an attempt is made to put in action current information as well a sold one when it comes to during and post-crisis management, while keeping in mind individual influences in small teams with a start-up like culture. This project enriches the literature for possible research in the upcoming years, either through different cases, but also putting in practice what was already on paper during the pandemic.

TARGET GROUP

The target group involves personnel of 4 employees, and the team leader, on a team of 8 individuals. Involved on the intervention is also the partner in charge of the digital marketing team that is Nubis. All employees have been working at the company for many years, with the youngest being part of it for over a year. This implied initial commitment to the company and its culture. The partner identified the company culture as informal, fun-oriented, and with most of the responsibility falling on the entrepreneur. This also implied a more start-up like behavior, despite the many years of experience, both company as well as the partners in the entrepreneurial field with parent companies.

To describe the target group, the partner emphasized their young behavior, with most of them being in their late 20s and early 30s. This was done due to their inexperience on crisis, such as the 2007-2008 economic crisis, meaning a different approach in attitude towards crisis situations. As mentioned in the previous section, however, the crisis definition seems differ for the corona pandemic and from the previous experiences, such as the 2008 economic crisis.

The invitations for the project come through the managing director, with the permission of the partner. However, employees voluntarily participate. For example, there was a certain participant that was initially invited for the project, but respectfully declined due to busy hours. The number however includes at least half of the team, for the sole purpose of inflicting individual change in an organizational context.

CHANGE GOALS

After the intervention and consultation to the company, the following should be achieved on an individual basis for all participants, and on an understanding level for the management of the organization:

Table 1: Change Goals and Explanation after investigation

Change Goal	*Why this focus? Why beneficial? Where does it come from?*
INDIVIDUAL	
Everyone can adopt a more proactive attitude to take initiative on connectivity and team building.	At the beginning of the disruptive change, the decision-making information channels were defined as unbalanced, and so the employees developed a reactive attitude towards what was happening and who was responsible on maintaining the office relationships, mainly looking towards management in a “flat” organization. With a more proactive approach and by developing more initiative and empowerment among the employees, they will be able to maintain their values and team dynamics above the meeting efficiencies during remote working.
Everyone can access and improve their individual and shared knowledge on coping behavior.	Many employees seemed to have had personal struggles which had been communicated to the management director informally. However, due to no access to office “coffee-breaks” where usual informal communication would happen, and with a stronger focus on productivity, but flexible hours, the past few months few personal development exchanges had been shared. Employees

	were left to work on their own with bi-weekly meetings that did not check and reflect their individual progress, against the usual culture of the company. Hence, giving more opportunities and access on an individual level by empowering them with shared knowledge and information on managing stress, online/home working, new routines etc., could improve their overall long-term happiness in the company.
Everyone has a higher perceived engagement on the decision-making process and the shift to the online environment.	Apart from taking initiative, many of the employees had the feeling that there was an imbalance on what change was relevant to them. Although some decisions from the management might have been better to have been communicated differently, overall, it seems to be a perceived engagement on the process that should be changed. In an individual level, this is related to initiatives and values-based relevance. Hence it seemed appropriate to address these values, and further understand in an individual level where engagement in the decision process should be increased.
TEAM AND ORGANIZATION	
Fully understands the individual needs of the employees.	The main goal of the overall project is for the organization and management to understand and act towards employee satisfaction and well-being, in a sustainable online environment. The team consists of 8 people, out of which 5 were interviewed. The management should be aware of all the employee needs and values on the undesired change to take measures to sustain and improve their decisions.
Is fully aware of the changes in culture that have risen by undesired change in the past 6 months and might continue during the shift to online environments.	Due to the emergency of a crisis, and no protocols being in place for such cases, companies based their decisions on general governmental roles, as well as what similar companies in the sector did. Nubis is spin-off start-up company of CodeOrange, sharing the same leaders and hence similar responses during this time. Interestingly, as hypothesized in the beginning regarding the possible cultural change, the organization took measures typical to a matured company, emphasizing productivity, and disregarding some more informal values that the employees were fond of. For some of the employees this implied higher stress levels and less connection with the company itself. To sustain the change the Nubis must *at least* be fully aware as a company of these changes in their nature and the affect that the online environment had in their overall culture and perception from current and future employees. Being aware implies higher possibilities to effectively change according to company values long term.

After the investigation phase with a few meetings with the team lead and one of the firm's partners, it became evident that there were changes to be considered in an individual employee level, as well as on the company's organization. Hence, behavioral intervention and organizational change were both vital to bring sustainable change in the company. During the investigation phase, there were a few inconsistencies in terms of expectations arising from management with employees and colleagues, mainly on the decision-making process and information communication during the early stages, as well as on what seems important to the employees to unify the online environment.

All goals in an individual level were planned to be measured by a mean of a survey, while the team and organizational ones are measures in terms of consultancy goals and needs, and will be finalized by a written report.

Change Approach

Project Phases and Approach

As introduced by KPMG, the Behavioral Change Management (BCM) was taken into consideration and tailored slightly to the needs of the client, in the form of a change intervention (Appendix A). The project is divided in 5 phases which were made clear to the leadership, as well as the employees.

Phase 1 is about determining the objectives and structure, which was slightly changes after analyzing the needs of client itself (mostly regarding the online environment only). Phase 2 is an investigation phase, where we also communicate visions and own the solution. This was mainly achieved through planning meetings with the employees via e-mail as well as an individual discussion with the team lead. Phase 3 is about "making it real" by executing individual interviews, to make the participants comfortable, as well as an opener to the overall topic. In this phase we analyze the individual impact of undesired change, persuading towards some common suggestions on the topic of employee well-being, and we make a base attempt to individual change before phase 4.

In Phase 4, we group the 5 participants together, making discussion happen, and set a foundation for the topics to come, as well as possible solutions. This phase is followed by a survey, which can be filled in within the week, and that serves as a conclusion and "reminder" to all discussed, moving the organization towards change. Lastly, Phase 5 consists of implementation and recommendations, primarily in the form of a report and further discussions with management and leaders, as the client.

Overall, the project took 33 days to competition, and the overall duration of each phase can be found on Table 2. The duration of the interviews dependent on employee availability and respond rate, hence the group discussion was conducted as far as 2 weeks for some of the employees. This could be argued as a validity error of the design, as the change goal on involvement greatly dependent on time. Some of the employees that were interviewed and engaged earlier in the process had lower perceived engagement.

Figure 1: Phases of the Intervention Approach and Design

Table 2: Timeline and duration

	Start	End	Duration (days)
Phase 1: Objectives and Structure	13 Jul 2020	17 Jul 2020	4
Phase 2: Investigation and Analysis	20 Jul 2020	27 Jul 2020	7
Phase 3: Interviews	29 Jul 2020	10 Aug 2020	12
Phase 4: Discussion	17 Aug 2020	19 Aug 2020	2
Phase 5: Results (Implementation)	20 Aug 2020	28 Aug 2020	8

The survey questions can also be found in Appendix B. Overall the decision to base the intervention on the KPMG BCM was taken due to the connection with individual and organizational behavior that such approach has. The persuasion techniques were based on the Pre-suasion book by Robert Cialdini, mainly on the opening and attention-grabbing techniques.

Environment and Platform

All meetings were done in Google meets. Due to busy planning of all employees, there were starting delays in most meetings, but they were to be expected. Hence most interviews were planned for 1 hour, but only took 45 minutes. However, the group discussion ended up being cut in half due to these delays and busy schedules of the participants. There were some topics on the agenda that were not discussed thoroughly, and due to the online environment not all participants got a chance to talk. There was always a fine line between efficiency and comfortability in this new medium, and although most participants had experience already in online platforms, this delayed slightly the persuasive aspect of the intervention in a couple of the change goals, particularly engagement. This was to be expected, but at the same time suitable for the topics of the intervention.

To increase reliability on online environments, all interviews and discussions were not recorded, and this decision was made transparent. Confidential information on an individual level and organizational level was discussed, and different from in person interviews, bias on the interviewer needed more reduction in online platforms.

Noteworthy Results

This is section was sent additionally to the company, in the format found in Appendix C, to conclude the overall discussion as a summarizing report for Phase 5, and to support implementation. An additional meeting was planned beyond the scope of the project to support this report.

Survey and Qualitative Discussion: Individual

During the interviews, the culture of the company was taken into consideration and each employee was asked about their values in the team and on the company: what they were looking for. Trust, fun, informality, and feedback/guidance were all a common theme among the employees. This was also emphasized when they were asked about what a newcomer would see in the company. All employees have a very positive attitude towards the company and they truly believe on the supportive environment it offers.

However, also regarding literature, Nubis took decisions with no distinction from mature and larger scaled companies. This implied hierarchies in the decision-making chain, and disregard for some of the informality in check-ins as the disruptive change was happening. This is a point to be aware of, as everything had an impact on the hierarchy and communication, and it will require time and commitment to adjust, organization wise. This is also a point of deciding in terms of company expansion: this type of attitude change on engagement and initiative is common on start-ups as they scale up and would eventually result in a disruptive change at Nubis. However, mixed with the longitudinal crisis definition, and the uncertainty the pandemic holds, there is definitely a lot the organization and the individuals need to pay attention to in order to maintain the culture and team dynamics, even via online environments.

Figure 2 summarizes the company values that are necessary to be considered in decision-making processes as well as meetings by management and leadership. Meanwhile the result section in this figure emphasizes some noteworthy results from the participants. While there is no-fit-all solution for the online environment, additional steps have been taken to maintain engagement of individuals internally.

Overall, the initiate of this project increased the team belonging feeling among most employees, with an average significantly higher. At the same time, most of the employees felt possibilities to further develop and have access to more knowledge in online environments than before.

Important is to note that all employees saw immediate or time-effective benefits on the conclusions of the discussion and the process itself. The discussion itself should have been longer, but it addressed important topics and it provided a safe space. Some employees however still feel that their initiatives will not have much impact on the company, and nor are they taken into consideration during decision-making. This is a matter of perceived engagement, as defined on the change intervention goals. As a recommendation to address perceived engagement on an organizational level, please refer to Figure 3.

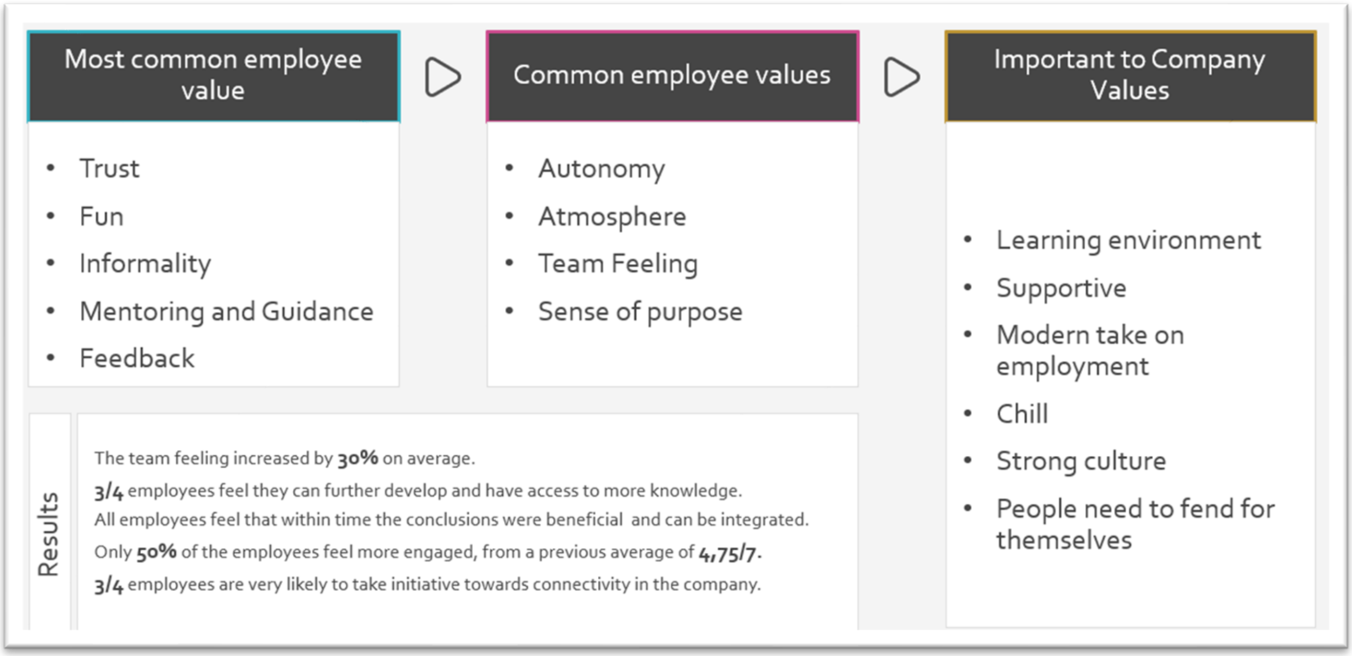

Figure 2: Summary of Values and noteworthy changes

Discussion with the Manager: Team and Organization Observations

Figure 2 visualizes the current information and decision flow in the Nubis team. A lot was said in the interviews and group discussion when it came to unfished plans and trust. The employees fully trust the management, but are not satisfied with some communication chains. All the participants were comfortable with how things were handled to apply regulations during the corona time, but some still needed more engagement than others in matters of employee well-being.

Main observation during this time was the trust the employees that participated put on the managing director. However, there seems to be a bottleneck between the "flat" organizational hierarchy and the actual responsible individual for a lot of the team functions, leaving the employees completely autonomous. This worked great in a setting of everyday meetings but seems to have started to appear as less engaging from the company. In other words, before personal team lead relations seemed to have been equal to company initiatives, and now they are perceived differently from the employees, and hence, becoming inefficient for the team lead to maintain (without giving the desired outcomes).

In online environments it is hard to keep track of everybody's well-being and satisfaction, as well as how they are feeling in the group, and if they are being heard. A perceived empowerment and engagement, while maintaining what the employees first liked about Nubis, should be the primary focus for the upcoming months, and year, and it is recommended to be done ***in a Lean way, with iterations of feedback and adjustment.***

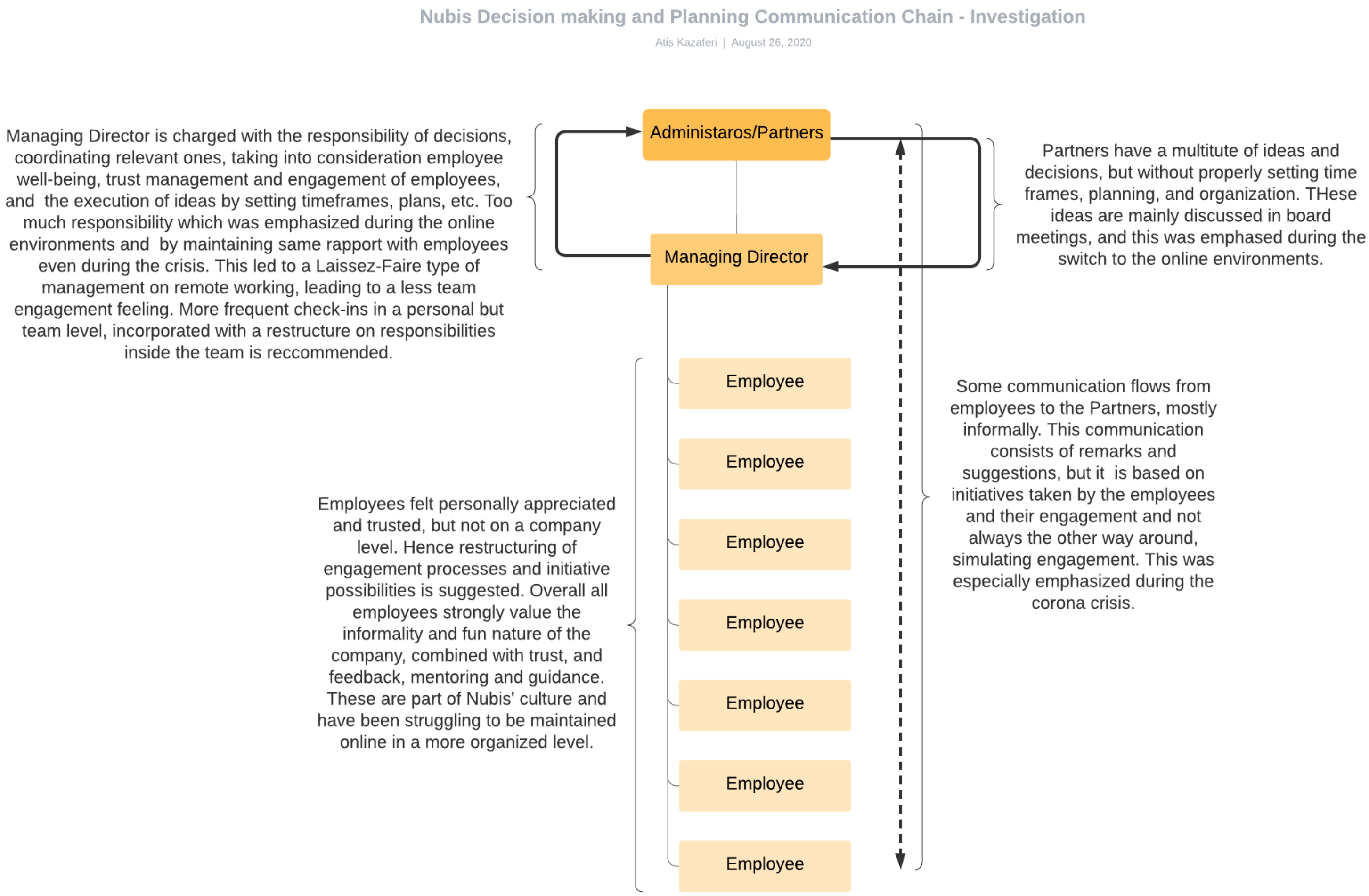

Figure 3: Investigated Diagram on Communication and Decision- Making

Advice Summary

This is section was sent additionally to the company, in the format found in Appendix C, to conclude the overall discussion as a summarizing report for Phase 5, and to support implementation. An additional meeting was planned beyond the scope of the project to support this report.

Conclusion on the Hybrid Model of Remote Working

Most of the employees appreciated a hybrid model of online working, with ***a flexible division 50/50*** between staying in the office or staying at home. Factors influencing this decision was the ***group dynamic and need for social interaction,*** but also travelling time and clients. It should be noted that while the hybrid model was desired by most, it is possible to have a flexible hybrid model on which employees are not necessarily needed in the office if all meetings are still done online. This allows for some employees to switch to complete remote work, also accessing international clients.

However, if such a model were in place, group dynamics and employee well-being would look very different, and high initiatives would have to come from the employees not coming in the office to maintain connectivity, and hence the culture of the company. This also implies both online and offline initiatives should all be considered and implemented, giving the employees variety, but also efficiency. This would be a semi-customizable implementation from the company to let employees choose and grow, by ***providing the right platforms, as well as the right offline setting.***

EMPLOYEE SUGGESTIONS

Table 3: List of Employee Recommendations

- ✓ **Meeting up** *in person* **on set times (monthly or quarterly), that everyone is aware of and can join**
  - **A trip together to look forward to no matter where someone is**
- ✓ **Communication by the company with** *appreciation* **or** *consideration*, **on an individual level, or team level.**
  - **An e-mail occasionally not only with updates, but** *acknowledgements*
- ✓ **Virtual team meetings and discussions**
  - *Debate focus* **and business and growth development, from time-to-time, in addition to informational standups.**
  - *Weekly informal* **meetings with the whole team, like the Friday nights drinks, but more tailored to the team**
  - **Keep** *F2F Discussions*
- ✓ **A good** *process/system* **to ask questions, which is less fragmented, but** *supports mentoring*, **and is reliable. (Slack is quite centralized, but more can be done to improve the reachability and respect employees and managers time and schedules)**
- ✓ *Strong planning* **of good ideas and going through with them. Now is the moment to work on long-term benefits.**
- ✓ **Thorough strategies on** *separating work-life*, **also based on the team, but coming as a platform from the company.**
  - *Platforms on slack*, **for example, to share goals or tips when not in contact with colleagues.**
  - **Interesting podcasts that** *can be shared easily* **through formal/informal platforms.**

ADVICE AND IMPLEMENTATION

✓ Scheduling

When it comes to the hybrid model of shared offices and online environments, it will all come down to scheduling. My strong advice is to apply a weekly time schedule on who will be at the office and when. Most employees will either come when they need to or find it beneficial, and this will have to be planned of time. Of course, the scheduling itself should be flexible to let employees change plans, but not without an informal notification.

It defeats the purpose of the hybrid model if 7 people show up on Monday, but only 1 shows up on Friday. The overall idea of this model is to ***simulate individual work*** with a lot of autonomy, but also ***social interactions*** when the employees most need it. Most of the scheduling will have to happen during the beginning of the week, as most employees plan their weeks to cover/work more during these times. Hence, it is recommended that at least 3 people stay at the office every day, unless there are circumstances that do not allow this.

It is also possible to have a hybrid model, and some employees completely work online. If this is communicated, and some of the team dynamic and personal check-ins are maintained, it will be able to be fully integrated in the company. There is no solution fits all, but whatever is decided needs communication and a proper system to maintain it, be it an online ***Slack channel, google calendar, or a physical informal one at work (a visual board).***

✓ *Visual board at office*

Lean management is at the heart of a lot of processes. Part of it are also ***Visual Management Boards***. While these are highly encouraged as they attractively engage the whole team in performance related matters, lean as a philosophy takes time to master and is different in many organizations. However, the idea of ***visual and efficient engagement*** is something not necessarily just in Lean organizations, as it can function for employee well-being.

A lot of the employees were fond of personal development sharing, and in a hybrid model, this can be online and offline, making their office stay interactive even with colleagues who are not present now. Providing online and offline visual platforms where employees can easily drag podcast suggestions, or fill in with their new routines, new books they have read, or interesting motivational ideas, is a good way to maintain and ***encourage personal development***, and team engagement. There are many ways to approach this matter, but the base idea is employee office satisfaction and personal growth, and online platforms are just as encouraged, but they will take out time from employee productivity during the days they choose to stay at home.

Make sure that if these Visual Boards are implemented then they are consistent and not chaotic, while everyone is aware and engaged with the new visuals at the office. This can be implemented for team, and for the whole office if it is of high interest.

✓ *Restructure*

As aforementioned, and discussed with the team lead, some restructuring on online environments might be necessary to relieve stress and fill in employee time. During the interviews, some employees felt that there was sometimes less to do than others, and some wanted to be more engaged with employee well-being and performance.

Empowering in such matters some of the employees, to be in charge of organizing meet-ups, managing some informal discussions, keeping the spirit up, and/or leading the connectivity of the ones present at the office when necessary, would split responsibilities, as well as make it more efficient and effective for all involved. Furthermore, it will highly increase perceived engagement. It is important to note that this is ***not an invitation to hierarchical change,*** but a recommendation to ***employee empowerment and shared leadership.***

During the transition to remote working, shared leadership should be facilitated to increase responsibility among employees and overall involvement. Although it is hard to be implemented and it does require dedication, it will sustain change long-term and increase loyalty.

✓ *Reflection meetings on set times*

More than often during the interviews and discussion the topic of frequent informal, yet structured meetings for employee input came up. Most employees during the interviews trusted the team lead and management for decision-making, saying that "they have a good feeling on when to communicate and not". While it true that more initiative should come from the employees, in addition to the idea of shared leadership, frequent informal meetups will support the overall needs of the employees to feel involved and appreciated.

It is important to note, that in case of hybrid model, or a model when some employees can stay offline for a long time, there will need offline meetings that are determined ahead of time. Dinners quarterly, trips, or yearly events, are general examples of events that employees will look forward to and be motivated on team dynamics, even without meeting their colleagues. The key are fewer but more important events in person, while focusing on quick and efficient involvement in their office/home everyday life by other means.

Personal Learning Experience

Personal Development

The past year has been life changing. For the last Honours module I had to submit a Personal Development Plan, and this document included my need for communication and self-confidence. It has been a journey of 2 years for me to realize that my self-confidence is not my main challenge. After careful work with my coach I developed the goal of "Being reliable to myself and to others in order to be more fulfilled, by balancing my emotional and decisive side".

Reliability and trust are big parts of my life, but I always seemed to struggle with my fears, trying to avoid consequences of my failures, and trying to always be perfect without asking for help. Only when I failed to submit my final Honours project on time, I realized on my final coach meeting, that my life is surrounded by a belief of "Finding and presenting the best version of myself". I am occupied by fear if I am good enough, and this belief forms a pattern throughout my personal and career life decisions. It is what makes me myself, and yet it is also my greatest weakness.

I feel that I have learnt a lot about myself and who I want to be in the past few months. I have tried to be aware of my belief and be open to close friends when it is hard for me to ask for help. I have worked hard to strengthen the bond between myself and others, and take pride on who I am, by appreciating my time alone. My goal throughout this project as well has been "When I need to make a decision, do not let fear and insecurities overtake me".

What I learnt during this module in my personal life is to trust myself and that this my journey. Challenging my insecurities, and getting out of my comfort zone, while setting priorities, it is truly who I want to be, and right now I feel a step closer to that, just by embracing my own small failures and small success. The fact that I can identify them both, already means a lot to me and my personal development.

Facilitating Change: A Short Reflection

When it comes to my experience in facilitating change to others, it is something that I have always dreamt on doing and I happy to have had the opportunity to practice. There were two occasions that I truly valued this opportunity and I really appreciated the challenge:

The first was when I had to analyze the situation at the company and truly understand, detaching myself from all perspectives, what was the true struggle that the undesired change brought to the company. Doing it alone was challenging, yet I appreciate the whole experience of drawing diagrams, talking to myself, and truly going through my notes and remarks on the behavior of each interviewee during the interviews. Analyzing in a consulting and behavior change perspective is beautiful and it always felt like go further into the details. Stopping to see the whole picture is as hard as looking for the details, and this is an experience I will never forget.

The second is a mixture between my target group and the team lead. I was always told I am not intimidating, and that others do not take me seriously, due to my enthusiasm. And here I was, in front of 6 career men, all older than me: all looking to me for answers and guidance. I was afraid of making mistakes, and for the first time I embraced that, and confidently led them towards what I thought and believed was the right way. I did not have all the answers, and that was alright, especially because I had the perspective they needed, despite being just a young girl. And on top of that, when I had a final discussion with the team lead on his leadership style and possible improvements, I challenged myself to not avoid conflict. I was assertive in my decisions, and I constantly pressed on my personal week points, leading to what I would call a successful intervention. And this will forever be my success, every change facilitated is, small or big, individual or to others.

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APPENDIX A: KPMG BEHAVIORAL CHANGE MANAGEMENT APPROACH

Figure 4: KPMG Behavioral Change Management Approach

Appendix B: Survey Questions

<table>
<tr><td>Team feelings</td><td>

How long have you been working at Nubis?
How much did you feel as part of the company and the team during the past 6 months? Please consider the comfort of sharing, asking, and if the team met your personal values and expectations. (1-7 scale)
Do you feel more as a team after this "intervention"? Please consider the comfort of sharing, asking, and if the team meets your personal values and expectations. (1-7 scale)
What do you think worked/did not work for you to feel part of the group/company?
Is there something else that should be done for/by you to feel more comfortable, appreciated or heard in the team, other than what was discussed?

</td></tr>
<tr><td>Initiative-taking and Engagement</td><td>

How likely are you to take an initiative towards connectivity in the company during remote working? (1-7 scale)
What prevents you from taking initiatives in the company usually? Do you think that has improved since this project started?
How would you rate your engagement in the company decision-making, for relevant matters? (1-7 scale)
Considering the 6 months of remote work, after this "intervention", do you feel more engaged? (Select other if you would like to add more)

Yes, I feel more engaged in relevant decisions and my opinion is appreciated
No, I feel less engaged in relevant decisions and my opinion is not being heard enough
I see no changes after the intervention, compared to how I was during the past6 months

</td></tr>
<tr><td>The overall experience and conclusions</td><td>

Do you think the conclusions of the online discussion were a reflection of your and the group experiences and will benefit the positive sustainability of online environments? (Select other if you would like to add more

Yes, I feel that they were beneficial to properly integrate online work into our company while maintaining employee well-being
No, I feel that they were insufficient to properly sustain the changes and learning during the past 6 months an…
Maybe, I do not have an answer right now, and only time will tell.

Do you feel that you had access to more knowledge so that you can personally develop further and sustain your own working environment? (Select other if you would like to add more)

Yes, I feel that I now can develop further and the individual reflection and group one worked for me
No, I feel that not a lot changed from my personal growth stage before the discussions.
Maybe, I do not have an answer right now, and only time will tell.

How did you feel about the overall process? Do you think a real issue was missed or misinterpreted, by others or the facilitator? Any suggestions, remarks, concerns etc?

</td></tr>
</table>

Appendix C: Complete Report to Company

Contents

INTRODUCTION

During the past month, a complete change intervention and change management report was conducted at Nubis. The coronavirus pandemic resulted in a sudden disruptive change in the organization, but sustainability is necessary due to the longitudinal nature of the pandemic, as well as the opportunities in the online environments it brings. Interviews were conducted with 5 employees, including the team lead. This report does not disclose confidential information discussed during individual interviews but analyzes noteworthy individual and group feelings in terms of the switch to the online environment.

Initially, we define some change goals in organizational and individual level for the interviews, based on an investigative process. Later we highlight results from the intervention and the process and move on to hands-on implementation and advice on the online-environment and culture maintenance in the post-corona, as well as during situation.

It is important to note the lack of research on the entrepreneurial field in correlation with crisis management, particularly on the phases of learning and reflection. The corona pandemic is an undefined crisis, that does not fit all the definitions which do affect crisis management research, and little research touches upon small group dynamics and SMEs. Hence, this report and the change management project took a more implementation-based approach, with individual well-being as the focus, and organization future decision-making processes as the secondary one.

CHANGE GOALS

After consultation to the company, the following should be achieved on an individual basis for all participants, and on an understanding level for the management of the organization:

Table 4: Change Goals and Explanation after investigation

Change Goal	*Why this focus? Why beneficial? Where does it come from?*
INDIVIDUAL	
Everyone can adopt a more proactive attitude to take initiative on connectivity and team building.	At the beginning of the disruptive change, the decision-making information channels were defined as ***unbalanced***, and so the employees developed a ***reactive attitude*** towards what was happening and who was responsible on maintaining the office relationships, mainly looking towards management in a "flat" organization. With a more proactive approach and by developing more ***initiative and empowerment*** among the employees, they will be able to maintain their values and team dynamics above the meeting efficiencies during remote working. This also include meetings that the company had previously initiated, but not many took initiatives to prepare for.
Everyone can access and improve their individual and shared knowledge on coping behavior.	Many employees seemed to have had ***personal struggles*** which had been communicated to the management director ***informally***. However, due to no access ***to office "coffee-breaks"*** where usual informal communication would happen, and with a stronger ***focus on productivity, but flexible hours***, the past few months, ***few personal development exchanges*** had been shared. Employees were left to work on their own with bi-weekly meetings that did not check and reflect their individual progress, against the usual culture of the company. Hence, ***giving more opportunities*** and access on an individual level by empowering them with shared knowledge and information on managing stress, online/home working, new routines etc., could improve their overall long-term happiness in the company.

Everyone has a higher perceived engagement on the decision-making process and the shift to the online environment.	Apart from taking initiative, many of the employees had the feeling that there was an ***imbalance on what change was relevant to them.*** Although some decisions from the management might have been better to have been communicated differently, overall, it seems ***to be a perceived engagement*** on the process that should be changed. In an individual level, this is related to initiatives and ***values-based relevance***. Hence it seemed appropriate to address these values, and further understand in an individual level where engagement in the decision process should be increased.
TEAM AND ORGANIZATION	
Fully understands the individual needs of the employees.	The main goal of the overall project is for the organization and management to understand and act towards employee satisfaction and well-being, in a sustainable online environment. The team consists of 8 people, out of which 5 were interviewed. The management should ***be aware of all the employee needs and values*** on the undesired change to take measures to sustain and improve their decisions.
Is fully aware of the changes in culture that have risen by undesired change in the past 6 months and might continue during the shift to online environments.	Due to the emergency of a crisis, and no protocols being in place for such cases, companies based their decisions on general governmental roles, as well as what similar companies in the sector did. Nubis is spin-off start-up company of CodeOrange, sharing the same leaders and hence similar responses during this time. Interestingly, as hypothesized in the beginning regarding ***the possible cultural change, the organization took measures typical to a matured company***, emphasizing productivity, and disregarding some more informal values that the employees were fond of. For some of the employees this implied ***higher stress levels and less connection with the company*** itself. To sustain the change Nubis must ***at least be fully aware as a company of these changes*** in their nature and the affect that the online environment had in their overall culture and perception from current and future employees. Being aware implies higher possibilities to effectively change according to company values long term.

There are no solution fits all for all the employees interviewed in terms of behavioral change. Everyone perceived the process differently and some were more interested in engagement than others. We can conclude that this can be true for the rest of the team as well. However, the team and the organization should work towards common understanding ***particularly when distance and autonomy play a key role.***

Change Approach

Project Phases and Approach

To summarize the change intervention, Figure 1 visualized the phases of the overall change management approach. A short explanation will also follow.

Phase 1 is about determining the objectives and structure, which was slightly changes after analyzing the needs of client itself (mostly regarding the online environment only).

Phase 2 is an investigation phase, where we also communicate visions and own the solution. This was mainly achieved through planning meetings with the employees via e-mail as well as an individual discussion with the team lead.

Phase 3 is about "making it real" by executing individual interviews, to make the participants comfortable, as well as an opener to the overall topic. In this phase we analyze the individual impact of undesired change, persuading towards some common suggestions on the topic of employee well-being, and we make a base attempt to individual change before phase 4.

In ***Phase 4***, we group the 5 participants together, making discussion happen, and set a foundation for the topics to come, as well as possible solutions. This phase is followed by a survey, which can be filled in within the week, and that serves as a conclusion and "reminder" to all discussed, moving the organization towards change.

Lastly, ***Phase 5*** consists of implementation and recommendations, primarily in the form of a report and further discussions with management and leaders, as the client.

Figure 5: Phases of the Intervention Approach and Design

RESULTS

INDIVIDUAL OBSERVATIONS

During the interviews, the culture of the company was taken into consideration and each employee was asked about their values in the team and on the company: what they were looking for. Trust, fun, informality, and feedback/guidance were all a common theme among the employees. This was also emphasized when they were asked about what a newcomer would see in the company. All employees have a very positive attitude towards the company and they truly believe on the supportive environment it offers.

However, also regarding literature, Nubis took decisions with no distinction from mature and larger scaled companies. This implied hierarchies in the decision-making chain, and disregard for some of the informality in check-ins as the disruptive change was happening. This is a point to be aware of, as everything had an impact on the hierarchy and communication, and it will require time and commitment to adjust, organization wise. This is also a point of deciding in terms of company expansion: this type of attitude change on engagement and initiative is common on start-ups as they scale up and would eventually result in a disruptive change at Nubis. However, mixed with the longitudinal crisis definition, and the uncertainty the pandemic holds, there is definitely a lot the organization and the individuals need to pay attention to in order to maintain the culture and team dynamics, even via online environments.

Figure 2 summarizes the company values that are necessary to be considered in decision-making processes as well as meetings by management and leadership. Meanwhile the result section in this figure emphasizes some noteworthy results from the participants. While there is no-fit-all solution for the online environment, additional steps have been taken to maintain engagement of individuals internally.

Overall, the initiate of this project increased the team belonging feeling among most employees, with an average significantly higher. At the same time, most of the employees felt possibilities to further develop and have access to more knowledge in online environments than before.

Important is to note that all employees saw immediate or time-effective benefits on the conclusions of the discussion and the process itself. The discussion itself should have been longer, but it addressed important topics and it provided a safe space. Some employees however still feel that their initiatives will not have much impact on the company, and nor are they taken into consideration during decision-making.

This is a matter of perceived engagement, as defined on the change intervention goals. As a recommendation to address perceived engagement on an organizational level, please refer to Figure 3.

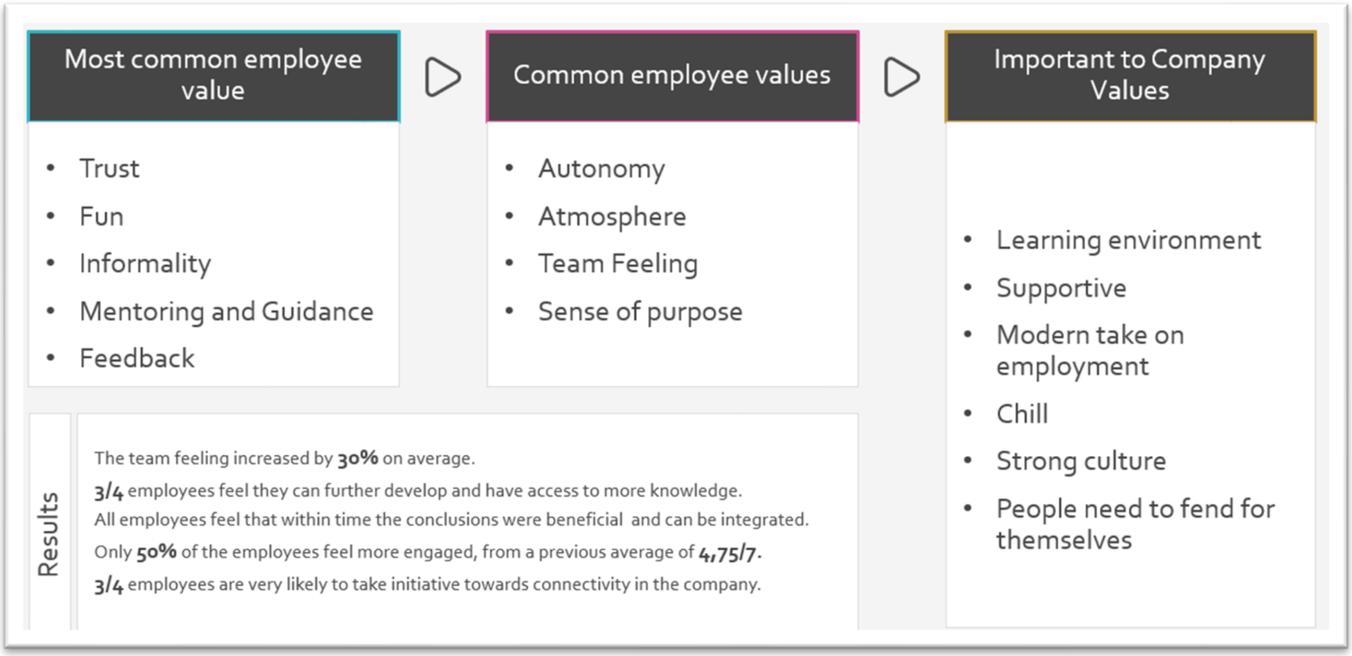

Figure 6: Summary of Values and noteworthy changes

TEAM AND ORGANIZATION OBSERVATIONS

Figure 2 visualizes the current information and decision flow in the Nubis team. A lot was said in the interviews and group discussion when it came to unfished plans and trust. The employees fully trust the management, but not are not satisfied with some communication chains. All the participants were comfortable with how things were handled to apply regulations during the corona time, but some still needed more engagement than others in matters of employee well-being.

Main observation during this time was the trust the employees that participated put on the managing director. However, there seems to be a bottleneck between the “flat” organizational hierarchy and the actual responsible individual for a lot of the team functions, leaving the employees completely autonomous. This worked great in a setting of everyday meetings but seems to have started to appear as less engaging from the company. In other words, before personal team lead relations seemed to have been equal to company initiatives, and now they are perceived differently from the employees, and hence, becoming inefficient for the team lead to maintain (without giving the desired outcomes).

When moving to the online environments and structuring in a hybrid model, it is strongly advised to adapt a different approach to leadership. Frequent team meetings, with some additional structural roles for some of the employees more eager to help or initiate personal development, will strongly benefit the company. This does not imply a hierarchical organizational, but rather a “flat” organization, maintaining the informality and supportive culture, with employees having additional roles to internally motivate them and give them a sense of purpose.

In online environments it is hard to keep track of everybody’s well-being and satisfaction, as well as how they are feeling in the group, and if they are being heard. A perceived empowerment and engagement, while maintaining what the employees first liked about Nubis, should be the primary focus for the upcoming months, and year, and it is recommended to be done ***in a Lean way, with iterations of feedback and adjustment.***

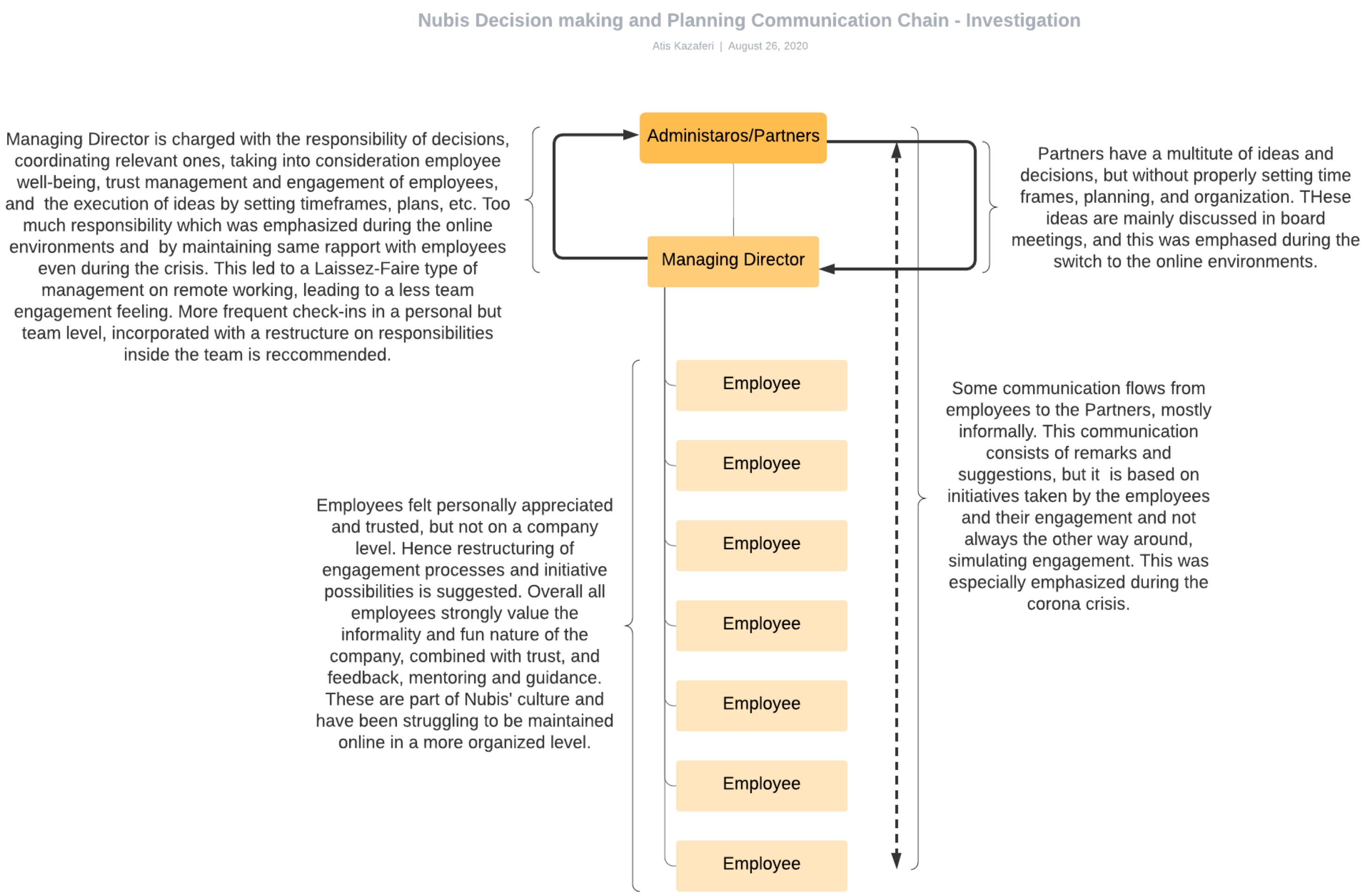

Figure 7: Investigated Diagram on Communication and Decision-Making

Advice And Further Implementation

Overall, the decisions taken towards employee well-being this moment in time will be proactive for the longitudinal crisis to come, as well as the post-crisis time. However, this will cost time for the employees, as well as for the management.

Conclusion on the Hybrid Model of Remote Working

Most of the employees appreciated a hybrid model of online working, with ***a flexible division 50/50*** between staying in the office or staying at home. Factors influencing this decision was the ***group dynamic and need for social interaction,*** but also travelling time and clients. It should be noted that while the hybrid model was desired by most, it is possible to have a flexible hybrid model on which employees are not necessarily needed in the office if all meetings are still done online. This allows for some employees to switch to complete remote work, also accessing international clients.

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EMPLOYEE SUGGESTIONS

During the interviews and group discussion a list of ideas came to be finalized and were noted. Some employees contributed more than others in the amount of solutions, however many agreed on most points. A lot from this list can easily be implemented or put down as an initiative program from the employees themselves. However, the manager or leader must initiate the implementation.

Table 5: List of Employee Recommendations

- ✓ **Meeting up** *in person* **on set times (monthly or quarterly), that everyone is aware of and can join**
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Make sure that if these Visual Boards are implemented then they are consistent and not chaotic, while everyone is aware and engaged with the new visuals at the office. This can be implemented for team, and for the whole office if it is of high interest.

✓ ***Restructure***

As aforementioned, and discussed with the team lead, some restructuring on online environments might be necessary to relieve stress and fill in employee time. During the interviews, some employees felt that there was sometimes less to do than others, and some wanted to be more engaged with employee well-being and performance.

Empowering in such matters some of the employees, to be in charge of organizing meet-ups, managing some informal discussions, keeping the spirit up, and/or leading the connectivity of the ones present at the office when necessary, would split responsibilities, as well as make it more efficient and effective for all involved. Furthermore, it will highly increase perceived engagement. It is important to note that this is ***not an invitation to hierarchical change,*** but a recommendation to ***employee empowerment and shared leadership.***

During the transition to remote working, shared leadership should be facilitated to increase responsibility among employees and overall involvement. Although it is hard to be implemented and it does require dedication, it will sustain change long-term and increase loyalty.

✓ ***Reflection meetings on set times***

More than often during the interviews and discussion the topic of frequent informal, yet structured meetings for employee input came up. Most employees during the interviews trusted the team lead and management for decision-making, saying that "they have a good feeling on when to communicate and not". While it true that more initiative should come from the employees, in addition to the idea of shared leadership, frequent informal meetups will support the overall needs of the employees to feel involved and appreciated.

It is important to note, that in case of hybrid model, or a model when some employees can stay offline for a long time, there will need offline meetings that are determined ahead of time. Dinners quarterly, trips, or yearly events, are general examples of events that employees will look forward to and be motivated on team dynamics, even without meeting their colleagues. The key are fewer but more important events in person, while focusing on quick and efficient involvement in their office/home everyday life by other means.

"Daniël Vernhout

Student Mechanical Engineering

"Academically, this course allowed me to expand my toolbox of skills to be an engaging speaker. But what really changed and shaped me were my peers and teachers; always driven, always ready to help"

Eindeprocessierups:

Building a Start-Up to solve an itchy problem

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Table of contents

Introduction

Each start-up has to begin with an idea. However, the idea on itself will never be enough to succeed. Obvious but crucial is the formation and management of a team willing to realise this idea. Clearly, this overly simplistic view does not hold on its own, but it does contain the crucial parts to build a start-up that can truly lift off. This Thesis aims to review the process of the formation of a team and various partnerships in construction of one particular start-up.

Oftentimes, the idea a start-up is based upon, has emerged as a means to fulfil a task of which the need or demand is high, and the current solution is lacking or insufficient.

In the case of this thesis, the problem at hand is the recent exponential growth (1) of the population of one caterpillar in particular; the oak processionary caterpillar (OPC). The urge for this plague in particular to be contained originates from the impact of the caterpillars' hair on the human skin and respiratory system. The hair contains a protein called thaumetopoein that, upon contact with the human skin can cause severe irritations and rashes. The problem becomes more serious when the hairs are inhaled; irritation of the respiratory system can in some cases lead to coughs or severe breathing difficulties.

Current popular solutions include using a vacuum cleaning system to suck individual nests from trees and newly designed chemicals applied on trees or individual nests. However, after two years of utilisation, rather than stopping the plague, these solutions only decrease its effect. On top of this, most solutions have proven to be either very labour intensive, costly or have a negative impact on the environment.

The combination of lacking current solutions and a pressing public urge to solve the problem displays the potential a serious solution may have. I, the author of this thesis, believe to have found such a solution. The mechanism of the product itself, being the main item of value around which the start-up is built, will not be discussed in this thesis, and will from now on be referred to as `product`. The start-up itself carries the name `Eindeprocessierups` and shall be referred to as such.

Now that the base of the start-up has been outlined, this thesis will focus on the process of crucial partnership formation. In particular, presentations and conversations prepared specifically for various audiences consisting of potential stakeholders will be investigated. The application of various pre- and persuasion techniques as well as implementation of personal characteristics of various audiences is tested and reviewed.

Next to this, the overall process of team-management and decision-making in the Eindeprocessierups start-up, including its partners, will be reflected upon. Finally, a number of lessons will be drawn from the process, In both more general terms surrounding the formation of a start-up as well as specific lessons to be applied in the continuation of this start-up. Additionally, the personal coaching sessions followed alongside this project and the personal progress made will be summarised briefly.

A brief history of Eindeprocessierups

It may seem unimportant from the view of the current situation surrounding COVID, but during the spring and summer of 2019, the Oak processionary caterpillar (OPC) plague(1) was considered a serious inconvenience to many, an actual problem to some. Over the course of that summer, a basic Idea came to my mind that could potentially solve this issue. In my role as a mechanical engineering student, this basic idea gradually merged from a sketch to a realistic concept. As I thought this solution could help many, I assumed the local municipality would surely be open to collaborate in such project. However, in a first call, the municipality clarified not to be interested in any type of conversation if the solution would not be shared unconditionally. As the new academic year as well as many other activities neared, this project was put on hold.

However, as I went for a run halfway April 2020, I noticed the presence of these caterpillars in almost every oak I passed by. This view reminded me of the respiratory issues multiple relatives had experienced because of the OPC and the solution I had in mind. So, I decided to actually pursue this project in the form of a start-up.

From an engineering perspective, I started the process of ideation and modelling, to investigate if a viable product could be created. In the process, it became clear that for this project to succeed from an engineering standpoint, certain particular skills were required, which I did not possess sufficiently. This is where the first step was taken towards the creation of a team. I called a friend, also studying at the University of Twente who had the required skills, to ask if he would like to collaborate on this project. At this point, the conversation was one between two friends, without any preceding planning or preparation. With a team capable of creating a functional prototype to conduct preliminary testing and create the prototype, from an engineering perspective, the project could move forward.

However, with a team consisting of two students, insufficient means were available to turn the functional prototype, which had proven to work successfully, into a mass produced product necessary for a successful introduction of this solution throughout the country. At that time, as test results were only preliminary and the prototype had not taken a near-final shape, a patent could not be filed yet.

The next steps in continuing this project from the teams' perspective were to find partners that could enable production and provide funds. Clearly, this process of finding partners would not succeed without a properly prepared approach and presentation. This process of finding and communicating with potential partners is a major part of this thesis, and will be discussed in the chapter ' personalised pitches' . Concisely, this process included a preliminary phone call to introduce the presence of such idea and plan a meeting. These meetings were then planned on the condition that an NDA provided by the Eindeprocessierups team was signed. Finally, the first meetings would include a pitch or conversation with the intent of interesting the potential partner. Following these meetings, collaboration was agreed upon.

In this manner, the team found a manufacturer and an investor willing to contribute to the project on the condition that more elaborate testing would prove the concept viable.

Starting the first weeks of July, the team began more elaborate testing and updating the prototype along the way to enhance its functioning. At this time, the team also made the first investment of buying equipment and materials to enable faster prototype iterations.

Following a short summer break, the team continued testing and further improving the product, while several in-house prototype manufacturing problems had to be overcome. Finally, nearing the end of august, the prototype reached a shape and level of functionality that would satisfy the condition of the manufacturing and investing partners.

Personalised presentations

In the process of building a start-up, the initial meetings with future partners play a crucial role. Therefore, this thesis aims to take a closer look at the preparation, execution and impact of different strategies applied during two initial meetings. These two meetings concern the first conversations on the topic between the team, and the manufacturer and the investor respectively.

Global strategy

In Cialdinis books 'pre-suasion(2)' and 'influence(3)', the full process of steering the audience towards a desired outcome is discussed. This process not only includes persuasive strategies, indeed priming and implicit influencing of phrasing, setting and other factors are also if not just as important as the strategies themselves.

However, instead of diving right into the application of these strategies to the preparation of the various meetings, one more process was included. The meetings discussed in this paper concern one-person audiences only. To further increase the effectiveness of various strategies, it was chosen to first investigate the targeted person thoroughly. This way, much more careful application of pre-and persuasion strategies was made possible. A brief overview of the personalisation and preparation process consisting of five steps, is listed below:

1. Noting down the goal of the meeting

    The initial step is quite obviously, to clearly note down what the final goal of the meeting is. Following this final goal, multiple sub-objectives are found to lead the meeting towards the final goal.

2. Creating a profile of the targeted person based on prior knowledge

    In this preparation step, as much knowledge as possible is gathered about the person. This knowledge might be based on previous meetings, job records or other sources.

3. Concluding anticipated preferences

    After obtaining a general profile of the targeted person, the information found is analysed and linked in order to find anticipated preferences.

4. Using Cialdini's techniques in designing a global template and meeting structure

    These anticipated preferences are then used to find and appropriately apply Cialdini`s pre- and persuasion strategies. In this stage, strategies defining the meeting appearance and structure are the point of focus. As an example, the choice of preparing a conversation-like meeting rather than a pitch-style meeting is discussed.

5. Applying generally successful pre- and persuasion strategies

    With the general structure set out, the text is prepared and specific generally successful pre- and persuasion techniques are incorporated. The wording and attention-gabbing aspects of the introduction are an example of the main content discussed in this final stage. Whereas all preceding steps developed from the personalisation of each different audience, this step is, apart from some highlighted exceptions, applicated equally to both meetings, thus discussed only once at the end of this chapter.

Manufacturer meeting

With the general approach in place, its execution in both the manufacturer as well as the investor meeting are now further elaborated. First the Manufacturer meeting is discussed.

1. Goal

The main objective of the meeting with the manufacturer was to interest him in a collaboration on the Eindeprocessierups project. To achieve this, a number of subsequent sub-goals are formulated that will lay the foundation of the presentation layout to build towards the final objective.

1. Gain the manufacturers` interest on the subject.
2. Clarify the need for a solution.
3. Interest the manufacturer in the product itself.
4. Interest the manufacturer in a collaboration.

2. Personalisation: gathering knowledge

The first step in the personalisation process is, as discussed previously, to create a general profile of the targeted audience. In the case of the manufacturer, this background profile originates from previous collaborations and meetings between me and the manufacturer on other projects. The list below includes only facts that have been used later on, while facts not used in hindsight are left out for the sake of relevance. The list below aims to only include observations, without drawing conclusions.

The owner and CEO of the manufacturing firm..

1. ..has built the company fully by himself from scratch over the course of 20 years
2. ..has not had the opportunity to obtain professional education, and has thus educated himself into the profession
3. ..comes across as very creative
4. ..has a very developed capability to imagine 3d structures based off explanations or drawings
5. ..sees his work as his biggest hobby, often doing little side projects
6. ..expresses the lack of knowledge whilst also a fascination towards a specific field of engineering.
7. ..Does not care about being rich. He lives very modestly and is mostly interested in his work itself and the employment of his employees.
8. ..Is always interested in further growth and expansion, for the sake of the challenge.
9. ..Has expressed that trustworthiness is of greatest importance.
10. ..Was not business-educated, but has developed a good sense for investment opportunities by means of experience.

3. Personalisation: anticipated preferences

From the list of traits outlined in the previous section, a number of conclusions have been drawn to find out what specific preferences the audience has, and how these can be used to tune the presentation to make the experience as fitting as possible. Below, conclusions refer to the number of the observation list in the previous section. It should also be noted that, next to the listed observations, all conclusions are also influenced by personal experience with the person.

a) Based on observation 1, 2 and 3 it was concluded that he has a `do it yourself` mindset, always looking for ways to solve a problem with means already available to save cost and grow further.
b) Observations 3, 4 and 5 indicate that he likes to invent new systems, and as such will immediately evaluate and try to optimise the idea told, bringing in own insights.
c) From observation 6, it was concluded that this part of the project should be emphasised on, whilst care must be taken to keep the explanation on this topic simplistic.
d) From observations 7 and 8, it was concluded that collaboration on a bigger part of the manufacturing process should be proposed to him, as it could fit very well to an expansion plan he has been developing.

e) Observations 9 and 10 indicate that he likely values collaboration on an equal level, e.g. not as a contractor, but as a part of the project itself.

4. Designing a global meeting structure

The conclusions drawn in the previous section complete the necessary information to apply Cialdini's principle in a fashion tailor-made to the targeted audience.

In `persuasion`, Cialdini reviews the concept of co-creation. It describes the increase in perceived value of and responsibility for an idea or product the person at hand believes to have co-created, over one they have had no say in. This concept is also referred to as the `IKEA-effect`, where customers who put together the product themselves perceive the product to be more valuable and likeable.

Combining this concept with conclusions a and b, it was chosen to omit a pitch-style presentation. It has been anticipated that the manufacturer prefers a conversation style, in which he feels free to interrupt and give feedback and improvement ideas at any given point. On top of that, in the preparation of the conversations, multiple points have been anticipated at which feedback will likely be given. To facilitate this, pauses and subtle questions were incorporated at these points. In this way, following the `IKEA-effect`, the manufacturer should perceive that he is actively included in inventing the product, thus valuing it more and introducing a feeling of responsibility to the project.

On the topic of co-creation, Cialdini suggests specifically asking the targeted audience for advice is favoured over asking for an opinion. The reasoning followed is that asking for advice puts a person into a merging state of mind, merging their own identity with that of the other party`s. Asking for an opinion, however, invites the person to focus on oneself, thus separating their identity from that of the other party.

Combining this advice with conclusion b brought about the thought that valuation of his input should be displayed explicitly. To this end, it was chosen to make notes on paper whenever he expressed an idea to the product, and care was taken to ask for advice rather than opinions.

From conclusion c, it was chosen to highly emphasise the possibilities created by the use of this field, while keeping the explanation of how it works as simple and concise as possible.

The mechanical part and the manufacturing process, on the other hand, should be elaborated on widely to a fair amount of detail. It should also be clearly displayed that the manufacturing process has been kept in mind while designing.

Investor meeting

The manufacturer meeting preparation has been elaborated on extensively. Chronologically this was the first meeting. In preparation for the investor meeting, insights of the manufacturer meeting have been used too, causing some overlap. For the sake of relevance, this section discussing the investor meeting has been formulated in a more concise manner.

1. Goal

The main objective of the investor meeting is to convince the investor to collaborate in and provide start-up capital to the Eindeprocessierups project. Besides, to convince the investor to take on an advising role in financial, marketing and accounting related topics. The sub-goals to achieve the main objective during the investor meeting have been listed below.

Sub-goals

1. Gain the investor`s interest in the subject
2. Clarify the need for a solution
3. Interest the investor in the potential of the product
4. Interest the investor in consulting the team in financial and accounting topics

2. Personalisation: gathering knowledge

The investor is acquainted to my father through his business . The information about him was thus obtained mainly from my father.

The investor…

1. ..Has built an accounting firm from scratch and successfully sold it several years ago.
2. ..Greatly values equality on the work floor; he used to work in the same space as al of his employees.
3. ..Relies his judgment heavily on his perception of the person, rather than the idea itself alone.
4. ..Greatly values honesty and sincerity
5. ..Likes to work in a very ordered manner
6. ..Is not technically educated
7. ..Has connections to boards of at least one municipality
8. ..Is currently mainly involved in investments after selling his accountancy firm.
9. ..Lives in the countryside in an area where a lot of OPC`s have been present in recent years

3. Personalisation: anticipated preferences

a) The first conclusion useful for the meeting preparation stems from observation 1. Having led an accountancy firm, the investor probably has worked with many firms and is likely experienced in a number of fields the team holds no strong expertise in, like marketing, Financial strategies and sales. It would be a loss not to utilise this knowledge in the Eindeprocessierups project somehow.
b) Observation 2 implies that the investor prefers to work with people on the same level, omitting his position of authority. Reverting this, it is anticipated that the investor prefers a conversation and collaboration such, that both parties can and dare to conversate on an equal basis.
c) Observation 3 implies that the investor strongly trusts his ability of analysing people. Therefore, it is of importance to not keep up any appearances during this meeting and, keeping observation 4 in mind, dare to display what one's perspective on things in a straightforward manner.
d) Combining observation 5 and 6, as opposed to the manufacturer meeting, all technical topics should be kept simple. Focus should be maintained on the application possibilities rather than design choices, And this story should be clearly structured.
e) It goes without saying that observation 7 demonstrates that this investor could also facilitate a collaboration with an important potential client. This should also be addressed in the investor meeting.

4. Designing a global meeting structure

In the manufacturer meeting, much emphasis is laid on the concept of co-creation. In the case of the manufacturer, this concept should still be applied, especially when considering conclusion b of the previous section. However, keeping conclusion d in mind, the emphasis of this strategy should not lay in the design process. To take this emphasis away, the technical explanation is explained in a deliberate monologue manner. Next to this, as was already found in the previous section, the emphasis is put on the possible functionality of the system rather than how this functionality is achieved.

By shortening this section of the presentation, more room is created to focus on the anticipated expertise's of the investors found through conclusion a) and e). Here, the concept of co-creation is quite literally implemented. When moving the conversation towards ownership of the company, only one, quite general proposal will be offered, after which the advice of the investor on this topic is asked for. Thus apart from using the concept of co-creation as a persuasion strategy, this execution also implicitly proposes the desired advisory role of the investor in the collaboration.

The one proposal mentioned in the preceding paragraph utilises another persuasion strategy. In 'Influence(3)', Cialdini describes the concept of likeability: it appears that people are twice as likely to agree with someone they like. Observation 3 indicates that this strategy, in particular, might be effective in the investor meeting. He two argues that people like people who are similar to them. Thus, utilising conclusion b), deliberately expressing the common virtue of equality in a collaboration, the investor should recognise like-mindedness, increasing the probability of a positive reaction. It should be noted that the team does indeed agree strongly on the virtue of equality between partners in the collaboration.

5. Dotting the I's: applying general Pre- and persuasion techniques

With a general outline and strategy in place, some specific general pre- and persuasion techniques, not linked to any personal findings, are now used to complete the presentations. To this end, various strategies outlined in Cialdini`s books  `Pre-suasion(2)` and `Influence(3)` have been used. Careful analysis of the recorded response is then used to indicate the effectiveness of the different strategies. The utilised strategies, accompanied by an example of their use in the presentation are listed below. Most of these strategies were utilised in both the manufacturer and the investor meeting.

1. Embedding Associations: the threatening

   According to Cialdini's 'pre-suasion(2)', emphasising the threat of something to the audiences' safety works in an attention capturing manner. However, if the threat is too prominent, so the book argues, the audience could tend to deny its vulnerability to the threat. Following this thought, it has been shown that combining the threatening message with a clear solution has been an effective way of mitigating this effect.

   In the meetings, the introduction included the influence of caterpillar hairs on people. By far the most common influences are rashes, skin irritations and itching. These are inconveniences that are perceived more or less severe by various people. However, in the case of inhalation of these hairs, people with a problematic or sensitive pulmonary system can experience severe coughing or shortness of breath. This problem in itself is much more severe, as it influences the supply of oxygen, vital to survival. Therefore, this specific and more serious side effect has been emphasised on. However, not much later, it is explicitly mentioned that a solution to this problem has been invented.

2. Authority
   In `influence(3)`, Cialdini states that people are more likely to agree with or believe a statement if it comes from or is backed by what is seen as an authority on the subject. Apart from the use of expert opinions, the presenter himself can also try to get the audience to think of him as an authority by using reliable, authoritative data.

   In both meetings, a number of statements that could have been logically explained were explicitly told in the setting of a talk with an employee of a caterpillar `vacuum cleaning` company. In this case, it is important to note that this conversation with the vacuum firm employee did actually take place.

Furthermore, the presenter used numerical statistics to display the size of the problem, hinting he had done research on the subject himself.

Finally, when the subject turned towards the specific technical field (mentioned earlier), I promoted my partner as a specific expert in this field and let him do the explaining on this part. It should be noted that otherwise it was agreed upon and favoured by the team that the main presentation part was exercised by me.

3. Social proof and scarcity

   The book `influence(3)` describes the observation that people often define right or wrong by the consensus of the crowd. Thus, by implying the majority of people favours a certain action, the audience is likely to feel favourable to this action as well.

   This strategy was very subtly utilised by saying: `everyone I have spoken to about this problem wants that something is done to solve this soon and in a national fashion`.

   This phrase also goes on to imply that this solution is not available while in strong demand, implying a `gap in the market`, or scarcity. This is further underlined by emphasising some key features or combinations of those the competition failed to deliver.

4. Likeable wording.

   In `pre-suasion(2)`, Cialdini describes an encounter with a health organisation that had carefully recreated their company language to fit the desired corporate values. As a not for profit health organisation, they tried to replace violent language with language associated with healing, avoiding terms like `bullet-points`, `attacking` problems or `beating` competition. Instead, phrasing like `information points`, `approaching` problems or `outpacing` competition was used.

   In the manufacturer meeting, this strategy was explicitly used when talking about the functional goal of the finding, which is the death of caterpillars. Thus, phrasing like killing was replaced with synonyms more aligned with the goal, like eliminating. Alternatively, simply less confronting terms were used, like the Dutch word for `switching off` (uitschakelen), which can also be used in this context.

   Reviewing conclusion 4 of the anticipated preferences of the investor, it was chosen to omit this strategy with respect to the death of caterpillars for the investor meeting. From the manufacturer meeting, the possibility arose that this particular implementation of the strategy could cause unclarity. Seeing as the investor values sincerity and honesty, using straightforward wording to avoid unclarity was valued over the potential benefit of this strategy. On a side note, observation 9 of the investor meeting preparation indicates that there is little chance the investor would worry about the death of an OPC.

Results and reflection

The meetings were executed according to the preparation described in the previous section. To review the influence of different strategies, the meetings were recorded. This was done in consent with all parties, under the condition that I would be the only one to listen to the recording.

It should be noted that the small sample of two presentations made that having any kind of single result section would not make sense. Therefore, the results and reflection have been combined to be able to directly interpret certain situations and provide more valuable results.

This section will first review each meeting by discussing its overall progress, or success. Subsequently, the reaction to applied strategies is reviewed upon.

Following the review of both meetings, a number of global choices in the project-process are re-evaluated by analysing their impact on the start-up as a whole.

General success rate

Manufacturer meeting

Overall, the manufacturer meeting can be labelled as successful. That is, the final goal formulated in the previous section `interest the manufacturer in a collaboration` was achieved; in fact, it was even surpassed. Not only did the manufacturer explicitly say he would like to be part of the project, he even suggested funding and facilitating the full manufacturing process.

Investor meeting

A similar conclusion can be drawn about the investor meeting. Here two, the final objective, ' to convince the investor to collaborate in and provide start-up capital to the Eindeprocessierups project. Besides, to convince the investor to take on an advising role in financial, marketing and accounting related topics' has indeed been achieved.

Meeting structure

Manufacturer meeting

Reviewing the global course of the meeting, a number of observations can be made. First of all, the implemented co-creation strategy fitted in very well. The manufacturer gladly took advantage from every pause, both planned and not, to express his thoughts on various topics and give out advice. The conversation soon turned into a brainstorm on the product design. Reviewing the recording, it became clear that the manufacturer felt like he became part of the design team.

Even though the team did indeed use advice over opinion, this strategy proved to be unnecessary as the manufacturer took every opportunity to think along, thus asking for advice became obsolete. The influence of this strategy could thus not be verified properly in this meeting.

When however the team took pen and paper to note down the advice he gave out, the manufacturer clearly read this as appreciation of his input and started to take the writing speed of the team into account when advising specific design improvements or changes.

Investor meeting

A similar approach of co-creation was used in the investor meeting, though its emphasis was laid on a different subject. As a consequence, the technical part of the conversation took on the shape of a pitch style, listing the possibilities the technology enabled. As expected, the investor was indeed mainly interested in these possibilities, although as expected he did not try to conversate much on this part, other than the occasional clarification question.

When asking for advice following the proposal of equal ownership distribution, surprisingly the investor advised holding at least 51 per cent of ownership in our own hands. He explained that not doing so might enable future deadlocks in decision making and that he believed the inventors should stay in charge of their own invention. Looking back, this misjudgement was likely prompted by assuming a certainty of honesty and reliability of all parties, which the investor pointed out to be an invalid assumption in the practice of his experience.

Generally speaking though, the co-creation strategy still seemed to fit the investor well, as a fairly balanced conversation started on ideating various collaboration possibilities concerning more target groups and the protection of IP, the content of which is discussed later on in this chapter. As was intended, the conversation was more so led by the investor who is of course more knowledgeable on the topics.

General pre- and persuasion techniques

When the threatening association of shortness of breath was brought up, both the manufacturer and the investor showed a clear reaction of engagement in this consequence. It should be noted that during both meetings, there was indeed a person present with respiratory problems. This combination was unintentional, but quite likely did contribute to the greater understanding and thus impact this point had on the manufacturer. In the manufacturer meeting in particular, I accidentally swapped the order of the introduction slightly while improvising to keep the story consistently, causing the mitigating solution providing sentence to follow a full 2 minutes after the threatening statement. It should be noted that in between, the exponential growth of the caterpillar population as well as the failing combat of this plague were discussed. These topics do indeed still fit in the general strategy of a threatening association, but the impact of this strategy might still have been weakened. However, in the investor meeting this swap was not made, and no significantly different response was observed.

The misplaced piece did however carry two further strategies, the first of which was adding a sense of authority by including growth statistics. However, this action brought about a slight reaction of amazement, indicating it functioned like an amplifier of the threatening association rather than introducing a sense of authority.

When the meeting progressed into the explanation of the system, and the specific field my partner is specialised in was to be explained, he took over the speaking role as previously discussed. Looking back, this action was much appreciated, although it might not have been primarily caused by the fact that the expert was explaining it. It should at this point be noted that the manufacturer had worked with me on other projects before, but did not know my partner. Therefore, the transition of speaker to my partner acted as a kind of introduction to my partner himself, which the manufacturer very much appreciated. The team later derived that the manufacturer took this moment as an opportunity to 'test' my partner on his knowledge and trustworthiness, posing some critical questions.

The investor two seemed to appreciate hearing my partner speak. While the investor posed more open questions towards my partner in a less ' testing' manner, he too clearly used this moment to learn about my partner and his takes on collaboration and such. However, as I myself I am less acquainted to the investor than to the manufacturer, similarly aimed questions were also posed toward me.

Approaching the end of the introduction, social proof was included, as described in the previous section. When this general consensus was expressed a slight nod of approval, though not very significant, was indeed observed. A similar reaction, although slightly more prominent, was perceived in the investor meeting.

The tactic of avoiding harsh wording when describing the death of caterpillars was used. Following this, when mentioning the death of caterpillars in a reasoning a number of people, though not all, used less violent though also less obvious synonyms like the proposed `uitschakelen` and `shut it up`. It thus seems to have subconsciously influenced the audience partly, but after a while this manner was dropped mostly. Later in the meeting, some unclarity appeared whether the caterpillars were to be scared or killed. It remains unclear whether or not this unclarity was caused by avoiding harsh but straightforward wording.

As discussed, this strategy was deliberately avoided in the investor meeting.

Start-up process

Reviewing the entire start-up process, a number of things influenced by the manufacturer drastically affected the course of the project. This section aims to review the most crucial ones.

Manufacturability

The team went into the manufacturer meeting with a proposition of a specific manufacturing process we then anticipated to best fit the application of the product. However, in this meeting, the manufacturer clarified that his available means did not fit the proposed manufacturing process. Instead, he suggested an alternative solution that would equally fit the application of the product, while also fit the manufacturing capabilities at hand. This heavily impacted the project, as the team had to go back to the drawing board to implement this alternative solution. Eventually it turned out that this solution would also allow us to produce a full scale prototype in house with our own prototyping facilities. This in turn allowed the team to test the prototype on full scale, and adapt rapidly to new insights. It also relieved the team from the need to find a prototyping provider.

Vandalism

During this same meeting, the manufacturer pointed out a number of factors we had not taken into account yet. One of these was the fact that this product could be subject to vandalism given its widespread placement in urban areas. This of course also influenced the way the team thought about the application process, while trying to preserve user-friendliness.

Marketing and production funding

As intended, the investor pointed out a number of important points on how to bring the product to the market. He also pointed out that this project needs a large scale testing programm. However, this testing can only be done in a limited time window, on top of that also demanding large scale production. At the time of the meeting, there was no time anymore to set up such large scale tests. The problem here is that in order to make it to next years' time window, investments have to be made beforehand with an uncertainty caused by lacking large scale testing. On the flip side, not taking this risk would effectively mean postponing the project by yet another year, creating plenty of time for competitors to take over this business opportunity.

He also pointed out a number of other target groups that could also be potential customers, like gardening firms or utility stores. To address these target groups as well, a very different marketing strategy is needed next to governmental applications.

Intellectual property

Another surprising advice the investor gave, concerned the ownership of intellectual property (IP). He advised to register the IP on my name as inventor, rather than on the start-up. The start-up would then use this IP under licence. He reasoned that this way, the inventor would always retain control over the invention, as well as protecting the IP from being lost in potential bankruptcy.

Insights and personal progress

Personal progress

Alongside the start-up-project, I also followed personal coaching sessions. I would like to briefly summarise the progress I have made through these sessions, which often correlated closely with the eindeprocessierups project.

I went into the coaching sessions with the feeling that I sometimes have difficulty choosing, or choosing quickly. My goal was to be able to make choices more quickly, and experience less stress in the process . I did not know how to address this properly. Gradually, as we had the first number of sessions, I understood that this problem is only the cause of another struggle; prioritising. My coach helped me realise that it is not the difficulty of making the choice, but rating the choice in importance; as such I spent too much time on comparatively unimportant choices, effectively losing time. So we planned that I would first ask myself about the importance of the choice, then realise how much time the choice was worth. This has helped me make the unimportant decisions quick and experience less stress in the process, because I had realised the unimportant choices have only little impact on my life. Later on in the sessions my coach also helped me realise that some doubtfulness is also caused by the fact that I was not always sure what to expect from someone. As an example, I have wrongly anticipated the amount of work a teammate in a university project group would actually do compared to what was agreed on. The way I tried to improve on this front was actually inspired by the meeting preparations for the start-up project itself. I started noting down what I thought I could expect from someone before the meeting, and then check this anticipation with their reaction during the meeting. It made me realise that I should make more strict agreements, and make sure in the conversation that the other person is actually willing and capable of doing so. Also, although quite obvious from an outside perspective, writing my expectations beforehand made me think about the other persons perspective before going into the meeting, making me more prepared and effective during meetings.

I would like to thank my coach, Sanne Bentum, for putting up with all these hours listening to me and leading me to realise what and how to improve to truly get better at the things I felt I was missing out on. Looking back I more than achieved my goal, reducing time and stress of choices by prioritising properly. As a bonus, I now go into meetings more prepared, with a much better hunch of what to expect and to never forget to make strict appointments.

General project insights

The path from idea to product is far longer and more complicated than I had previously imagined. The building of a start-up leading to a mature production firm with a sound financial foundation is a process of many small steps, which are each vital for success. Therefore, small and big matters often need equal depth of attention, to avoid becoming pitfalls for progress. Teambuilding and teamwork are the crucial requirements to develop quality products and consolidate product and business continuity.

Another thing the preparation of personalised meetings made me realise is that implementation of even the subtlest pre- and persuasion techniques can have a large impact on the mindset of the audience, conscious as well as sub-conscious.

Finally, I this project displayed to me how important it is to make the meeting fit to the audience. Looking back, an elevator pitch would have worked in a disastrous manner in both meetings in the given setting.

Thus carefully researching the audience before thinking about any strategy is a key step to creating pleasant and effective meetings.

Discussion

This research focussed on the preparation of personalised meetings in a start-up setting. Part of the thesis aimed to apply and review different pre- and persuasion techniques. Off course the overall success rate of the meeting was also of importance in the review of the outcome. However, several factors have occurred over the course of this research that could have influenced the results. As such, these external factors are discussed in this section.

1. The product itself

Off course, every meeting mainly revolved about the product this start-up is built around. Generally speaking, a good idea or product is easier marketed than an average, or even bad one. Thus, given the fact that both meetings were successful, it is should be considered that it were not solely the pre-and persuasion strategies that accounted for this outcome. As such, the quality of the idea itself might have caused a general interest apart from its presentation. This in turn could mean that some observations of reactions to different strategies might not have been caused by the strategy itself. However, in a strategy-to-strategy perspective different sorts of reactions were indeed observed, proving that they were still of significant influence.

2. Previous acquaintance of the investor and manufacturer.

Both the manufacturer and the investor where acquainted with me in one way or another. Off course, having prior history with someone changes the setting of a meeting. This was also observed in the manufacturer meeting when my partner took the word. The manufacturer had worked on another project with me personally in the past, while the investor had been acquainted to my father through his business. This difference in level of acquaintance is indeed also of influence. Concluding, the trust built up through this previous acquaintance two have positively influenced the outcome of the meetings.

Future

New meetings are being planned to present progress made and discuss future steps. To this end, video-editing of testing footage as well as a functional prototype that closely resembles the envisioned final product are being finalised.

These meetings intend to produce a go for the continuation of the start-up. Subsequently, together with the investing and manufacturing partners, a more concrete partnership agreement will be created in the coming meetings, establishing the foundation of the start-up. After that, the process of patent filing will be kicked off.

After finalising the patent filing process to the point of a pending patent, the project can proceed on several fronts. From an engineering perspective, the product and required tools will need to be prepared for mass production. To fund this process, the manufacturer has proposed to act as an investor of resources, as part of the agreement made.

Off course, the protection of the pending patent will allow for beginning the process of client interesting. This will include a marketing strategy, as well as strategies to approach different target groups, like private entities, municipalities or gardeners.

Timewise, the goal is to have multiple agreements on pilots with various clients, as well as prepared means for mass production before the caterpillar season of 2021. Off course, by that time, the patent should also be granted.

Conclusion

This Thesis reviewed the process of building a start-up, with special emphasis on building collaborations and partnerships. For one, the overall process was reviewed upon. Starting as one person, over time, the project team has grown much, first with the addition of my partner, and later on through collaboration with a manufacturer and an investor. The second focus of this Thesis was the influence of personalisation and the use of pre-and persuasion strategies on initial partnership meetings. As expected, tailoring the meeting towards personal insights of the audience seemed to ensure a pleasant and effective experience. This was indeed confirmed by both the investor and the manufacturer after the meeting.

Overall, pre- and persuasion techniques proved to be capable of significantly influencing the audiences' reaction toward its predicted objective. For some strategies however, little to no response was observed. It should be remembered that some external factors were present that influenced the outcome of the study.

Looking at the project, I must say to be very content with the progress made. Although this project has taught me how complicated and labour intensive building a start-up can be, I am happy to have started it, and will enthusiastically continue working on it. On a personal front I have progressed much on the front of decision making, and both personal coaching sessions as live practice in meetings have helped me to further develop presentation skills and build a better understanding of the audience.

Looking forward, a new phase of the project can be kicked off. The soon planned process of patent filing will enable the team to move forward on many other fronts of the project, aiming to have the final product in use by the beginning of the caterpillar season of 2021.

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STUDENT CIVIL ENGINEERING

“Stefan Pozinarea

“Change is like an ice-cold dip. You either jump right in and suffer for a while, or you ease into it, and it takes too long to enjoy. Even if you refuse it, others drag you in or push you off the side.”

Comparing objective and subjective outlooks on a personal time budget. A change initiative for better time valuation.

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Introduction

This project aims to provide insight into the utility of one's time and the way in which the usage of such a resource can be perceived in relation to an own set of values. Moreover, the primary goal of this intervention is to instigate a behavioural change based on an individually relatable quantification of time utility, particularly on the differences between a reference situation and a possible improvement of aforementioned utility of time.

Firstly, to gain a better insight into scheduling and budgeting of time, the coaching sessions afferent to the final 'Processes of Change' module have been centred around scheduling and analysing the personal situation. Secondly, in order to assess the usage of time from both subjective and objective perspectives, a quantifying method needs to be used in order to translate preference to impersonal factors. For this, a set of economic valuation methods will be employed, which are often used in economic assessments, in order to predict consumer behaviour.

Further analysis the two perspectives, can generate a relative-point discussion and on the basis of the differences between the two. By comparing the intrinsic perceived value and the quantified value of the everyday time budget, an improvement can be made towards the lacking aspects of the current habits of time allocation.

Motivation and target group identification

The motivation for pursuing this following project topic stems from personal struggle with the perceived utility, and valuation, of time. Additionally, observations of the popular occurrence of such issues among close-age peers, seems to indicate the existence of a widespread issue. Moreover, with the sudden transit towards work-from-home practices, the problem of healthy time management has started being discussed more and more during recent times. The urgency may be further increased at the overlap of what is likely a step in the development process of the youth and the unexpected circumstances of a transient timeframe. For such reasons, the intervention is based on the idea that objectivity can help alleviate uncertainty. A possible hypothesis can be derived In the same way a strict schedule serves to bring steadiness and security to a person’s daily set of activities, a set of clear indicators could help instigate a person towards better allocation of their time. This subsequently suggests that a person subjected to the change intervention could, and would be willing to, bring improvements to their time management practices.

Following previous reasoning, a suitable target group has been selected. It would be a set of actively involved young individuals, in this case students, who would allegedly seek help for better management and allocation of their time. Ideally, such a group can be gathered for a set of time management courses. In this case the intervention would take the shape of a short (10-minute) conversation. The conversation would directly revolve around the quantification of time utility and the difference between the reference situation and the possible improvements the partakers would be willing to make. Simultaneously the conversation serves indirect purposes, linked to nudging the partaker towards executing the envisioned change. More about the setting, format and expectations of the conversation will be discussed later.

Definition of objectives

The change intervention aims to instigate reconsideration of the initial personal values in regard to time, and to address personal bias through objectivity.

Secondly, if the members of the target group deem the intervention exercise as useful, the goal is for them to want to implement this tool in their array of time management methods.

Discussion and intervention method

The aforementioned discussion will consist of three components, the identification stage, the consideration stage, and the reflection stage. The underlying change and persuasion methods, employed during these discussion stages, are psychological mechanisms described by Richard H. Thaler and Robert Cialdini in their scientific journals, and eventually books. The stages will be described in the following paragraphs. The entire intervention revolves around this discussion, as other relevant data would not be collected after the end of the discussion.

In the identification stage, the partaker will have to express some minimal amount of personal authentication, a way to be contacted and incipient non-primed statement, on how they currently spend the 24 hours of the day (assigned among 8 main activities in an average workday). The statement is meant to be an objective representation of current scheduling behaviour. At this point the partaker is expected to lack bias towards the valuation methods used in this change intervention, but they are expected to have an intrinsic perceived value of efficiency and priority (related to activities). This bias is later used for suggesting the perception can be systematically wrong, as it becomes ground for possible improvements (Thaler, 2008).

The next discussion point is the acknowledgement of the context of the discussion. It is emphasized that the student enrolled for a time management course, so it is expected that they seek some improvement in this regard. Questions such as ”How do you describe your current scheduling behaviour?” and “Would you be interested in a small, practical (emphasis on practical), exercise which may help improve you scheduling?” would be addressed, in order to set the context and prepare the path towards the later stages of the discussion. This part in the identification stage, acts as a priming second-hand mechanism. It may be an obvious idea to the student that improvement is a goal, as well as them enrolling in the course being a first-hand self-priming mechanism. This part of the conversation also generates a “privileged moment”. During a one-on-one conversation, another aspect is brought to the forefront of the time management issue. The idea of self-relevance, and the act of speaking out about the incentive to change, become supportive and reinforcing factors (Cialdini, 2018).

After the context setting, assuming they agree to continue the discussion by including the “exercise”, the consideration stage begins. They are, thus, asked to rank their everyday activities by assigning scores to 8 main sets of daily events. Ranking is the next step towards establishing a basis for the change intervention. It involves establishing and recognising a personal value system, relative to priority perception. By ranking the activities in order of their perceived importance, the partaker is now made actively aware of, and responsible for their time of the day (again with a suggestion of self-relevance). They are then asked to think of the distribution of time they mentioned in the identification stage and to give a comparative consideration of the two sets: the set of scores per activity and the set of hours per day invested in the respective activity. At this point, the potential for time management improvement is made clear as a priming method.

The following part of the discussion is dedicated to explaining the “exercise” and introducing the concept of utility. This concept is portrayed as a mathematical indication of the possibility to improve the use of a budget, in our case an amount of available time, related to a variety of goods that have to be acquired, in our case the tasks which have to be fulfilled within the available time. “Additionally, this is used by economists in order to objectively and accurately predict improvements in consumer behaviour” (Roy, 2020) (this speech-marked sentence can be used in the actual discussion, as it effectively delivers the suggestive message). Once they seem to understand the idea of time utility and how they can benefit from knowing more about it, they will be presented with the results of the utility function, which is based on the sets of data they have openly provided.

They are told the following: “The results show the intrinsic values at which you indirectly, and possibly subconsciously, perceive the respective 8 main daily activities.”. “These are the equivalents of salaries you are being paid for spending time in the manner you are doing it right now.” The focus, at the end of this stage, is on the highest and the lowest values out of those ”intrinsic value” prices, and on how these prices can be taken advantage of, in order to maximize the utility and ultimately managing time better. For example, when a “salary” value is much higher than the value 1, the student pretends a lot more priority and importance for that activity, than the amount of time they put into the activity. If a value is much smaller than the value of 1, they tend to overdo the activity and not depreciate the priority and importance (Appendix). These statements would be brought up during the final part of the consideration stage, suggesting the focal points of the discussion, may be the cause (Cialdini, 2018) for poor time management and low utility. At this point feedback can be exchanged, such that the student is identified as aware of the presented situation and if they are interested in addressing what is now a more centralized problem: ”It should now be way easier to address your drawbacks and capitalize on your strongest points.”; ”You seem to put quite some effort into … (activity to be addressed based on results) and it really pays off for you. You should try and do mode of that!” The feedback is mostly effective when the partaker acknowledges they are not criticized and they are told they are easily able to execute something well (Thaler, 2008).

Finally, after undergoing first two parts of the survey, the last stage will ask for an indirect reflection on the relevance of the exercise and the discussion itself until now, pointing towards the clarity and accessibility of the exercise. At last, a few words will be exchanged on the topic of reconsideration of beliefs and behaviour. The reflection stage is also the part of the discussion, where the answers are gathered, in order to verify the goals of the intervention.

The opening statement of the reflection stage would be: “Did you like the exercise? It seemed quite insightful to me when I came across it. I personally do it a lot now, when I feel like I am too busy, or I don’t feel like working at all.”

The aspects of clarity and accessibility can be addressed as such: “Would you like to know more about this exercise and how it functions? It can provide a lot more insights into how to use your time.”; “It is actually very easy to do. I take less than 5 minutes and it show you how to better use your time.”

A last remark and question: “Now as a final observation, do you remember the scores you gave to those 8 activities. Those can change depending on the amount of work you have to do and sometimes being under stress. Do you think the results of the exercise could lead to you viewing these activities in a different way? Would you possibly give them different scores initially?”

Another question which can convey the effectiveness of the intervention is: ”Considering you are following this time management course, did you find this useful and would you do it again throughout the course?”;

Interpretation

The answers to the two main questions, which provide results for the quantification of the effectiveness of the intervention, are aggregated and presented, alongside the personal impression of the discussions and the occurring unsolicited feedback.

The two main questions which we are talking about are:

A. Do you think the results of the exercise could lead to you viewing these activities in a different way and would you possibly give them different scores initially?

B. Considering you are following this time management course, did you find this exercise is useful and would you do it again throughout the course and/or when you are scheduling?"

Positive responses towards these two questions are deemed as validating for the change intervention.

Results

At the time of the draft being handed in, there have been 8 conversations resembling the change intervention. Due to a lack of access to an actual time management course, the interviewees have been asked beforehand if they are interested in improving their time management. Unfortunately, not all approached students have answered positively. It is to be noted that the conversations have been kept under 10 minutes for the purpose of accessibility.
8 out of 8 people who have gone the through the process of the change intervention have answered positively to question A, suggesting the method succeed in altering the initial perception on importance and priority daily activities.
6 out of 8 people answered positively to question B, yet 4 of them suggested that they were interested in the exercise and would do it again, but do not see it as a recurring practise that could become a habit.
Some personal findings additional, where that the partakers were rarely impressed by the utility as a whole, but found the outlying "price" values to be a point of much interest and possibly the main driver of their appreciation towards the exercise.
The change approach was indicative of the interest people give to their own betterment. Although most of them were not taken aback by the idea of utility initially, towards the end all of the interviewees were interested in the mathematical aspects of the approach and the prominence of outlying factors. In the future, the number of discussion will increase, but seeing that question A of the intervention received decisively positive answers, it would be interested to test the value system in reverse and check if people's opinion are bound to change repeatedly and impulsively, if not for the given advice.

Advice to the target group

Question A of the change intervention is an indicator of false perception. The partakers have expressed willingness to reconsider their values in regard to daily activities. However, if the proposed exercise is to become a recurring practise, the value scores should not be changed impulsively. Doing so, may lead to deceiving results and a wrong perception of time valuation as a whole. To avoid such issues, the partaker has to assume responsibility for their value score set and test it over prolonged periods of time. If a change in the value score set is made, the utility of time should be treated as a new practise, which is not to be compared to previous value sets. The integrity of time use is after all the key to better utility.

Learning experience

Overall, this change intervention, as well as the entire "Processes of Change" track was a delightful experience which helped me figure out how to take advantage of my ideas and what I am interested in, and it convinced me I can apply them successfully in any domain.

When comparing the nature of the intervention to my Insights Discovery profile, I can find myself in the style of the intervention. The approach tends to eliminate the interviewer from being the driver of the intervention, relying on factuality and "objectivity" rather than strong delivery. This could be debatable, as I do not consider friendliness as a strong persuasive trait, even though it may very well be one in the right circumstances. However, I have the active profile of a supportive coordinator. I believe this suggests that the comforting and polite way, in which I conduct my interactions is also the main strength of my persuasion style. I think the intervention also hints that I like cooperation based on appreciation of common values, which fits my active personality profile. As much as this intervention takes the odd form of a playful interaction, it helped me recognize the basis of my appreciation for such game-like activities. I truly believe that such a format centred around a set of rules, I the same way a game unfolds, is a very potent framework for any behavioural intervention. After reading some of the work of psychologist Jean Piaget, I have come to realise a great deal about why I am particularly fond of objectively set, unanimously agreed upon, rules, hierarchies and micro-societies that constitute games. Form these, I can deduce and define concepts which I later have a discussion basis for. The create a basis for the way I interpret situations, being then able to observe something both subjectively and objectively. The study of the entire Processes of Change track has further validated these beliefs for me. The strict, sometimes tedious, schedule of the study has never felt better. The honours afterhours sessions have been the best way to spent time at this university. That is because everyone involved accepted to play the game and enjoyed it. There was a micro-society of active highly intelligent people, who were accepting that there are people who are better than them and people who are worse than them at various things and at different times. Moreover, they enjoyed comparing themselves to others, challenging themselves and others which kept the game exciting. This has convinced me that the environment is incredibly more important than the capacity and willingness of one individual. When surrounded by great people one is bound to become better or leave. You can only lose the game if you do not try to play it!

Appendix

Utility functions and prices

$$\max_{x_1,x_2,x_3} u(x_1,x_2,x_3) = x_1^{\alpha_1} x_2^{\alpha_2} x_3^{\alpha_3}$$
$$s.t. p_1x_1 + p_2x_2 + p_3x_3 \leq M$$

From the first two f.o.c. we derive

$$\frac{\alpha_1}{\alpha_2}\frac{x_2}{x_1} = \frac{p_1}{p_2}.$$

which implies

$$x_2 = \frac{p_1}{p_2}\frac{\alpha_2}{\alpha_1}x_1.$$

From the first and third f.o.c. we derive

$$\frac{\alpha_1}{\alpha_3}\frac{x_3}{x_1} = \frac{p_1}{p_3}$$

which implies

$$x_3 = \frac{p_1}{p_3}\frac{\alpha_3}{\alpha_1}x_1.$$

Substituting the solutions for x_2 and x_3 in the budget constraint we obtain

$$p_1x_1 + p_2\left(\frac{p_1}{p_2}\frac{\alpha_2}{\alpha_1}x_1\right) + p_3\left(\frac{p_1}{p_3}\frac{\alpha_3}{\alpha_1}x_1\right) = M$$

which implies

$$x_1^* = \frac{\alpha_1}{\alpha_1+\alpha_2+\alpha_3}\frac{M}{p_1}.$$

Figure 1:Utility function and time valuation

Example of situational valuation

Core activity	Score (1-8)	Rank order	Share	Quantity	Intrinsic value (price)
sleep	2	6	0.166667	7	0.571428571
work/study	1	7.5	0.208333	6	0.833333333
nourish	5	3	0.083333	0.5	4
relax/entertain	3	5	0.138889	4	0.833333333
socialize	4	4	0.111111	2.5	1.066666667
exercise	1	7.5	0.208333	1	5
chores	6	1.5	0.041667	1	1
others	6	1.5	0.041667	2	0.5

Table 1: Example of valuation process

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“Theresa Höfker

“Change comes in all forms and ways but only if you are open for it and let it happen.”

Making Young Adults Change Their Behaviour to Be More Environmentally Friendly by Superimposing Cues

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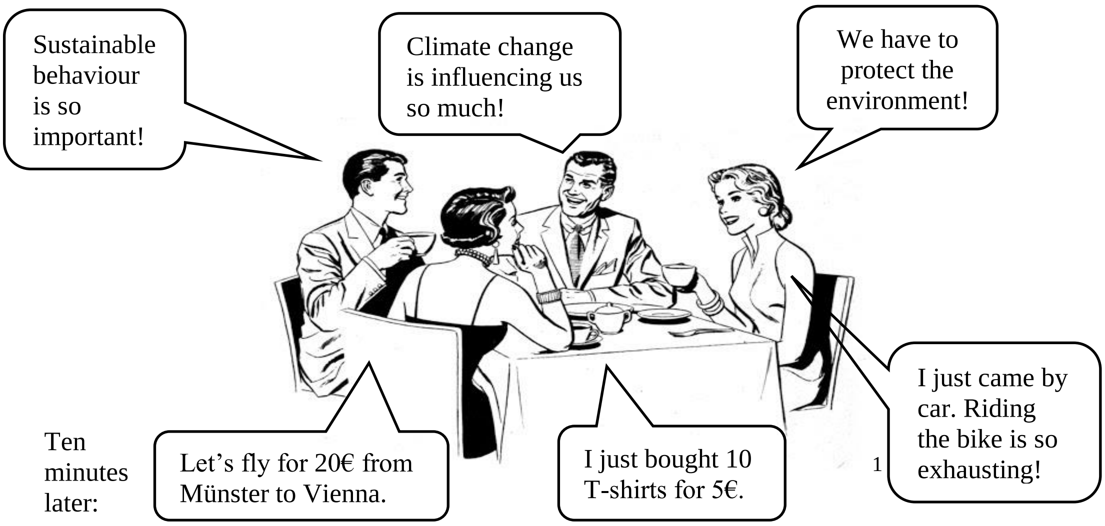
Introduction



[1]

I observe situations like the one above very often when I am together with my friends. It happens so many times that we talk about climate change and that sustainable living is more important than ever. In those moments, all of them seem to see the urgency of this topic. However, some moment later it seems like everything is just forgotten. Everyone just talks about how cheap and fast everything should possibly be. No one cares anymore whether their actions are sustainable. These situations have made me thinking and wanting to change something. With the current project, I tried to make a first step to having an influence on others to become more sustainable and change their behaviour to be more environmentally friendly.

Climate change has become more important than ever and therefore sustainable living comes into the focus by many people. Generally speaking, sustainability means limiting ones impact on the environment by finding a balance between what one takes from and gives to the environment (Beqaj & Rizvanolli, 2018). And it is important that people adopt such a sustainable style of living. By now, it is very well known that climate change occurs due to the actions of humans. Therefore, it needs to be stressed that human beings need to change their behaviour to prevent further irreversible degradation of the environment (Baumbach, Graf, Graf, & Schafranek, 2018). This behavioural change has to occur at many different levels, from the societal level, over the institutional level to also the individual level as interactions between humans and climate occur at all of these stages. This also demonstrates the complexity of the topic of climate change. Many factors influence the outcomes and results concerning climate change (Clayton et al., 2015). However, in many approaches to change behaviour concerning sustainable living the individual level has not been regarded. Factors that are important when talking about decisions and behaviour of individuals have received less attention of existing interventions (Clayton et al., 2015). With the currently emerging pressure to act at all levels, the current project takes a closer look that the individual level of behavioural change to act more sustainable.

Behavioural change by habits

When one talks about individual behavioural change, probably the most important aspect to consider are habits. Habits can be described as “behavioural patterns enacted automatically in response to a situation in which the behaviour has been performed repeatedly and consistently in the past” (Lally & Gardner, 2013). However, these automatic processes can

[1] Picture retrieved from: http://clipart-library.com/friend-dinner-cliparts.html

be a big challenge when one wants to change their behaviour. Habits might regulate actions although the person tries to intervene and govern their actions. This becomes even stronger when the person is in a stressful situation where the body tries to safe energy (Lally & Gardner, 2013). This stresses the importance to look at changing habits when one wants to change their behaviour. To achieve enduring behavioural change, people need to learn new or adjust their old habits.

An important feature of habits are cues that trigger the learned behaviour. Every habit that one executes is before initialized by some attribute of the environment the person is currently in. Examples of such triggers can be the environment the person is in, the time of the day a particular object in the current environment and so on (Hollingworth & Barker, 2017). Therefore, to initiate new habits or adapt current habits the person has to make usage of these insights in the role of cues. By implement cues in the environment for the desired behaviour behavioural change can become much easier and long-living for the person (Hollingworth & Barker, 2017). And this is also true when people want to change their behaviour and adopt new habits concerning sustainable living. Implementing the right cues in one's environment can help to be reminded of the more desired, sustainable behaviour (White, Hardisty, & Habib, 2019). Therefore, the main approach of the project is to use this strategy of implementing cues to hopefully change the behaviour of the participants.

Target Group

The target group of the project is determined by several characteristics. First of all, the people in the target group are at the end of their study or apprenticeship and will probably start into the working life within the next year. As Hollingworth and Barker (2017) describe, by now it is known that new behaviours and habits are introduced when people are also facing some kind of change in their life, for example starting a new life phase, moving to a new home, or changing the job or career. These events naturally involve some kind of change in the daily routine so people have to develop new habits and do not yet possess deeply rooted behaviours. This is highly advantageous as people can then implement the desired behaviour directly in their new routines (Hollingworth & Barker, 2017). Additionally, people facing a change in life are thought to have more freedom soon compared for example to students who just started studying. They have to make some decisions on their own that younger students might not have to do as they spent a lot of time with their parents who make the decisions. Also, an argument for choosing younger people was that the probability is high that they heavily are affected later on by the consequences of climate change. This is thought to already create some interest in the topic. And as it can be seen by the *Fridays for Future* movement, there already is some interest among younger people to work on the topic and safe the environment as much as possible (Wahlström, Kocyba, de Vydt, & De Moor, 2019). Therefore, another inclusion criterion was that the people already have some kind of awareness or interest in the topic to change their behaviour to become more environmentally friendly. The people in the target group to some extent are aware of the topic and that they need to change their behaviour. Changing behaviour always starts with intrinsic motivation. So, since the participants then have some level of motivation they are more likely to start and continue working on their habits. Since the people picked, were at least to a little extent familiar to me I was able to estimate to a certain extent whether they are interested in the topic and try to change their behaviour in some way.

Change Objectives

The ultimate objective of the intervention is to change people's behaviour to act more environmentally friendly. To achieve this overall goal several smaller objectives should be achieved. First of all, the target group should become aware of their current behaviour concerning sustainability. The second objective is that people overlay cues for bad habits with cues for environmentally friendly behaviour. Thirdly, people use social media as a general reminder of sustainable behaviour.

Measuring the effectiveness

Whether the project is regarded as successful is based on different measures. First of all, if all participants indicate at the end of the project that they gained new insights concerning sustainable behaviour the intervention is regarded as successful.

Secondly, if the majority of the participants indicate that they will continue using the strategy introduced and further look for possibilities to implement new cues, the project will be rated as successful.

Thirdly, three questions are asked to the participants before and after their participation in the project. The three questions are:

1. *Please indicate to what extent sustainable living is important to you.*
2. *Please indicate how you feel about your behaviour with regards to the environment.*
3. *Please indicate to what extent you behave environmentally friendly.*

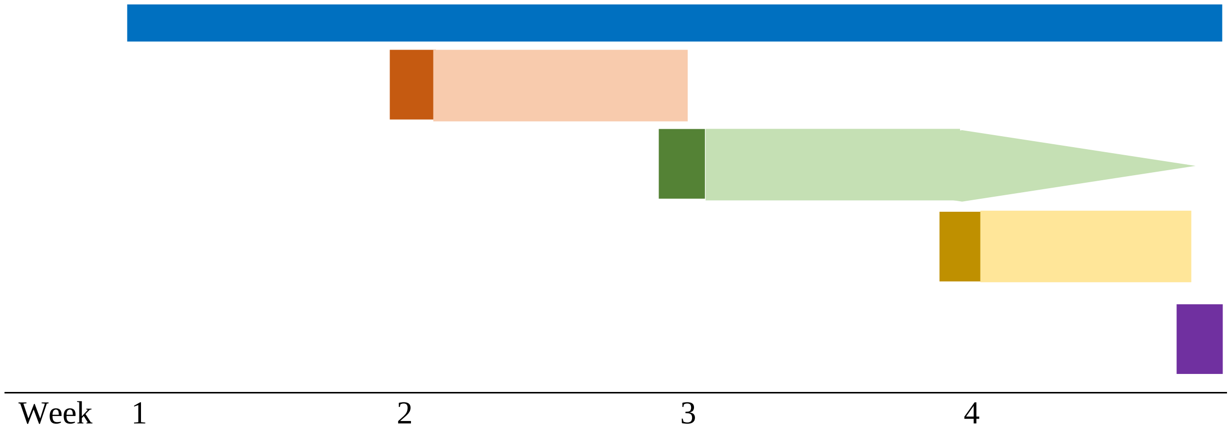
The participants received a slider on which they could indicate their standpoint about the question. These questions were used to compare the general feelings towards their current sustainability before and after the intervention. In the discussion, during the last meeting, the exact differences are then discussed. If the majority of the answers at the end of the intervention were higher than before, the intervention, the project is regarded as success Important to note is that the second and third question is more important for determining the success, as participants were contacted that already had some interest in sustainability and sustainable behaviour.

The Change Approach

The main approach for the project is based on Siegfried Greif's lecture on "How to bridge the intention-action gap by coaching methods based on science". It consists of four stages, which were theme or goal clarification, planning and contrasting, implementation intention, and support implementation sIn the project these four stages were implemented and adjusted to the project over a course of three weeks. Before the start and then after each week a meeting was done with all of the participants.

Before the actual start of the intervention, the participants were recruited based on different methods to get and keep their attention. Following, step one, the first meeting and the first week, was all about getting started. The participants should start by finding out their opportunities where they see possibilities to improve their behaviours. In the second step, the meeting together with the second week was then more dedicated to the actual behavioural change. Based on the insights from the first week the participants should try to change their behaviour. In the third step, the performance of the participants was talked about. It was discussed how the behavioural change was going for them and how they feel about it. In the following week, the participants should further implement the strategies for behavioural change and make an adjustment based on the discussed difficulties. In the last meeting and therefore the fourth step, the insights of the participants in the past weeks were discussed. Additionally, possible future steps were introduced and also discussed to ensure that the started behavioural change also lasts longer than the weeks of the intervention. In general, it was chosen to do group meetings as this was preferred by the participants to support each other. The sessions were done on Skype as all participants already had access to it and therefore were easily able to join.

Overview of the intervention:



Getting and keeping the interest of the participants
Meeting 1: Goal clarification
Task 1: Collection of desired & undesired behaviour trigger
Meeting 2: Planning & contrasting, Implementation intention
Task 2: Superimposing cues
Meeting 3: Supporting the implementation
Task 3: Social media as a cue
Meeting 4: Feedback & outlook into the future

Getting and keeping the interest of the participants

To make the participants interested in the project and keep the interest, different methods were used. First of all, the idea of likeability was used. People were contacted that I already knew at least a bit. This had the advantage, that the participants already had some trust in me and might follow what I have to say. According to Cialdini (2016), using this method makes it more likely that people listen to one and be interested in the explained topic.

Next to that, the method of social proof was used. Before the project started with the participants, I tried out the method of superimposing cues myself. I made experiences myself that I could explain to the participants. Therefore, while talking to the participants, in the beginning, I mentioned several times that I found a useful method. By talking about my experiences and how effective the method was for me was, it became more likely that participants said yes to join the project according to the findings of Cialdini (2016).

Also, the idea of consistency was important when recruiting participants. People try to behave in a way that is consistent with what they have done before (Cialdini, 2016). Therefore, I mentioned during the recruitment that they are already aware of climate change and sustainable behaviour and the project would be the next step to continue with working on these topics.

Lastly, curiosity was used to recruit the participants and keep their interest high. In the beginning, it was mentioned that I ‘found’ the new method to work on habits. However, it was never completely explained what the method was about until it was used. By keeping some important information from the participants, I tried to keep their curiosity high and make them want to stick with the project to hear more about it.

The first meeting: Goal clarification

[2]In the first meeting, Greif's stage of theme or goal clarification was the basis (Greif, 2020). Therefore, the topic was introduced with some facts and then a discussion was started.

The group session was intended to create some common ground between the participants. They all have some interest in the topic but the extent of knowledge and insights might differ. Therefore, they could learn from each other. The discussion was created very free to express everything in mind and no limitations were made on what the participants should tell. At the end of the discussion, it was led in the direction of what might be not going well concerning the desired behaviour. Mainly questions were asked about possible improvements and how they can be achieved. This was done to formulated goal for the upcoming weeks, together with the participants. The idea was that the goal goes in the direction of finding ways to implement more sustainable behaviour in their daily life. However, it was important that the goal was not predetermined but rather developed together. This was done to hopefully make the participants feel more involved. At the end of the session, the participants received the task for the next days to collect situations in which they do not behave sustainably, like going by car instead of by bike, and to note down possible triggers for such behaviours, like the car is directly next to the entrance of the house.

During the weeks the method of telephone shadowing was used to keep in contact with the participants. Telephone shadowing means the monitoring of the participants to check with them how they are doing via the telephone (Greif, 2019). If any questions or issues occur they could rather easily be helped. Therefore, four days after the initial meeting the task of the participants slightly changed that they should note situations where they acted environmentally friendly and how these situations were triggered.

The second meeting: Planning & contrasting, implementation intention

After one week the second meeting took place. The time frame of a week was chosen to give the participants some opportunity to reflect on their behaviour but also to not have a too big time-span between the meetings. This meeting was structured according to the second and third stage of Greif's model, namely planning and contrasting, and implementation intentions.

In this meeting, the notes the participants made during the week were discussed. The meeting was done with everyone together because in the first meeting the participants raised the wish to do it together to learn from each other. In an open discussion, everyone had the chance to present their insights into their behaviour concerning sustainability. Then it was looked at the cues and the triggers of the behaviour. The idea of superimposing cues of Greif (2020) was introduced. This method describes, that to change behaviour the cues for the old and undesired behaviour have to be replaced with cues for the new and desired behaviour. Therefore, the old cue becomes deactivated and new cues are introduced that facilitate the new behaviour (Greif, 2019; Greif, 2020). As explained earlier, cues are very important when one wants to develop new habits. Therefore, in the second meeting, this idea of superimposing cues was introduced. It was explained to them what this method entails and several examples were given to them, like placing a bike next to the car. Based on their observed behaviour, the participants thought of ways to implement cues in their environment that trigger the desired behaviour. First, the participants were asked to come up with ideas themselves. If they had difficulties with this, suggestions were given to them to get some ideas of what they can do.

[2] Picture retrieved from: https://definingcommunication.com/individuals/feesandservices/

At the end of the session, again a task was given to the participants. They were asked to implement the cues discussed and use them as a strategy to trigger the desired behaviour and also look for other ways to implement the cues. Again, during the week, the participants had the chance to ask questions and express difficulties via the telephone.

The third meeting: Supporting the implementation

[3]Then, after one week, the third meeting took place. This was about supporting the implementations of the participants. The main goal of the meeting was to see how the participants are doing. The participants were asked to talk about their week. Together in the group solutions were looked for to possibly solve the difficulties. Additionally, social media was introduced as a possible cue. Originally, the idea was to have an influencer, that focuses on sustainable living on their channel, join one or more sessions to talk about their experiences. They would have given useful tips and insights that might help the participants to engage in sustainable behaviour. However, unfortunately, no person, that was contacted, was willing to participate or did not answer. Therefore, the alternative plan was to introduce some influencers to the participants that they then could follow. Therefore, the participants were reminded naturally when they spent time on the social media platform and also got more insights into the topic from people that deal with the topic daily and have a lot of knowledge.

For the week, the participants were asked to have a look at the “green” influencers and also continue using the method of superimposing cues. Again, at any time they had the chance to ask questions and express occurring difficulties by phone contact.

The fourth meeting: Feedback & outlook in the future

[4]In the last meeting, the main goal again was to discuss how it went for the participants and what insights they gained. The participants could exchange with each other what they discovered during the week. At the end of the session, a look into the future was made. Actions and goals for the future were formulated together with the participants. Finally, they received a small overview with the most important facts discovered during the sessions to keep them in mind.

After the intervention

At the end of the last meeting, it was important to end on a good note with the participants to keep the positive feelings about the intervention. Therefore, they could express any feelings about it. The participants got the opportunity to talk about anything they feel is important to them concerning the topic. They were given the opinion to mention anything that has not yet been discussed. Additionally, the participants received my contact details. They had the possibility to contact me at any time if they had the feeling that they want to talk about the topic. They were free to ask for more meetings and were given the opportunity to further support each other’s efforts to implement the desired behaviour.

Results

[3] Picture retrieved from: https://www.flaticon.com/free-icon/feedback_1087916

[4] Picture retrieved from: https://www.iconfinder.com/icons/4013630/arrows_future_past_planning_sign_timeline_icon

Three participants were part of the intervention. Two of them were female and one was male. Two of them were 21 and one was 22. When approaching them they were initially enthusiastic and seemed to be interested to learn something about how they can become more sustainable. They were open to try out something new and were interested in talking about sustainability and environmentally friendly behaviour.

The overall goal, to change the participant's behaviour to act more sustainable, was mostly achieved. Overall, in the end, the participants were very positive about the intervention and the intentions. Therefore, they generally had the feeling that they change their behaviours in some ways. However, as it is in almost all interventions, not all sub-goals were achieved to the same extent. Some were more applicable and better to execute than others. Therefore, this will be elaborated in the following.

Generally, at the end of the last meeting, they seemed to appreciate the open attitude to have further contact concerning the discussed topics. The participants indicated that they would consider it and that they are thankful for the offer.

Measure one

First of all, a measure of the effectiveness of the intervention was the indication by the participants that they gained new insights and learned about to implement these. This goal was achieved. During the intervention as well as at the end of it, the participants indicated that they learned something new. Especially, when ways to be more sustainable were discussed, they exchanged ideas and ways to implement these. It happened often that one participant came up with an idea of improving their behaviour and the other participants indicated that they had never thought of that aspect. One example was the usage of cloths for dishes. One participant said that instead of throwing them away he or she could wash it in the washing machine and therefore reuse it. The other participants said that they have never thought of washing the cloths and always threw them away. But that it is a sustainable, rather easy and money-saving idea. Therefore, the behavioural change several advantages. And these situations occurred more often during the sessions.

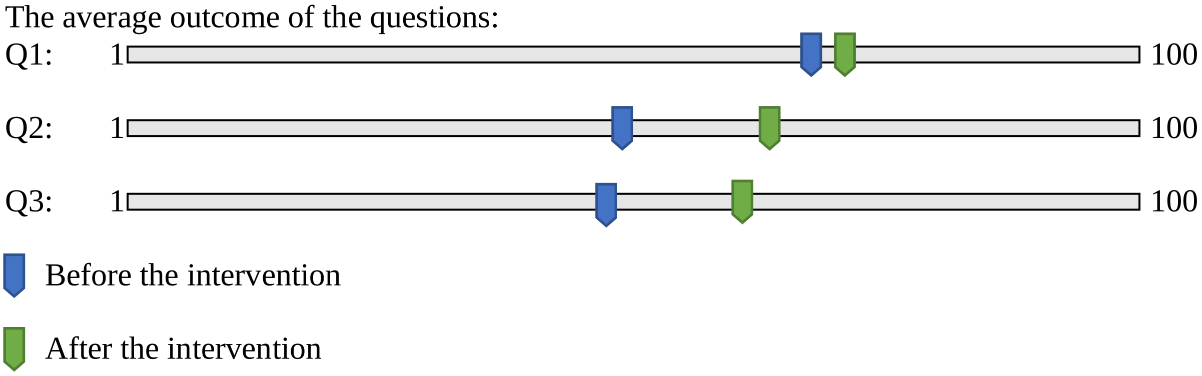
Measure Two

The second measure of effectiveness was that the participants indicate that they continue using the strategy of superimposing cues and look for new ways to implement cues. This goal was only partly achieved. During the intervention the participants implemented different cues like for example, putting the bicycle key right next to the entrance door to use the bike more often instead of the car or putting signs on the trash cans to better sort the trash. The participants reported that they mostly worked well for them. When they saw the cues, they were reminded of their desired behavioural change. And sometimes they even influenced other people living with them, for example in the case of the trash cans. However, the participants also mentioned that the cues were mostly reminders for the desired behaviour and they felt less of an obligation to engage in that behaviour. Therefore, it happened to them that they saw the cue but still acted differently than the desired behaviour. They sometimes ignored the cues they put up for themselves. Nevertheless, the participants also indicated that this only happened a few times because they knew that in the meetings we were talking about how they are doing. The participants explained that because of the felt social obligation they more often acted based on the cues than when the social aspect would have missed. Therefore, they concluded that superimposing cues can be a helpful method but not alone. It works very good as a general reminder but needs additional strategies to lead to the desired behaviour. Additionally, the described that they see great potential in social media to give them more insights into possible sustainable behaviour. During the week they saw some interesting things they could implement in their lives, like a recipe for a vegan cake. However, the week to use social media was just after the incident of police racism towards black people in the US. Therefore, almost all of the influencers only posted about the *Black Lives Matter* movement and not a lot was posted about environmentally-friendly behaviour. However, as described before, the participants see the potential in social media to serve as a general reminder. For the future, the participants reported that they would like to continue having discussions with friends about the topic and reminding each other of the desired behaviour, next to keeping the developed cues and using social media as a general reminder

Measure three

Lastly, the positions of the sliders were representative for a score but this was not shown to the participants. Therefore, the mean was computed for all questions before and after the intervention. Subsequently, the positions of the sliders were compared. It became apparent that the participants feel that they behave now after the intervention more environmentally friendly.

The average outcome of the questions:



First of all, these results show that the participants already showed some interest in behaving environmentally friendly. However, a discrepancy can be seen between the felt importance of sustainable living and the behaviour of the participants. With regards to the small increase of the slider in question one, the participants explained that due to the intervention the importance of acting environmentally more often came into their mind. Therefore, their already existing opinion that the environment should be protected got slightly strengthened and they felt that the importance to act became stronger for them.

Concerning question two and three the participants explained that now, after the intervention they feel that they in general act more sustainable. They described, that before the intervention they noticed when they could have acted more sustainable but seldomly changed their behaviour respectively. By taking them at hand and slowly starting to engage in strategies to become more sustainable they now feel that they changed their behaviour and became more sustainable. Examples of the behavioural change are that they go more often by bike instead of by car, they use meat alternatives, they separate their trash more thoroughly and reuse their cloths. However, as described before, these results are not only the outcome of superimposing cues but rather several components of the interventions, like the social aspect, superimposing cues and the social media, led them to become more sustainable.

Advise for the participants

After the project has finished there are some things the participants can do to further deepen the behavioural change and that is advised to them. First of all, by keeping the cues in the environment and not removing them they can further work on developing the new habits. Additionally, it is advised to keep on looking for situations and behaviour were the desired behaviour might not yet be present. In these situations, the participants can then have a look at whether they can implement cues for changing the behaviour. As the method is relatively easy and does not necessarily need a lot of supervision participants can simply further work on their behaviour. Next to that, what the participants also mentioned, is that they can remind each other that they have the goal of being more environmentally friendly. The friends can act as simple, general cues for triggering more sustainable behaviour. Lastly, if the participants keep following the sustainable influencers they can get a lot of new ideas of what they could change to be more environmentally friendly. The week, where the participants were asked to follow some of those influencers was in the light of the *Black Lives Matter* movement. Therefore, not that much content was posted concerning sustainability and how it can be achieved. Therefore, as the possibility is high that the influencers post more about it in the future, participants can get many ideas from that on how to work on their behaviour.

Conclusion

As described by Mahajan and Graves (2018) humans and their behaviour can be very complex, especially when talking about sustainability. Therefore, insights into behavioural change approaches are highly important for advancing in this topic (Mahajan & Graves, 2018). With the project, a method known from individual coaching was taken to facilitate behavioural change to becoming more environmentally friendly. Overall, the method of superimposing cues was regarded as helpful when trying to come up with new habits. However, as it is with many interventions, there is not super-method for behavioural change but rather many aspects have to be taken into account. According to the participants, a good combination of different influences should be used when creating approaches to facilitate sustainable living. So future interventions, trying to target the missing individual level of behavioural interventions (Clayton et al., 2015) should take this notion into account and try to incorporate as many facets of the topic as possible.

Learning experience during the project

During this project I faced many challenges and made many new experiences that helped me further develop myself and learn more about my leadership style. Especially in the beginning, I stepped out of my comfort zone. I came up with an initial idea that was very much different from the final project executed. Initially, I thought about an intervention in which I plan one big session with some participants. The idea was to first present some facts and figures to the participants after which a discussion followed. I wanted to measure the success with a 'traditional' questionnaire. I came up with this idea because this was what is familiar with, what I knew how to execute and also am good in from my study Psychology. However, thanks to my supervisor, I was challenged to think more broadly and come up with new ideas for the project I did not have implemented before. I had many brainstorming sessions in which I thought of ideas and ways to make the project more interesting and fun to execute. At the same time, I had to be creative. This whole process was very new to me and I had many different ideas for the project but had to decide for one. In this process, I learned and experienced by myself that the first idea one has is not necessarily the best one. Good ideas often come with time and need some creativity. And this was also hard for me in the beginning. I would describe myself as rather uncreative and conventional. I thought that I would not be able to come up with a good idea that is different from what I am used to. But I learned that creativity needs time and can also be some effort. By thinking about the topic and researching many times I was able to come up with new ideas. This taught me that I can be creative if I want to and that creativity comes with time.

Next to that, a great challenge for me was to contact the influencers. In the first moment, I thought about this idea I thought it is unfeasible and I should not do it. However, in general, I thought that it was a nice and new idea to include them. I am a person that engages in a lot of thinking before acting. This was also part of my personal development plan for the coaching sessions that ran next to the project. I wanted to act more spontaneous and listen to my gut feeling. In this case, my gut feeling said you should do it, it sounds like something interesting and fun to do. Nevertheless, I also started thinking about many things regarding the contact. In one discussion, then my supervisor, she said: “Just do it, nothing worse than then rejecting the request or not answering it can happen!”. And in this moment, I decided to go with my gut feeling and just contact them. This was far away from my comfort zone. But after sending the email to them I realized that I was very enthusiastic about the contact and secretly hoped one would accept the request. It felt good to leave my comfort zone. This showed me that sometimes leaving the comfort zone can make one happy and very enthusiastic. In general, I learned during the project that leaving the comfort zone is important to make discoveries, become creative and feel better.

Lastly, in the project, I discovered my leadership style that I already started recognizing during the whole process of the track Processes of Change. During the *Insights Discovery* workshop, I learned that my management style is mostly that of a coordinating supporter. I am a person who gives everyone the chance to express themselves and to be heard. I am the person who wants everyone to feel comfortable in the situation so that they can develop themselves. Additionally, I value information and keep an overview of what needs to be done and how this can be achieved. Looking back at the project, I realised that I also created it in this way. My highest priority was that the participants felt comfortable during the project and are not forced to any actions they do not like or they think do not work for them. I wanted everyone to find the right way for themselves to implement the methods. However, I kept the focus on what I wanted to achieve and if I had the feeling the participants were on the wrong track I tried to steer them back in the right direction. And also during the different modules of the Honours Program, I discovered my qualities in management and leadership and how to use them effectively. With the time I became more confident that the way I work in and with a group is a good one and is helpful. I remember one session where a fellow student mentioned, that he likes my leadership style because it gives room for everyone to develop themselves and integrate their ideas but I also know when it is time to work on things and know what needs to be done. Looking back, I felt very good at this moment and this further supported my confidence in my leadership style. Without the Honours program, I probably would not have gotten these insights and probably would still be struggling to find my way of leading and managing a group.

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Student Business Information Technology

"Thijs Bink

"Change is not only sparked by the things you say, but also by the things you don't say"

“Marlen
Braun

STUDENT PSHYCHOLOGY

“When you change yourself, you change the world”

"Aninka Spekle

Student International Business Administration

"You have within you the strength, the patience, and the passion to reach for the stars and change the world"

“Daniël Van Der Weg

“You can change anything, but you can’t change everything”

Student University College Twente (ATLAS)

Prioritizing at the UT COV or COVid-19

9th of July

A collaboration between University of Twente & Champ Consultancy

Thijs Bink - s2139650
Marlen Braun - s1941305
Aninka Spekle - s2083078
Daniel van der Weg – s2098202

UNIVERSITY OF TWENTE. | Champ Consultancy

Table of contents

Introduction

The University of Twente is a middle-sized university that is divided into different units. One of them is the services unit, which encompasses eight different departments (University of Twente, n.d.). To make the educational processes more efficient and to increase interdisciplinarity, it was decided that the three departments Centre for Educational Support (CES), Library, ICT Services & Archive (LISA), and Campus & Facility Management (CFM) will create an additional program to improve coordination of the three departments. The resulting organization should be Centrale Onderwijs Voorziening (COV).

There have been two attempts to form the COV. When it was formed for the first time, there was a lack of communication between the participants and the difficulty of getting departments and faculties of the university to participate and be engaged in meetings. Therefore, the COV was stopped for a certain period. In January 2020, the second attempt was started and is
still going on. This time, a program manager was hired to set-up the COV and develop a vision for it. Moreover, the program manager should create a plan for optimal support of the educational services and the boards that will govern the COV.

At that time, though there was a desire (from higher management) to form such a program, the approach still had to be shaped. As consultancy firms, it was up to us to deliver a proposal on how we would best shape the program. As part of the Champ Consultancy team, we delivered a four-step approach: Explore, Investigate, Connect and Centralize, that would ensure the maximum potential of the COV would be reached.

The change was perceived as urgent in the winter, but it changed when the Corona Virus arrived in Europe and different measures had to be implemented. Some of those measures also affected the three services CES, LISA, and CFM. For example, one aspect that needed to be improved was the effective use of lecture rooms. With moving to online education, not only changed a lot for the services, but they also encountered completely new situations. Creating ways in which education can continue with the Corona Virus became more urgent than the set-up of the COV, especially as M. also is highly involved in one of the services.

Introducing Champ Consultancy

In addition to understanding the situation of the consultancy case, it is also crucial to know the consultancy team that worked on this case.

The Champ Consultancy Group supports you to create an environment for people to excel in what they are best at and thus to become champions. Champ consultancy strives to turn organisations into the champions of their organisational sector. A healthy future is one in which the right people are in the right places. Through cooperation and networking, we believe you can achieve anything. People and their passions are crucial in consultancy.
We strive to cooperatively create optimization and integration with an emphasis on close personal connections with the opportunities at hand.

Our consultancy company strongly believes in the statement that “the extent to which an actor’s network contacts are connected to one another has important implications for generating novel ideas and exercising social influence. The existing evidence suggests that actors with networks rich in structural holes are more likely to generate novel ideas” (Battilana & Casciaro, 2012). We believe that a network is everything, specifically, it is the key to a strong foundation of a well-functioning organisation. Therefore we operate based on the principles of the facilitated network consultancy model. Together with our client, we strive to create the strongest possible network within an organisation to improve the processes & structure within that company together.

We offer our honest but critical advice to the situation at hand based on a strong and valued relationship between observable facts and the human connection. Our strategy closely intertwines with the facilitated network philosophy (Bean, 2016), indicating weak links in the network and strengthening them by consulting with a strong personal touch. We believe that through this mentality, all problems are solvable and new champions will arise.

Change Goals

The educational sector is ever-changing as new developments and insights influence the educational processes within the University. To stay on top of these changes the university is sometimes required to improve its organisational structure and cohesion. The change goals in this manual relate to the increasing desire of the University to streamline and centralize the use of its educational resources. This desire originates from the discrepancy in occupancy of resources between the system and actual situation as the system indicates that nearly all resources are fully (or even over-) utilised whereas this does not match the actual situation. To tackle the discrepancy described above, the university wants to centralise part of its educational resources through the “Centrale Onderwijs Voorzieningen” organisational programme in order to increase its overall effectiveness.

Essentially, the change goal described above relates to the abstract change goal of creating organisational change. With this form of change, it is often relatively hard to clearly define concrete change goals as they are highly dependent on the environment and quite susceptible to external factors. As a matter of fact, due to the developments of COVID-19 situations, it is debatable whether the initial change goal of centralising educational resources still applies. Due to the overall shift in priorities, the initial goal has become quite blurred and as of now a lot of time is dedicated to redetermining the scope and goals of the COV.

As a result, our initial four-step organisational change proposal was not really applicable anymore. Through various brainstorming sessions we eventually discovered that our assistance was most required into shaping the Sounding Board, an advisory organ of the COV programme organisation. Our assistance was most required as the Sounding Board had not been looked into as much as the other segments of the COV though a well-formed advisory organ could potentially significantly help the COV in future decision making. This way, the actual and eventual change goal of this report became: “finding the best composition, form, interaction and function for the Sounding Board of the ‘Centrale Onderwijs Voorzieningen’ programme”.

Change Approach

As this project is a continuation from the prior module of “Coaching & Consulting”, it is perhaps best to reflect upon the change approach from the beginning of that module. After all, the consultancy philosophy, client interaction and final project plan all had an influence on the overall project and change goals above. Our consultancy team was composed of a mix of personalities that enabled a strong coverage of interpersonal and analytical skills. We felt that it was important to convey these two skills in our consultancy philosophy and concluded that this fitted nicely with the “facilitated network”.

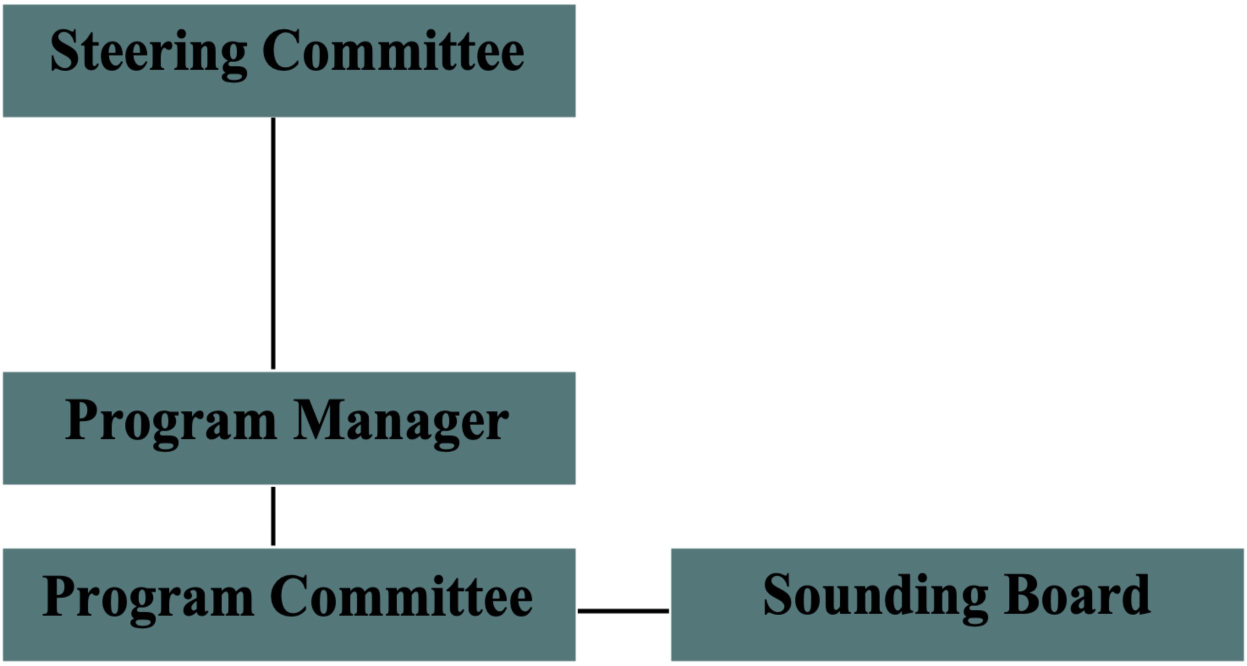
Furthermore, based on the interviews and provided information, we were quite convinced that network and communication were most likely vital elements of the project. Both change and education are closely linked to people which implies that the network first needs to be right before change can be initiated. For this reason, we decided to create a change proposal with 4 network and people oriented steps. The steps of “Exploring, Investigating, Connecting and Centralizing” aim to explore the right factors for the creation of the COV whilst at the same time motivating and connecting people into supporting the establishment of the COV.

However, after the acquisition of the project we soon realised that our initial proposal might not be that fitting after all. As some parts of the COV were already developed, whereas other parts - such as the sounding board - happened to be underdeveloped. The new situation required us to adjust our approach and to reconnect with the client to figure out what is actually needed, which is perhaps one of the vital consulting lessons the pandemic has taught us. In the end, the flexibility in our new approach enabled us to convince our client to let us work on the Sounding Board project. Within this project, the same level flexibility, creative thinking and ease of scope adjustment was required to deliver a proposal that ensures maximum client satisfaction.

Results

The Sounding Board

The sounding board is part of the program called the “Centrale Onderwijs Voorzieningen” further referred to as the COV. This program will try to improve the use, division and information on the educational facilities. The organisation looks approximately as follows.



At the top, there is the steering committee, which is responsible for guiding the project in the right direction and making decisions. The steering committee communicates to the program committee through the program manager. The program manager is responsible for leading the project team and communicating with the steering committee. The program committee is responsible for the operational side of the COV, meaning they outline projects and do them as well. The sounding board will give advice to the program committee on the projects that they are doing. They will give advice on the ideas of the program committee and also come up with their own ideas.

The sounding board is, therefore, an advice organ and its greatest purpose is to give different perspectives and new ideas to the program committee. Their purpose is to give people who are involved with the program on various levels, the opportunity to give their perspective.

Sounding Board Composition

For the most optimised use of the sounding board we recommend a certain composition. We would advise the committee to exist of members of all different faculties and services. This is to be able to give the most comprehensive advice and representation, which requires there to be perspectives from all sides of the program and the organisations/institutions that are involved. These members will be a mix of teachers, students. faculty team members and so on. Ideally, there will be six to eight members, in order for there to be plenty of members, though still have ease in communication.

In addition to these full-time members, we would implement one-time members. If on a specific project it is desirable to have advice on a specific area of expertise or part of a service or something similar, the sounding board can invite them to come and give information or input on the project. This gives more flexibility and the opportunity to give well-informed advice and feedback.

Considering the responsibilities and roles of the members, there will need to be a chair and a minute-taker/secretary. The minute-taker is useful because then it is easier to share information and discussions within the sounding board. The chair makes sure that everyone has the chance to talk and ensures that everyone is heard. Moreover, there should also be a member of the program committee attending the sounding board, because they are advising on the projects of the program committee. This member does not always have to be the same person from the program committee, and we would advise for this member to be the chair so that all the other members are free to speak.

Communication

Communication will have a huge impact on the success of the COV and the workings of the sounding board. First of all, good communication during meetings is important to keep attendees engaged and solution-oriented. Second of all, communication between the different committees of the COV is important to ensure that the voices of all members will be heard. Third of all, communication between the sounding board and the rest of the university is important, as the COV will have to bring together and represent the various faculties and departments.

As described in the previous section, the sounding board will consist of staff members and students with varying backgrounds. This diversity will allow the sounding board to come up with new and unique ideas and suggestions for the programme committee. It could, however, make it challenging to facilitate the meetings of the sounding board. This risk is fairly limited due to the small size of the sounding board, but one factor that should be taken into account is a possible perceived power difference between the staff members and the students, as this could reduce commitment (Yang et al., 2007). It is important that the leader of the sounding board ensures they treat each other with respect to stimulate effective collaboration (Leonard & Frankel, 2011). This could be done by highlighting their similarities in function and by focussing on their common goal of improving the usage of educational facilities (Dickerson et al., 2016).

The main activities of the sounding board are giving opinions about already formed plans of the programme committee and brainstorming about new COV projects . Therefore, the sounding board will likely only meet a few times per year: when a new project is started, and near the end of a project when the programme committee wishes to receive feedback. As meetings are not frequent, and the participants have different working hours, it would be best to organize them during the evening, possibly accompanied by dinner. This would allow the members of the sounding board to stay after their regular working day without having to worry about getting food, whilst also serving as a more informal moment to exchange opinions about the COV..

The outcomes of the sounding board meetings will initially be shared only within the COV. This will be done in two ways: through minutes and in person. One of the regular members of the sounding board,who is not part of the other two committees (Program & Steering) will take minutes, to avoid that they will be written with a bias in favour of the plans of the program committee. The member of the sounding board who is also part of the program committee will elaborate on and lead a discussion about these minutes during the first meeting of the program committee after the sounding board meeting.

Although the programme committee will often have contact with people outside of the COV, this is not the case for the sounding board. Especially because the sounding board is only advisory, it is important to make sure that its voice is heard even when in disagreement with the programme committee. To make sure this happens, we propose that information about every COV project will be published (internally) in a predetermined format. This format should include a section written by the sounding board stating what their input was, and how they think about the final results. This way, the sounding board will have a formal way of sharing its input with the people they represent.

Learning from the past

When it comes down to streamlining multiple high-dynamic departments within a rather innovative organization, it is important to constantly be on the lookout for possible obstacles and issues that may occur. In order to make the best possible recommendations for the future, it is important to look back and reflect on the past. For this reason, Champ Consultancy has decided to dedicate part of its investigation into COV relevant past events and form recommendations on the basis of these events.

With respect to the past, up until roughly june of 2016 there used to be a “Werkgroep Onderwijs Ruimtes (or WOR)” that was established for similar purposes. Whereas both committees share a vision of improving the facilitation of educational resources possibly through centralising certain aspects of it, for some reason it was decided to discontinue the WOR at some point. We believe that the motivation for the discontinuation could contribute significantly to the implementation effectiveness of the COV, hence we have contacted several University staff members to inform them about their knowledge and perspective on the WOR.

For starters, none of the staff members that were contacted managed to explain as to why the Werkgroep Onderwijs Ruimtes was discontinued as to most it occurred as if the WOR “just simply stopped”. This is even more striking when you consider that the general consensus on the initiative was fairly positive. According to the staff, the purpose of the education was important and the connection between departments was definitely desirable. However, the communication of said purpose and the management of staff expectations with respect to the WOR could have been more improved. Based on our current knowledge of the COV and its implementation process, we believe that a lot has already improved with respect to the concern raised above. A lot of time is currently spent on defining the COV scope, purpose and affiliated terms which will hopefully help to ensure that the right expectations are created amongst staff members.

One of the additional concerns we foresee perhaps lies within the general policy of the university. The University of Twente is at its core highly innovative and quite entrepreneurial. For this reason, the university is sometimes inclined to launch renewing projects when the scope or actual desire research has not yet been completed. Especially in the current situation, given the COVID-19 pandemic, it’s important to realise that constant monitoring of desire is highly recommended in order to prevent executive management decisions from becoming disconnected from what is actually needed by UT staff and teachers. In the past period, one may have observed that the original issues for which the COV was brought to life have changed significantly and the actual scope of the COV has therefore shifted regularly. The shifts in scope and environment are initially not a problem as long as the programme organisation keeps verifying with its staff that the changed goals and scope are still relevant and desirable.

As an additional benefit, the clear lines of communication due the close monitoring of relevance and desire of COV affiliated projects will possibly also help to generate commitment and engagement amongst involved staff members. Upon analysing the perspectives of the WOR, we feel that in the prior attempt, the lack of engagement and involvement of affiliated university staff might have contributed to its discontinuation. Educational resources are thoroughly intertwined with people, which means that when it comes to decision making on the topic of educational resources, the related people will both need to be and feel involved in the process. When this is not managed fully, as sometimes occurred in the case of the WOR, people will lose interest or feel misrepresented which affects the effectiveness of the Werkgroep Onderwijsruimtes.

In order to increase its effectiveness, the COV must keep a close eye on the general concerns described above as well as the possible problems that may occur during or after the formation of the organisation, the most relevant ones being:mation of the COV, four main problems can occur

COV members do not show up to meetings or drop out

Here, it is important to figure out why those members dropped out. Is it due to individual circumstances, or is there a systematic flaw in the way the COV operates? Ask the specific member for their reason for leaving and make being part of the COV as pleasant as possible.

The advice of the sounding board is ignored.

Adding a specific section of the sounding board's advice in the report is already a good step. However, which penalties apply when their advice is ignored? One option could be that the decisions made in the report are not valid when they do not comply with the sounding board's advice.

A problem occurs and it is given up quickly

Problems are opportunities and show that something can be improved. For example, when members tend to drop out of a certain board it does not mean that the entire board is not of use. Instead, search for the dropout reason. Maybe the way the meetings are held are ineffective, or a certain member is difficult to work with. (Self-) Reflection of the processes and behaviours are important.

The COV is handled as a low-priority project

This has two consequences. On the one hand, COV members may take their tasks less seriously which makes the COV ineffective and difficult to work with. On the other hand, from an outside perspective, the COV is perceived as unimportant and necessary to consider. Therefore, it is advisable to handle the COV as a high or middle priority project.

Reflection

In order to work on our change goal of finding the best composition, form, interaction, and function of the Sounding Board of the “Centrale Onderwijs Voorzieningen”, we faced different challenges and learned from them.

First, it was challenging to define the change goal we would work on. Although we originally proposed a COV concept and four steps to get there, the circumstances changed in March 2020. Our client became heavily involved in other important covid-related activities and, therefore, had less time to work on the COV with us. Therefore, the proposed steps could not be implemented. This demanded quite some flexibility on our part, but, as we all wanted the COV to be a success, we tried our best to adapt to the new situation. Due to different opinions in our group regarding how to proceed, we had difficulty coming to a unified result and change goal that satisfied all of us and that would benefit our client. Consequently, we decided to be more proactive and proposed to our client that we could best help her by starting with the sounding board proposal. Whilst creating this proposal, we learned how to deal with the opposing opinions within our team, and how to work with a client that does not have a clear goal or vision.

Another challenge was the contact with our client. As she was so busy, it was hard to plan meetings to work on the project together. Our conflict here was that on the one hand, we understood that our client was busy, but on the other hand we set high goals in the beginning that were only achievable with frequent contact. Additionally, our client told us that she prefers face-to-face meetings and a good personal connection. Establishing that via online conferences that took place every two or three weeks was challenging and frustrating for some team members. After many discussions within our team, we worked out how we wanted to proceed with this project. As a result, we learned a lot about the dynamics within our team and how to resolve small conflicts or tensions.

Related to contact with our client, contact with other university staff was also difficult. Our proposed four steps included interviewing staff from the different departments to find out their wishes and experiences with the current system and the previous COV attempt. Due to the situation, we had to abandon this step completely for this module. In general, the planning and gathering information to work on the change goal was more difficult than expected.

Still, as a team we overcome these challenges together. One characteristic of this project was that it was not clear how exactly the COV should look like. Through our work, we helped our client by creating a clear foundation for the structure of the sounding board and COV in general. Furthermore, our recommendations can be used to prevent a second failure of the COV. To conclude, we wish our client all the best with the COV and hope that the COV will become a great success.

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Student University College Twente (ATLAS)

“Rick Akkerman

“People change because change can change things”

Design Thinking to Enhance Student's Ability to be Creative: A case study of a Design Thinking workshop

Rick Akkerman

Introduction

For my change project in the module "Learning by doing" of the Honours track Processes of Change, I worked on increasing awareness of the potential of design thinking in value creation by hosting a hands-on workshop. The goal of this workshop was to enhance student's understanding of design thinking and to persuade them to use this designing tool in the future through experiencing its usefulness during a simple yet meaningful exercise.

The workshop was given during the Create Tomorrow event at the University of Twente on the 29th of May 2020. Create Tomorrow challenges 1.000 students with different nationalities and backgrounds to create innovative solutions and groundbreaking ideas to help companies. With the event being the largest and most popular student think tank of the Netherlands, this was an amazing opportunity to introduce design thinking to an engaged audience. Throughout the planning, organising, and giving the design thinking workshop, I had the pleasure of working together with honours student Thyne Scholte.

In this report, the following will be discussed. First of all, design thinking and its sense of urgency in the bigger context of value creation will be explained in a short theoretical background. Secondly, the target group, change goals, and change approach will be discussed in the methodology. Thirdly, the results will be presented alongside a reflection and evaluation. Fourthly, a piece of reasoned advice to the target group will be explained. Lastly, I will highlight my most important learning experiences during the project and the rest of the PoC track.

Theoretical background

Value creation will be the key component for professionals to identify challenges and develop innovative solutions within the complex and competitive business environment of the future (Kline, 2016). The model for value creation, following the knowledge funnel, requires a reconciliation between two predominant principles in business today, analytical thinking and intuitive thinking (Martin, 2009). Whereas analytical thinking uses deductive reasoning and inductive reasoning to follow the path of innovation, intuitive thinking focuses on the creative instinct as the source of innovation. For example, small companies create value by penetrating new markets, however, they lack the funds and resources to systemize and commoditize their processes. Larger companies mostly find themselves in the last stage of the knowledge funnel. They use systems and procedures to create the value they always did but are less capable of reacting to market changes (BizShifts-Trends, 2013). With the complexity of everyday life increasing, focussing solely on analysis or intuition will not be enough. In the future, the most successful businesses will have to balance analytical thinking and intuitive creativity in a dynamic interplay (Martin, 2010). Design thinking, the integrated approach at the core of the design process, represents a third way of value creation, abductive reasoning.

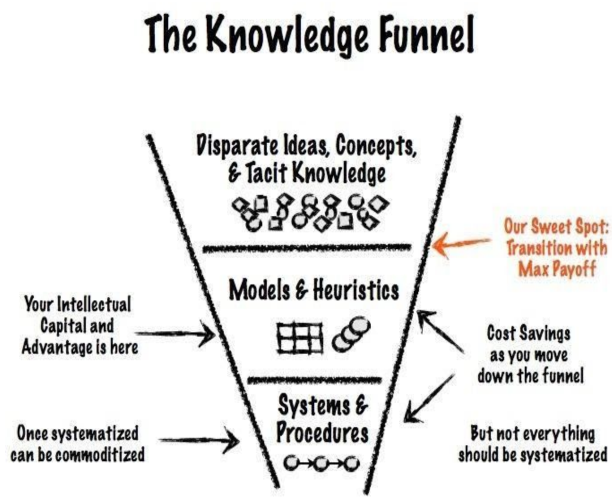

Figure 1; The Knowledge Funnel (Distinctions Asia, 2019)

Design thinking has many different possible interpretations, from the creation of artifacts to the creation of meaning (Johansson et al., 2013). In this report, design and designerly thinking will be defined as a problem-solving activity (Buchanan, 1992). Design thinking is an activity-based, iterative, and continuous process with a strong emphasis on learning-by-doing. More specific, design thinking is a structured approach to design cognition and design learning, enabling multidisciplinary teams to enact positive, design-led change in the world. Our ability to be intuitive, to recognize patterns, to construct ideas that have emotional meaning as well as being functional, form the foundation for design thinking (Brown and Wyatt, 2010). While analytical thinking leads to a mon-disciplinary team, design thinking focuses on multidisciplinary teams and the involvement of all perspectives (Brown 2008; Lindberg et al 2009). This makes design thinking a holistic and interdomain approach towards value creation, which is more applicable to future circumstances than the predominant analytical thinking and intuitive creativity principles.

In this report, the design thinking approach by the Hasso Plattner Institute of Design at Stanford University, commonly known as the d.school, was used. This specific approach describes design thinking as a five-stage process, as can be seen in Figure 2.

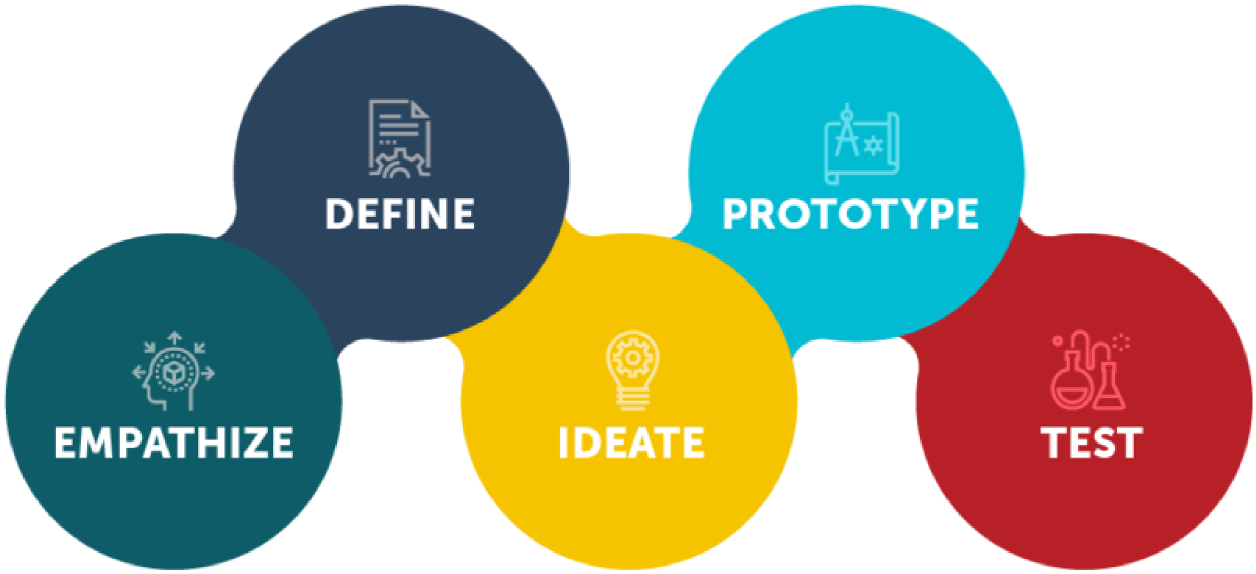

Figure 2: The Design Thinking process (Samaraweera, 2018)

From the five-staged process, it could be argued that Design Thinking has inherently strong similarities with case-based reasoning (CBR). Schank et al. (1999) defined "A GBS is a learn-by-doing simulation in which students pursue a goal by practicing target skills and using relevant content knowledge to help them achieve their goal. During the simulation, students are provided with coaching just in time for them to use the information" (p. 165). In the case of Design Thinking, students are pursuing to pinpoint the exact problem of the user and finding a solution that creates value. Going iteratively through the Design Thinking process, they learn more and more about their user and the problem for which they are trying to solve. At the same time, they will master the skills needed to understand and solve the problem at hand or find people that have those skills and want to contribute to problem-solving. Lastly, coaching is done by the user, who supplies the student with feedback in the Test mode of the Design Thinking process. Looking at these similarities it can be argued that in its core, Design Thinking is a learning-by-doing problem-solving approach.

Unknowingly, many enterprises already use some aspects of Design Thinking, however, do not embrace the approach as a way to move beyond today's conventional problems. One bottleneck that stands in the way of adopting Design Thinking in an organization is that Design Thinking might not be embraced by the entire organization. Another possible bottleneck is that an organization might resist human-centered design and is more inclined to either approach problems analytically or intuitively (Brown and Wyatt, 2010).

Educational systems are seen as the key to a Design Thinking driven 21st century and overcoming these bottlenecks, as this is the only compulsory place for most young people to learn such abductive reasoning competencies (Scheer et al., 2012). The key is not only identifying challenges but also developing innovative solutions that provide real value to stakeholders in a learning-by-doing environment. Being able to understand and comprehend problems that span multiple industries and disciplines or problems that are still poor defined stand at the core of this. By acquiring such competencies, future employers and employees can be successful in tomorrow's complex and competitive business environment.

Methodology

Target group

The target group consisted of students from the University of Twente that participated in the Create Tomorrow think tank event. Create Tomorrow participants were able to sign-up for the Design Thinking workshop approximately one day in advance and signing up was free of charge and not mandatory. Moreover, the Design Thinking workshop was the first workshop offered that morning and there were no parallel workshops. By signing up for the Create Tomorrow event I assumed that many of the participants had an interest in problem-solving already. Around 30 participants were present during the workshop. Some participants were in the same physical room, which means that they were using the same laptop to participate. Participants were in the age group of approximately 18-25 years.

The reason for choosing this target group was two-folded. First of all, the literature points out that the education of young people is the key to a Design Thinking future (Scheer et al., 2012). Hasso Plattner, one of the founders of the Hasso Plattner Institute of Design at Stanford University once said: "Our society is in need of an entrepreneurial mindset, not only for companies but also for every citizen." This resonates back in the principle of the d.school at Stanford to offer Design Thinking education intended specifically for non-designers (Dunne & Martin, 2006; Plattner et al., 2009). With participants of the Create Tomorrow being from every faculty of the University of Twente, this diverse and multi-disciplinary environment would be an amazing place to pursue this vision.

Second of all, while the University of Twente places a high value on constructivist learning already, structured simplified approaches such as the Design Thinking process get less intention. This is something I experienced myself. For example, after learning about Design Thinking through the University Innovation Fellow program, I noticed many integrated aspects of Design Thinking in the curriculum of my study program already. Presenting Design Thinking as a structured problem-solving approach and putting a clear emphasis on all its different aspects is something that I felt was lacking though. Looking back at how knowing about Design Thinking as a concept has helped me, I wanted to allow students of the University of Twente to learn about its potential as a structured problem-solving approach.

While the participants were the main target group within this change project, all other stakeholders involved were also able to learn. The Create Tomorrow organizing team, for instance, might have gained experience with Design Thinking in practice and could see the effect of this workshop on the brainstorming processes of the various working groups. Moreover, the workshop facilitators might have gained more experience with leading groups effectively through the Design Thinking process. In general, in situations where various stakeholders have to collaborate to innovate the experience of the participant, all parties will encounter learning opportunities.

Change goals

The original goal of this change intervention was to enhance student's understanding of Design Thinking. Due to external requirements from Create Tomorrow and unforeseen circumstances caused by the COVID-19 crisis, this goal had to be adjusted to fit the situation at hand. The following requirements needed to be incorporated:

1. The time slot for the change intervention was one hour;
2. The change intervention had to be done online;
3. The change intervention needed to focus on brainstorming and collaborating;
4. The change intervention needed to give participants the required tools to be able to create innovative ideas for the challenges of companies.

Taking all of these requirements into consideration, the goal of the change intervention was redefined as follows: enhance student's understanding of the first three phases of Design Thinking to make them feel confident to use Design Thinking in the future. Making students understand the concept of Design Thinking and its usefulness is hereby seen as the key to students feeling confident enough to use it in the future and changing their ways of approaching problems. Following this line of thinking, there should be lots of attention to creating an effective learning environment. The main five takeaways that I wanted participants to take home were the following:

1. The different stages of Design Thinking and their relation
2. How to think from the user perspective
3. How to converge to a small set of solutions using the impact/effort model
4. How fast thinking and writing down any idea you have, can lead to very viable solutions within a short amount of time
5. How you can think creatively using the Design Thinking structure

Measuring the change in terms of the understanding by participants of Design Thinking will be done by asking two questions to all individual participants before and two questions after the workshop. The following questions will be used before the workshop:

1. What do you expect to learn today?
2. How much do you know about Design Thinking?

And the following questions will be used after the workshop:

1. What did you take away from this session?
2. Are you planning on using Design Thinking in the future?

Substantiating, correlating, and interpreting the answers to these questions will lead to my conclusion on whether I reached the proposed change goal.

Change approach

Before going into any of the knowledge and learning activities, the change intervention was started with a stoke. Stokes are icebreakers and energizers designed to boost energy, build connections, foster empathy, support collaboration, or cultivate creativity in a group setting. While not being a panacea, such energizers contribute to improved student participation, increase student persistence, and ultimately enhance student learning (Chlup & Collins, 2010). The change intervention was in the morning, therefore, in this case, I choose a stoke specifically to boost the energy of participants. The stoke called the "shakedown", involved shaking your arms and legs several times, which required people to stand up and be in an active mood (Taylor & Tania, n.d.). After the energizer, the participants were asked the first two questions using the online tool Mentimeter. Using this piece of interactive presentation software, the participants were able to actively participate during the workshop and have a certain sense of control by influencing what was shown on the presentation screen (Mentimeter, n.d.). At the same time, it allows us as organizers to receive feedback and valuable input for future workshops.

Thereafter, Design Thinking was introduced together with its purpose as a problem-solving approach. Before explaining the five different stages of Design Thinking, it was mentioned that due to the combination of requirements 1 and 3, more emphasis would be placed on the first three phases of Design Thinking. Highlighting the reason for only going in-depth into the first three phases was to avoid the misunderstanding that Design Thinking only has three phases. After this explanation, the participants were introduced to the practical case they would be working on for the following half an hour. The problem of people trying to pull push-doors or the other way around creating uncomfortable situations in the process, also described as the “door opening experience”, posed the perfect problem case for this workshop for three reasons.

Firstly, during the workshop, there was no opportunity for participants to interview users. This is in contrast with the Empathize mode, as Design Thinking should be all about trying to improve the situation for someone else. Empathy is defined as “the ability to recognize what other people are thinking and feeling, and the ability to engage with other people in a social manner”, (Stueber, 2013). In this situation, participants are not in a position to engage with other people socially to empathize with them. However, choosing an everyday problem such as pulling a push-door might enable participants to recognize what other people are thinking and feeling when going through this experience. Secondly, research suggests that concept learning heavily depends on the extraction of a simplified or abstracted generalization from a more complex concept. In short, complex concepts are more difficult to learn (Feldman, 2003). Using a simplified problem case enables the use of Design Thinking as a concept in its most simplified form, resulting in participants being able to learn the foundations of Design Thinking easier. With participants only working for half an hour on the problem case, using simplification will help in effectively reaching the change goal. Lastly, while the concept of opening a door experience may be simplified, there still is a scale of design possibilities and directions the participants can go into. From making the experience of failing to open a door more enjoyable rather than humiliating, to finding an intuitive way of knowing which way doors open, to removing all doors in the world. Any direction is possible within this simple problem case.

After explaining the problem, the participants were divided into five groups of around four to five participants each. Every group was sent to their breakout room with their supervisor guiding them through the Design Thinking process using an online structure in MURAL (Appendix A). While online whiteboards allow for the completion of collaborative design tasks with different group structures, group consciousness and coordination are very important factors (Metz et al., 2015). Interpreting these findings the supervisors were instructed to keep tight control on the time, while at the same time being open for questions. Moreover, the role of the supervisor was to give a short explanation at the start of each different phase. All three other supervisors were University Innovation Fellows, trained in complex problem solving by the Stanford d.school and experienced in guiding groups through the Design Thinking process.

When all the five groups ran through the redefining the door experience exercise, they came back to the central online room. The main concepts of Design Thinking were shortly repeated and to give people a little bit more information on the last two phases of Design Thinking, these were explained more thoroughly. Before the session was ended, the participants were asked the last two questions through Mentimeter. Last but not least, the participants were informed that if they were interested in learning more about Design Thinking, they could open a document with several links to literature and videos about Design Thinking.

Overview of change approach

Takeaway	**Approach**
The first three phases of Design Thinking and their relation	1. Introduction to Design Thinking in the central presentation; 2. Walking through the problem case with short explanations by the supervisor; 3. Summary at the end of the workshop.
Thinking from the user perspective	1. Introduction to Design Thinking in the central presentation; 2. Choosing a problem with which it is easy to envision the experience of other users than yourself; 3. Walking through the first phase with a short explanation by the supervisor; 4. Summary at the end of the workshop.
Converging to a small set of solutions using the impact/effort model	1. Walking through the third phase with a short explanation by the supervisor; 2. Summary at the end of the workshop.
Fast thinking	1. Only having around 10 minutes per phase and time very strictly; 2. Reassuring the participants to trust us in the fast-pace process and to write all of their ideas down; 3. Challenging participants to come up with at least 5 ideas.

Creative thinking	1. The combination of fast-paced, user-driven and fast thinking, leading to many new ideas; 2. Asking participants to write all their ideas down, no matter what.

Table 1: Takeaway linked to approach

Summary of techniques used

Several techniques were used to create an optimal learning environment for the participants. The five most important techniques will be summarised here. Firstly, the target audience had a profound interest in problem-solving as they voluntarily signed up for the workshop. Interest in the subject matter by the learner is one of the foundational principles of the learning-by-doing approach, as it leads to engagement. Secondly, using concept simplification on the problem case allowed for teaching a simplified version of Design Thinking. Conceptual learning heavily depends on simplification as more complex concepts are more difficult to learn, making it easier for the participants to learn the principles of Design Thinking. Thirdly, repeating the Design Thinking principles. As the amount of correctly recalled information increases with repetition, this made sure that participants learned these principles well (Bromage & Mayer, 1986). Fourthly, inviting the participants to trust in you as a supervisor signals readiness to take on the responsibilities that their trust would bring (Scanlon, 1990). The importance of establishing trust is also emphasized by Cialdini (2016). While set in a different context, the red line stays the same, before participants will allow you to ask for their collaboration you need to gain their trust. This way the participants can feel more comfortable, resulting in them being able to fully participate in the Design Thinking workshop. Lastly, the message and call-to-actions throughout the presentation were as clear as possible. By delivering the core elements you want your participants to focus on, the more attention you will draw, following Cialdini (2016).

Results

Participant's Pre-workshop evaluation

Participant's consensus was that Design Thinking is about ideation, the creation of ideas (Figure 3). Participants expected to learn about creativity and thinking out of the box (takeaway 5). In that line of thought, they refer to Design Thinking as a new brainstorming method, a way to translate ideas into action, or as a way to find suitable solutions (takeaway 4).

While many of these expectations relate to Design Thinking, foundational principles such as empathizing and defining are not mentioned (takeaway 1). Thinking from the user perspective forms the heart of Design Thinking and is not mentioned once (takeaway 2). Design Thinking is often referred to as a way to create lots of ideas, however, converging to a smaller set of ideas is not explicitly mentioned (takeaway 3).

These answers indicate that, while participants knew that Design Thinking can serve as a brainstorming tool, they lacked knowledge on the foundational principles of Design Thinking. Answers such as “knowledge about new or a-typical sources of energy” also indicated that some participants were not familiar with Design Thinking at all.

The answers to the second question confirm the interpretation of the answers to the first question (Figure 4). While many participants already knew about Design Thinking, there is also a group of participants that have never heard of the concept. The size of the latter group is relatively large, indicating that maybe more participants were not familiar with Design Thinking than earlier interpreted.

Figure 3: The first question

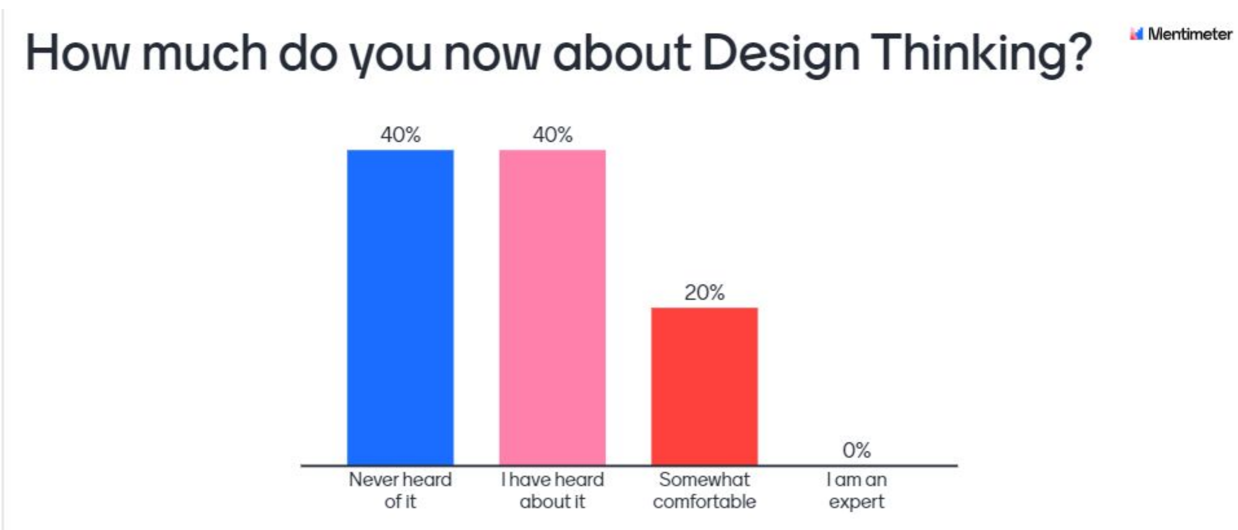

Figure 4: The second question

Participant’s Post-workshop evaluation

At the end of the session, we asked participants what they had learned. The answers to this question had many similarities with the answer to the first question (Figure 5). The participants still saw Design Thinking as a way to think outside of the box and as a way of creative thinking; creating different solutions (takeaway 5). Moreover, participants relate Design Thinking too fast thinking and brainstorming (takeaway 4). Interestingly, the participants now also relate to key design phases and the Design Thinking model. These answers suggest that the participants took away that Design Thinking consists of different phases and is not only about ideation (takeaway 1). Answers such as "interaction with users" and "integrating the core" indicate that participants believe there is some foundational principle for Design Thinking focussing on users (takeaway 2). The answer "effort impact" indicates that at least one participant took away the importance of converging to a smaller set of solutions (takeaway 3). These outcomes indicate a learning curve. Whereas participants did not relate takeaway 1, 2, and 3 to Design Thinking at first, they somewhat related all of these takeaways after the workshop.

Finally, we asked: "Are you planning on using Design Thinking in the future?" (Figure 6). Eleven participants said yes, two participants said maybe and zero participants said no. While this indicates that not all participants were answering the questions, it also indicates that the majority of participants that did answer feel confident enough to use Design Thinking in the future.

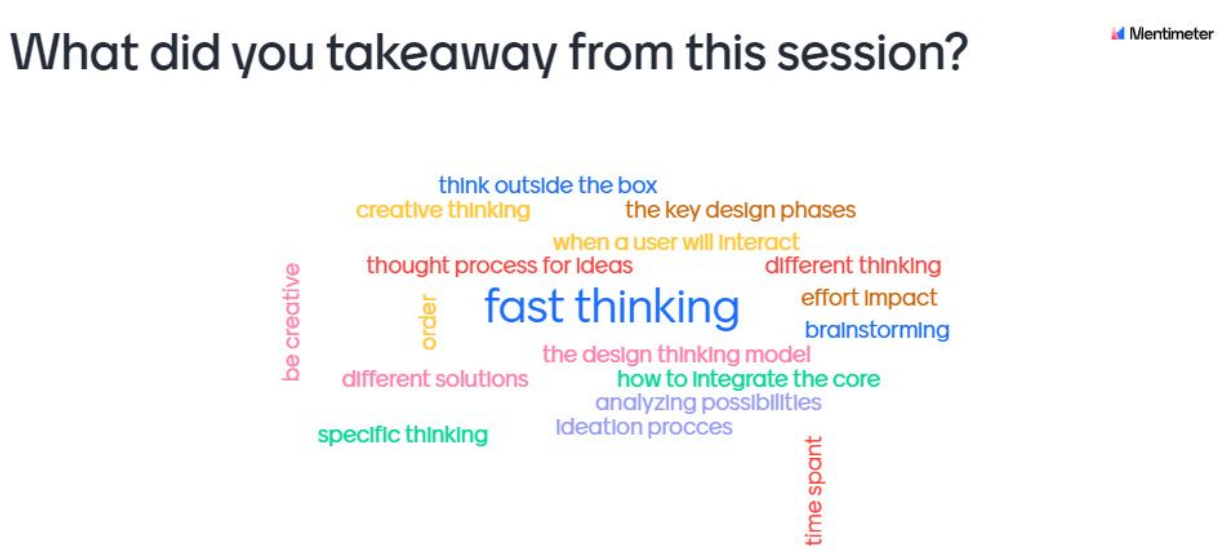

Figure 5: The third question

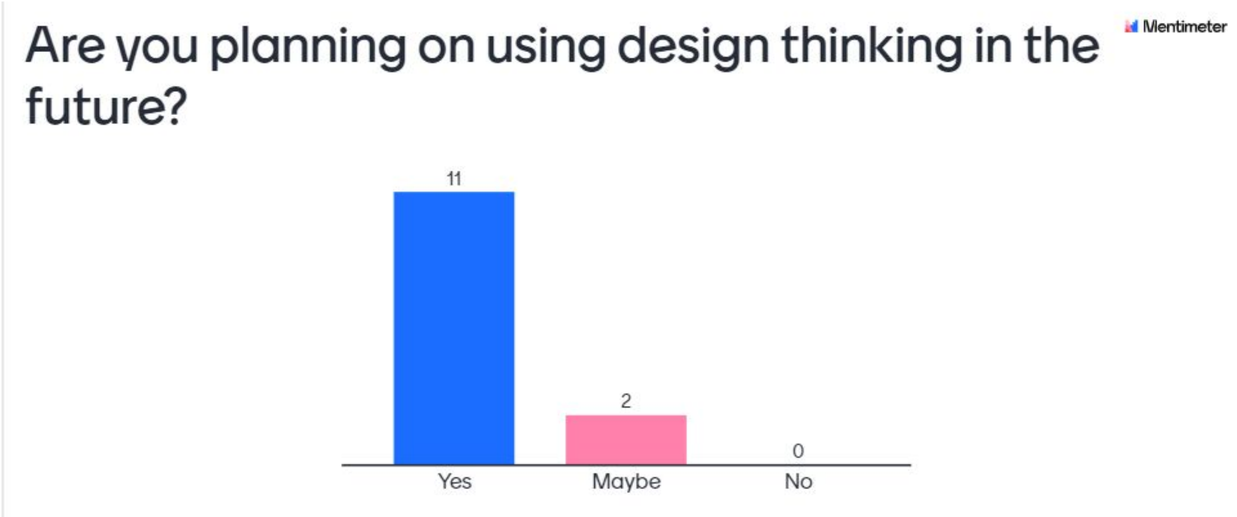

Figure 6: The fourth question

Conclusion

In terms of understanding, the results show a general learning curve. Participants went from naming two foundational principles of Design Thinking before the workshop, to taking away all five after the workshop. Moreover, the results show that participants went from little pre-knowledge of Design Thinking to planning to use Design Thinking in the future. This indicates that the first steps towards changing their way of approaching problems have been effectively taken. With about ten participants entering the online document with more information about Design Thinking after the workshop, this shows that the workshop at least enthused students to deepen their knowledge of Design Thinking. The results might be biased because, as earlier mentioned, the participants were already interested in complex problem-solving.

Moreover, the difference between the total number of participants and reactions to the different questions might be the consequence of several participants using one laptop to participate. This way the opinions of multiple participants might have been mixed into one answer. Moreover, participants may have assumed only being able to answer once for each open question, resulting in participants not writing down all their expectations and takeaways.

Advice

After experiencing this crash course on Design Thinking, participations should continue with gaining knowledge of Design Thinking and abductive reasoning approaches. These competencies are the key to being able to create real value in the future. Participants can start by exploring the sources of information that are mentioned in the document sent to them at the end of the workshop (Appendix B). These sources do not go too far away from their knowledge of Design Thinking. Thereafter more deepening sources, such as papers written by researchers at the Hasso Plattner Institute of Design could be used. Keep in mind though, that Design

Thinking is all about doing, so I want to advise students not to waste too much time reading about Design Thinking. Go out and find initiatives or organisations that provide workshops or study programs, so that you can learn by doing.

Learning experiences

Throughout organising, planning, and giving this Design Thinking workshop, I realised those teaching concepts are extremely difficult. Especially concepts that students can only experience and not just read about require a lot of effort and time from students for them to understand. With my approach to simplifying the concept in combination with a target audience that was enthusiastic to learn about Design Thinking, this workshop was effective in teaching the Design Thinking concept. However, I could not have imagined how this workshop would have gone without those two basic principles. In the future, I want to be able to also give Design Thinking workshops for people that are not specifically interested in origin. This would require me to explore literature and teaching methods that create an even more engaging learning environment for students to stay involved.

From the first lecture with Tsjalle van der Burg, my expectations for this program were set sky high and the fun thing is, it never let me down. Throughout my journey, the teachers, guest speakers, and coaches have taught me to look different at education, consultancy, and life in general. Every semester, module, week, and course there was always some sort of takeaway. Ones that I remember the most are the suggestion to sometimes just take a chair and do nothing other than sitting or my coach showing me how I can improve in tackling problems more directly. Moreover, the Honours Program has taught me so many things that I never expected I would ever find important, storytelling for instance. Being able to create an empathize story for your audience and taking them along your journey to in the end teach them an insight is something that is now so valuable in my everyday life. I have learned about myself that to hit a home run you shouldn’t try to hit harder but try to hit in the middle. Putting the right amount of effort and energy into the direction you envision is so much more important, than endlessly trying to put effort and energy into something hoping it will just get you somewhere. In short, the Honours program has taught me basic life lessons that support me in my development as a change-maker and will allow me to in the future not only challenge myself but also the people around me to create an impact on our social/technical environment.

Appendix A

Design Thinking | Brainstorming
A structured approach to planning design-led strategy and innovation
For:
Redefining the Door Experience
Created:
29/05/2020
1 Empathize | Experiences
Time: 4 min
2 Empathize | Feelings
Time: 4 min
3 Define | Needs/Insights
Time: 3 min
4 Define | Problem Statement
Time: 5 min
How might we ...
5 Ideate | Solutions
Time: 5 min
6 Ideate | Impact/Effort
Time: 3 min
Effort
Low
High
Impact
Low
High
UNIVERSITY OF TWENTE.
INNOVATION FELLOWS

Appendix B

Dear participant,

Thank you for attending one of our Design Thinking workshops! We hope that you enjoyed the experience and got some inspiration on how to structure and boost your brainstorms.

If you want to learn more about the tools we used during this workshop, the Design Thinking structure or the University Innovation Fellows program, please find all of that information in this document.

We want to wish you lots of good luck today during the Create Tomorrow event and make sure to have fun and effective brainstorms!

Kind regards,
University Innovation Fellows Twente

P.S. On the 8th of August we will be hosting an online relay race around the globe and through all timezones with workshops relating to Design Thinking and much more! Interested? Check out more information here.

Website | Instagram | Facebook

MURAL (Click here)
Design Thinking Crash course (Click here)
Tom Kelly on Design Thinking (Click here)
Design Thinking PDF (Click here)

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Student University College Twente (ATLAS)

“Thyne Scholte

“Before you can ask someone else to change themselves, make sure you can too!”

POC: Learning by Doing

Individual Report

By Thyne Scholte

10th of July 2020

Thank you to My, Satwik, and Simon for being the additional facilitators for the Create Tomorrow Workshop. Also, I would like to thank Sanne for being my personal coach for the past couple months.

Introduction

With the COVID-19 virus spreading globally, wreaking havoc, and being identified as a pandemic by the World Health Organization a lot of change has been happening around us. One of those changes is in our workspace. The professional industry has all gone online. Luckily we live in an ideal time where the internet allows us to presume most of our activities. It is thus important to use what we have access to, to continue the plans set before the outbreak to mitigate the economic effects. I am part of the University Innovation Fellows, a global initiative by Stanford University, that trains students to make an impact on their campuses. As we are all over the world we often use online tools to share ideas and information. This made us prepared for the outbreak but also the obligation to help others learn how to do so.

As a University Innovation Fellow, I followed a 6-week online (but still highly practical) course about Design Thinking. Design Thinking is all about going through a process of five phases to ensure that the outcome is a design or prototype that is user-centered. This is to ensure that the final product is what the user needs. Teaching students at a highly-entrepreneurial university, like the UT, such skills will allow them to create businesses around a product or service that solves a gap in the market of a specific target group of people.

As a University Innovation Fellow (UIF) I was asked by Create Tomorrow 2020 to host a workshop about Design Thinking together with Rick Akkerman. To give a little background. Create Tomorrow usually organizes one of the largest student think tanks in the world and the winner earns a prize. Due to the COVID-19 outbreak, the entire event had to be hosted online. The event would take place on the 29th of May and our workshop would be at 9 am. The goal of our workshop is to teach the students about Design Thinking to help them brainstorm ideas about their respective topics for Create Tomorrow, all while it being online. At the same time, we wanted to give them the tools to emulate the online brainstorming session during the COVID-19 pandemic.

I had to design the workshop to meet all the requirements of Create Tomorrow and to ensure a change among the participants.

Change Goal

Goal: Teaching students on how to use the phases of Design Thinking to come up with solutions to real-life problems that are user-centered all while being in an online environment.

Outcomes:

- Learn about first three phases of Design Thinking
- Learn how to host an online Design Thinking Workshop
- Come up with solutions to tomorrow's problems

Design Thinking is a non-linear process that seeks to understand those involved in a certain challenge and how to find innovative solutions to solve them. Design Thinking is divided up into five main phases: Emphasize, Define, Ideate, Prototype, and Test. Figure 1 quickly explains what happens in each of these phases (Harvard, 2020).

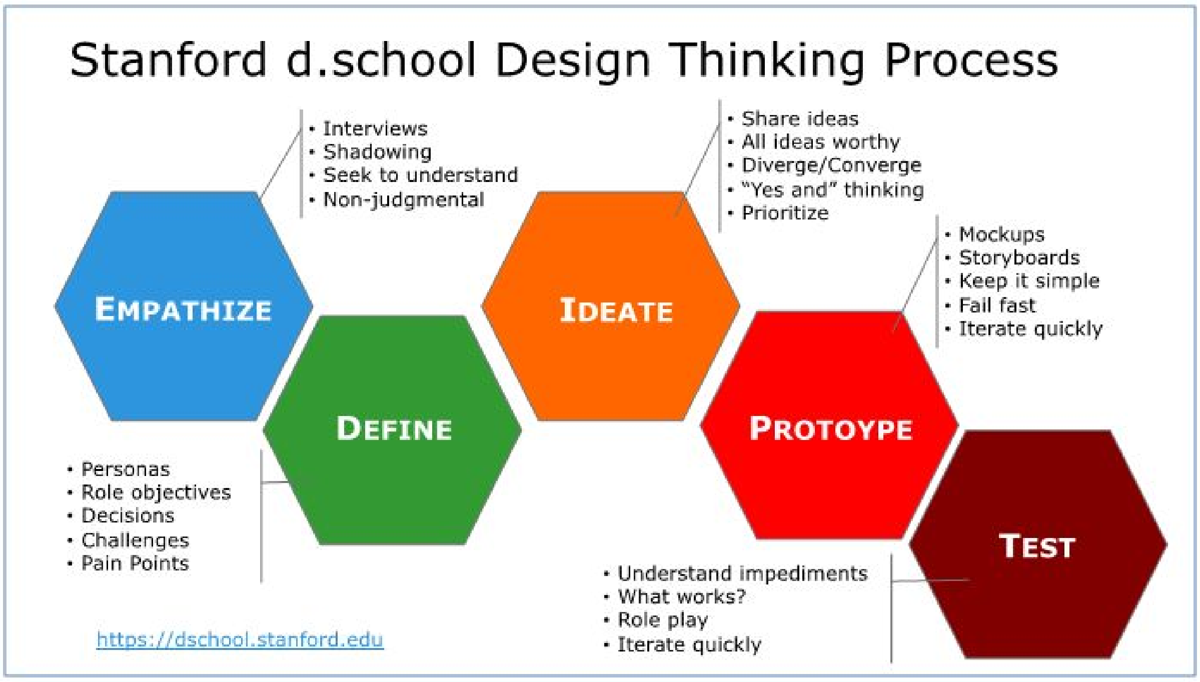


Figure 1: The five phases of Design Thinking (Original Concept from the Design School of Stanford)

Design thinking is so important in our lives now as we often encounter wicked problems, called so because they don't have a clearly defined main problem. Using the Design Thinking process you reframe these challenges to designing what is important for the user (Kumar, V.D.). This ensures that the right steps are taken to ideate and prototype new ways to meet the needs of the user.

The Design Thinking process is also highly flexible (IDF, 2020). With an ever fast-changing world, it is important to sometimes not fully restart but going back to check if the approach is taken also works considering a change in the user’s needs. With Design Thinking, if while testing your prototype does not meet the needs of the users then you can go back to the emphasis phase to identify where your prototype deviated from the user’s desires.

Research has shown that the Design Thinking process had a positive effect on the ability of a team to come up with innovative ideas due to the enhancements in sensing the user’s needs (Kurtmollaiev et al., 2018). As part of this workshop, we want to introduce the idea of Design Thinking to possibly create a similar positive effect among students of the Create Tomorrow Think Tank.

As mentioned in the change goal we also wanted to show how even though the Corona crisis does not allow us to meet in person we can still go through the phases of Design Thinking almost as effectively. This is done using different online tools that encourage interactivity like Mural and Mentimeter. In the end, we also decided to give a one-page online handout that would include the tools we used for the workshop so others can simply emulate.

Change Approach

I organized a session (Together with RIck Akkerman) about Design Thinking during the Create Tomorrow Online think tank on the 29th of May. The session was one hour long and divided into three phases: Introduction to Design Thinking, Group Brainstorming Assignment, and Conclusion. The slides used can be found in Appendix B.

The target group is around thirty bachelor and master students mostly from the University of Twente with a variety of different expertise. As they are students who joined Create Tomorrow they are passionate about finding new solutions to wicked and global problems.

Before the final plan was created an initial plan was presented to a couple of parties to receive feedback. First, my fellow POC cohort and Professors who recommended I should ensure that I know my target audience for the workshop. Lara said that we should include a more quantitative way of measuring change. We then proceeded to implement a Menti with two questions before and after the workshop.

We also got feedback from fellow UIF'ers who are experienced in organizing Design Thinking workshops, who suggested we still deal with three out of five phases of design thinking and that there should be a maximum number of participants in each breakout session. This feedback was then applied to the final presentation.

This feedback was then used in the final workshop outlines below.

Introduction to Design Thinking (15 minutes, Slides 1-4)

We start off by quickly introducing ourselves and giving an overview of what the goal of today is, "Learning how to use Design Thinking to Brainstorm Ideas that are user-centered". This allows the participants to already set certain expectations according to Victor Deconinck (personal communication, April 29, 2019).

After that, we go into a stoke. A Stoke is a small activity that either creates focus, boosts energy, nurtures camaraderie, or communicates a mindset. Every UIF'ers has their favorite stoke. These stokes are used to ignite activity among the participants. Since it is online many stokes would not work as they won't be easily able to participate in small groups. Thus for this session, we decided to use the stoke Shake Down (Instructions in Appendix A). We decided on this one as it boosts energy which is highly important considering it is nine in the morning and because it can all be done in your own room.

Studies have shown that having an energizer before an activity can serve as a transition from what they were doing before the session to the activities in the session (N.d. California Academy of Sciences, 2020). At the same when students have undergone an energizer, they are more likely to not exhibit disruptive behavior (Raney, M., Henriksen, A., & Minton, J., 2017). This is beneficial to us as higher concentration levels can lead to more information being given, leading to a more relevant change.

Then I ask the participants to open up menti.com and answer a couple of questions. This will be elaborated on in the results section.

After that, we get into the Design thinking process. For this workshop, the decision was to explain only three out of the five phases of Design Thinking. As we only had one hour and Create Tomorrow is a think tank they just need to come up with ideas and don't actually have to prototype them. In the end, we would also provide them with tools to further their learning of the last two phases as they are still crucial.

Group Brainstorming Assignment (30 minutes, Slide 5)

Succeeding the introduction to Design Thinking we split the group up into five smaller groups. Each group had one facilitator who was either me, Rick, or another University Innovation Fellow to whom we have given a facilitators guide explaining (Appendix C) how to run phase 2 of the session. This would make the groups personal as the number of expected participants would be around five per group. This would ensure that everyone has a voice and feels comfortable in the situation. This idea came from the Harvard Business School case, “Teaming at Disney Animation” (Edmondson, A., Ager, D., Harburg, E., & Bartlett, N., 2015). Where they reduced the meeting to a maximum of six to increase their effectiveness. While that was in-person communication I don't think it is farfetched that it is similar (maybe even more extreme) when done online.

As discussed previously the focus will be on the first three phases of Design Thinking. In the smaller groups, the facilitator goes through the phases together with the participant using an online whiteboard platform called Mural (See Figure 2). This allows the students to go through a similar process of brainstorming using sticky notes and a wall but then online. Using this platform shows that there are replacements for certain activities we do as a student while being socially distant.

The topic we chose was the door opening experience. The first phase of Design Thinking is emphasized and such a topic as the door opening experience is something that anybody can relate to as they most likely have once noticed an annoyance with the design of a certain door. The topic makes it easy to emulate a brainstorming session in a short amount of time where the designers do not have to go out to talk to the users to emphasize with them.

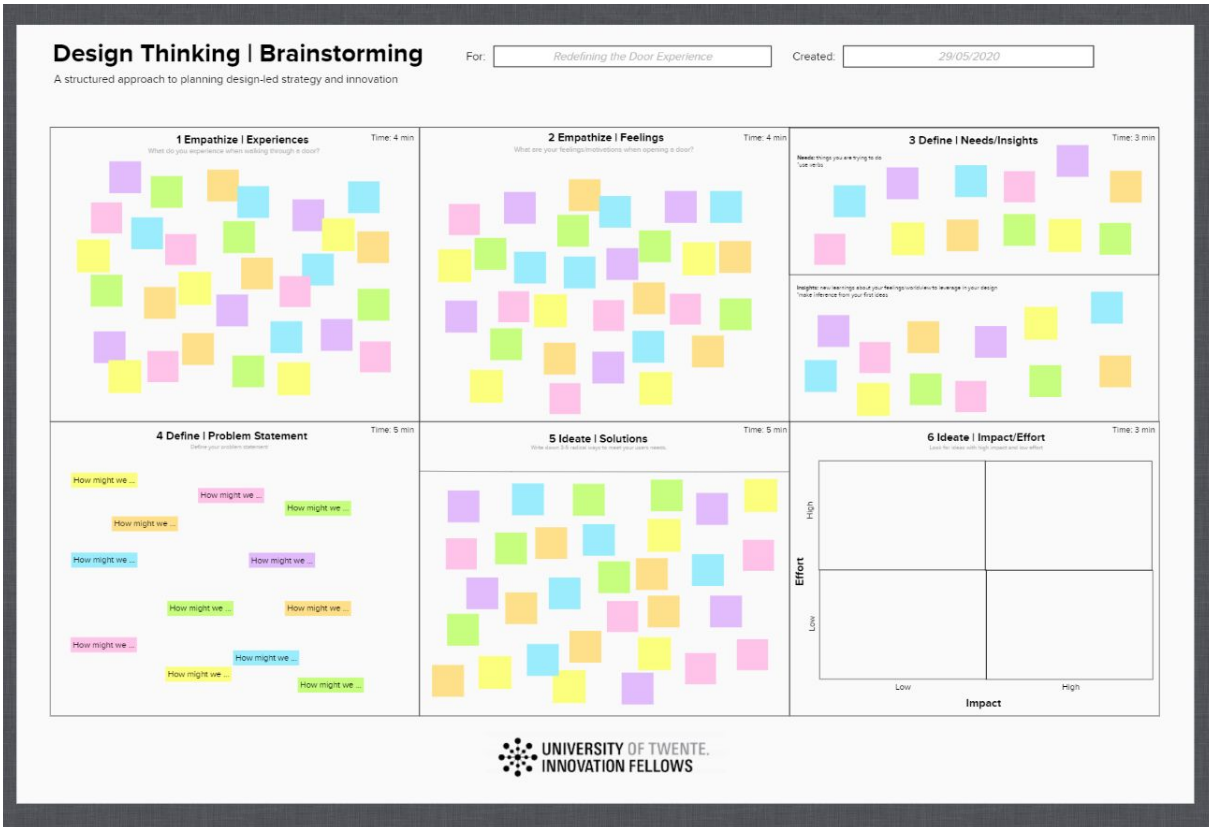


Figure 2: Brainstorming Mural

The mural has different questions relating to the phases of design thinking. The students are then given a couple of minutes per section to ensure a fast-paced environment. The facilitator ensures that everything goes according to plan but also to make sure that the participants do not feel rushed. The reason we aimed for a fast-paced environment is to make the participants feel like what they are doing is so important and therefore are not afraid of making mistakes as sometimes the greatest ideas seem stupid at first.

Conclusion (15 minutes, Slides 6-9)

When all the groups are back together in the main call, we start with a quick summary of what we have seen today throughout the group. We already had a couple of expected outcomes prepared to talk about but also included what we learned from all the breakout sessions. This gives the audience something to take with them from the previous thirty minutes and makes them feel involved as we mention what happened in our smaller groups. This is based on the heart head hands method told by Victor Deconinck (personal communication, April 29, 2019).

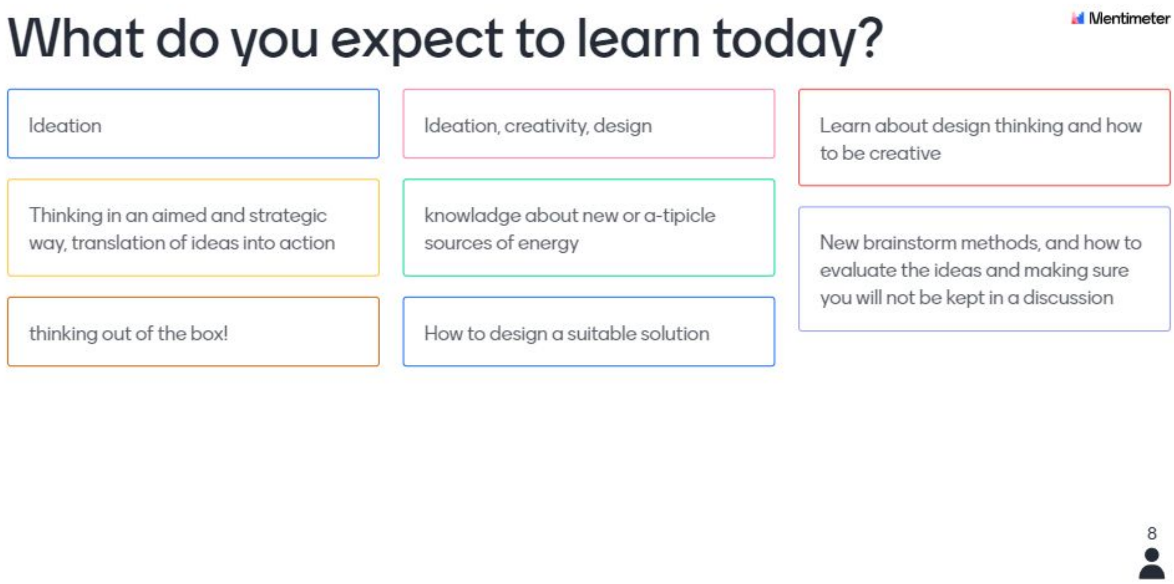
As previously mentioned the focus of this session was on the first three phases, with that a quick explanation prototyping and testing phase is still necessary to wrap it up. After that, we go into another Menti to test the change made throughout the session.

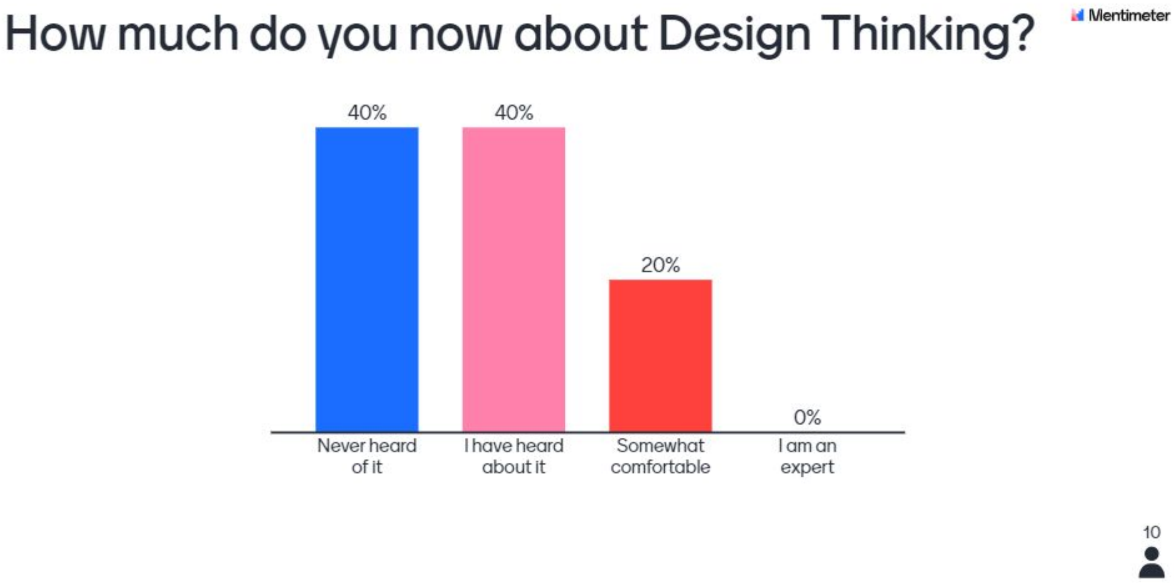
Concluding the workshop we give a quick explanation of the University Innovation Fellows are and provide them one-pager (Appendix D) on how they can further dive into design thinking with videos, articles, crash courses, etc.

Results

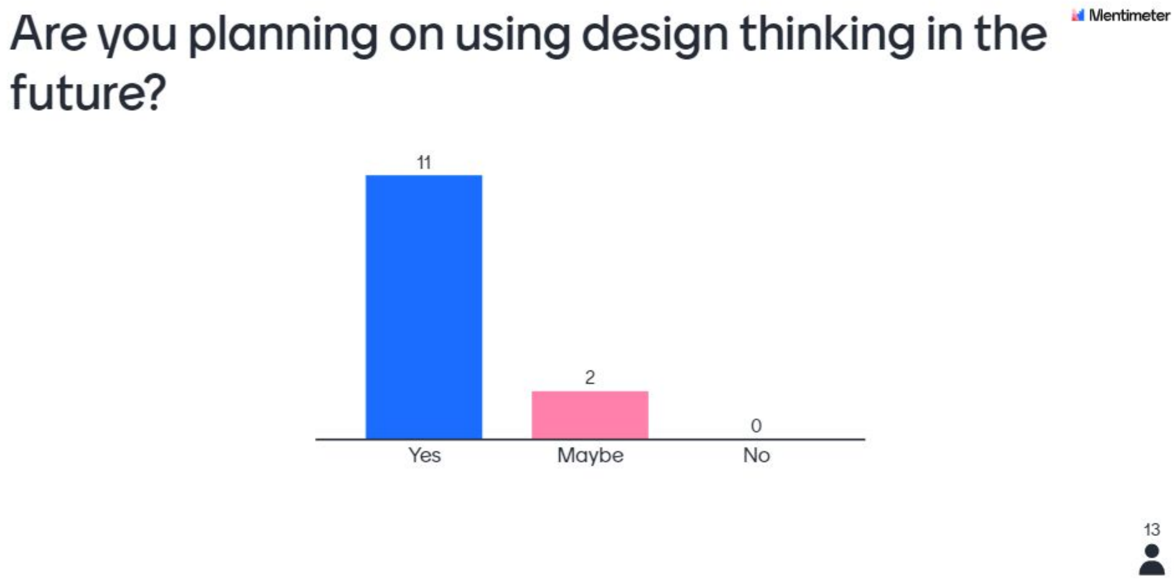
At the end of the workshop, everyone said that they learned something meaningful and were happy to be a part of it. At the same time, I have also identified a couple of things that could have been improved to ensure a more smooth and meaningful learning/change experience. These experiences are all my opinion and while they are valuable quantitative evidence showing learning is more concrete. That's why as outlined in the methodology I had the participants of the workshop answer a Menti questionnaire before and after the workshop.

Before the workshop:





After the workshop:



From the following questions answered by participants of the workshop, we can see that initially, they did not know a lot about design thinking and that they are planning on using it in the future. Then the takeaways included integral parts of the presentation, examples include "Effort Impact" which is an essential component of the ideation phase to ensure that ideas require a low effort but have a high impact. Other ones included fast thinking which was done by the small amount of time for each phase or thinking outside of the box. Overall from the results from the Menti, I believe that a good amount of people learned about Design Thinking and are using it which is exactly the change goal of this project.

However certain things could have been improved on in the session. Outside of the specific technical difficulties, we did not fully know how the participants would be attending. We expected everybody to attend using their own computer in their separate rooms. However several groups attended behind one computer. This made it quite difficult to interact with them and split them up into smaller groups. This led to a bit less involvement of certain participants then we would have wanted. Therefore next time we should clearly mention that everybody should join with their own laptop to more effectively go throughout the breakout session (Phase 2).

I learned a lot from my change approach. I learned that technical failures always happen but that what is most important is that you are as prepared are possible and flexible for changes. With this, I learned that in the future I should always confirm certain (often obvious) aspects for the session instead of just assuming it will be as expected. This can prevent problematic situations like the problem with multiple people behind one computer described previously.

Advice

My advice to the target group is to continue to use the Design Thinking method to ensure that the prototypes they make while trying to become an entrepreneur or just to solve a problem are user-centered to ensure they truly fill a necessary gap in the market. They can continue to learn about Design Thinking by looking at the links in the document sent to them at the end of the workshop.

My advice to people who want to organize a similar design thinking workshop (also online) is to use similar tools as to what we did. At the same time really ensure that the individual groups with whom you go through the steps are small to allow for short discussions. A lot of different tools can be used to encourage interactivity however try to keep it simple for both yourself, as the host, and the participants as technical difficulties are bound to arise.

Reflection on the Processes of Change Track

Throughout the processes of change track, I have learned a lot about change interventions and how humans act in society. However, I believe that what I learned most about is myself.

I have learned that whether I am a good leader depends on who I am leading. From my insights discovery profile, I am both red and blue. I simplify that down to being both a director (Red) and someone who likes exact answers (Blue), Insights calls it a reformer. With this, I believe that I am an effective change leader when those I am leading like efficiency and also have the blue aspect in them. I see this when I am working in groups as I personally dislike not seeing us not taking steps forward, but this does not mean I don’t believe in the statement, “You might need to take a step back to take two steps forward”. As a change leader, I want to together with my group go towards achieving goals and work in a fast-paced environment where we don’t spend too much time discussing but instead take action.

Together with my personal development coach, I went into something different. Before going into it I would like to say that it is tough to explain the journey of realization I went on with my coach on paper and that I will not share everything as it is highly personal, but will share just enough to show growth. My goal is to live more in the moment. What I have realized in the past months is that I always look towards the future and imagine what it is going to be like. I apply for many different cool opportunities like going for a semester abroad at Georgia Institute of Technology or going to China for summer school. I have noticed a cycle, that when I get that opportunity I don’t stand still and enjoy/appreciate where I am and the work it took to get there. Instead, I just look for the next opportunity.

I started to notice this cycle because of the Corona outbreak which canceled lots of the activities that I was planning on going to. This made me think about all the hours I spent obsessing over the future and how I can be better instead of just enjoying what I already have and go have some fun or strive for excellence. All of this wasted time. While I do not believe that it is all just a waste of time I believe I could allocate it better.

A simple solution could be to worry less about the future but we live in a world where if we don’t apply for opportunities and actively seek it out far in advance, nothing will just come for free. So while that would solve the main issue of not living in the moment it causes lots of other issues at the same time.

I, together with the help of my couch, decided to try to find subproblems. The most promising one is competitiveness. I am highly competitive which is driven by me being scared of having unfulfilled potential. When I feel comfortable in a project or course I often don’t put in more effort than I need to. Instead, I choose to put my time and energy into other initiatives. Thus with that, I am looking into future opportunities to try to fuel my competitiveness instead of putting everything that I got into an opportunity that I was already given. I hope this somewhat makes sense.

A solution to this is increased levels of competition during the process of completing a project. When Desiree once asked during a lecture about what aspects of consulting are the most interesting to me I said the end and the beginning. I believe this is because it’s easy for me to be interested then because of my inner competitiveness. However the issue is the middle part, that is when I put just enough effort (but no more) into making the deliverable. Again, I always look into the future and don’t live in the moment.

An example of increased levels of either inner or external competitiveness is the consulting competition during the 5th module. An even better example is University Innovation Fellows, as while I made it into the program I see that previous cohorts have accomplished amazing things and my inner competitiveness drives me to work hard to achieve such success (hopefully sometime :D).

This all related back to my insights discovery profile that states that I am not feeling challenged in my workspace. Therefore what I can conclude from my sessions so far with my coach is that I need to continually find ways to challenge myself in the projects I am doing by doing something. What exactly I don’t know yet.

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Appendix A: Instructions for Shake Down Stoke

INSTRUCTIONS

of PEOPLE

0 3-∞ ∞

Facilitator says:

1| Everyone stand up!

2| Shake out your right arm 8 times, counting down from 8.

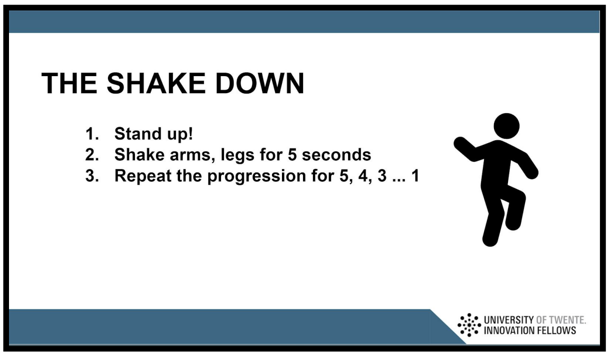
3| Shake out your left arm 8 times, counting down from 8.

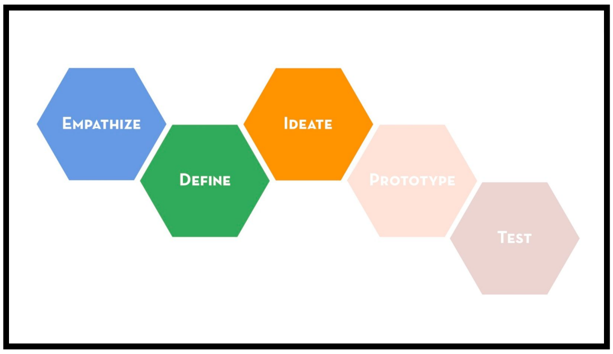
4| Shake out your right leg 8 times, counting down from 8.

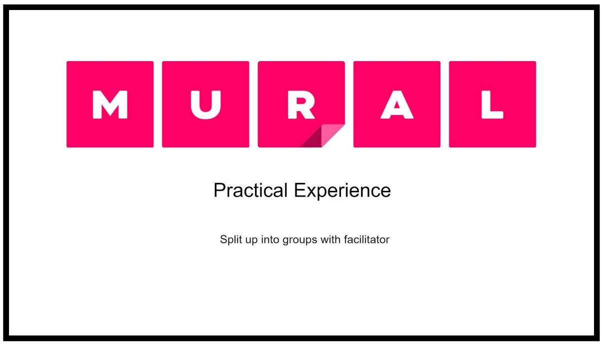
5| Shake out your left leg 8 times, counting down from 8.

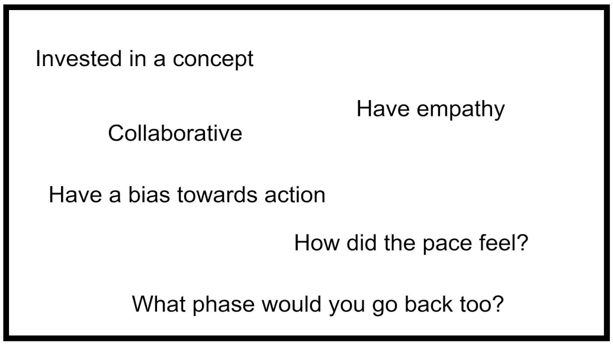
5| Repeat the progression for 7, then 6, then 5, 4, 3, 2, 1!

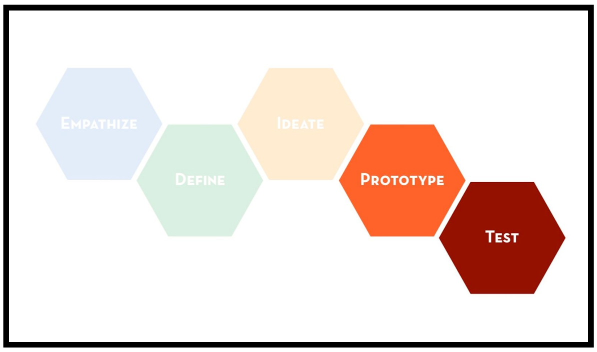
Appendix B: Presentation Slides











Applying Design Thinking

- [x] Final Document

uiftwente
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Appendix C:

Facilitators Guide for

Create Tomorrow 2020

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27th May 2020 at 9:00 am

Preparation for the workshop:

1. Sign up for Mural under design lab
   a. https://app.mural.co/signin-join-workspace?returnUrl=%2Finvitation%2Fteam%2Fdesignlabuniveristyoftwente4963%3Fcode%3D7134eaff5fac493d81bbb86418fb7d82%26sender%3Dmiliohan4937&title=DesignLab+Univeristy+of+Twente&viral=true
2.

Group Number	Jitsi Room	Mural for facilitator	Mural for participants
1: Thyne	Group 1: https://meet.jit.si/Create_1	Click here	https://app.mural.co/t/rickakkerman3874/m/rickakkerman3874/1590687838021/93512c2c3843706101007e90c60ebb3f6dd88479
2: Rick	Group 2: https://meet.jit.si/Create_2	Click here	https://app.mural.co/t/rickakkerman3874/m/rickakkerman3874/1590687830669/954fb190037bd5c7c376d1e9c9e73504ab224a8d
3: My	Group 3: https://meet.jit.si/Create_3	Click here	https://app.mural.co/t/rickakkerman3874/m/rickakkerman3874/1590687821010/806fbd5d983085ff86a3ba12bc0706dbe1e7cc0b
4: Simon	Group 4: https://meet.jit.si/Create_4	Click here	https://app.mural.co/t/rickakkerman3874/

			m/rickakkerman3874/1590687813517/7f63cfc1efd55909a31cf129e51c1c6aee42298d
5: Satwik	Group 5: https://meet.jit.si/Create_5	Click here	https://app.mural.co/t/rickakkerman3874/m/rickakkerman3874/1590687802895/2c7db020cbb21e8ded2d2351ea922de1bf87e25d

3. Join the Jisti room at 8:45 am, have fun, and be sure to participate.

Spotify Playlist:
https://open.spotify.com/playlist/2nNg9RDEANEvcXMCSWsp7O?si=BJC5FC7aSVep9D4dw2o2rw

At 9:00 am the program will start. We will give you a link to a Jitsi room that will fill up around 9:15 am with a group of participants of Create Tomorrow. Before this, we have introduced the participants to design thinking and did a little warming up exercise.

Step by step:

1. Start a 30-minute timer.
2. A quick introduction of yourself to the group (Not enough time for everyone else to introduce themselves)
3. Share the mural you will be using in the group chat of your Jitsi
4. Inform them that this session will be fast-paced. Do not feel worried or stressed if you are unable to write down all your amazing ideas. Every idea is worth writing down so don't feel afraid. Trust us!
5. Quick introduction of the topic
6. Move to the first box. What do they experience when opening a door?
    a. Between phases quickly go over the ideas brought up.
7. Second bow. What are their feelings/motivations when opening /closing a door?
8. Third box. Things they are trying to do and new learnings about their feelings/worldview to
9. Fourth box. Everyone creates one how might we question!
    a. Vote on which one to use for the next section
10. Fifth box. Find solutions to one HMW question
11. Sixth box. Move the solutions onto the scale of impact and effort. Everyone can move all of the post its. It should be obvious about what fits where.

Appendix D: End of Workshop Flyer

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Dear participant,

Thank you for attending one of our Design Thinking workshops! We hope that you enjoyed the experience and got some inspiration on how to structure and boost your brainstorms.

If you want to learn more about the tools we used during this workshop, the Design Thinking structure or the University Innovation Fellows program, please find all of that information in this document.

We want to wish you lots of good luck today during the Create Tomorrow event and make sure to have fun and effective brainstorms!

Kind regards,
University Innovation Fellows Twente

P.S. On the 8th of August we will be hosting an online relay race around the globe and through all timezones with workshops relating to Design Thinking and much more! Interested? Check out more information here.

Website | Instagram | Facebook

MURAL (Click here)
Design Thinking Crash course (Click here)
Tom Kelly on Design Thinking (Click here)
Design Thinking PDF (Click here)

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