# IMT 4313 Design, Creativity and Innovation

Individual report for group project

Candidate nr: 91036

## Introduction

The group part of the exam gave us the chance to practically apply the concepts of creativity and innovation, together with design, in order to design a physical prototype that would support the health of the elderly and that would also inspire children. Achieving this; we had to work together as a team in a design process.

During the process we faced a lot of common design issues. Including; how to conceive an idea - "ideation". How to develop the idea based on a specific need (mainly the health of the elderly), and how to give this idea value - "value creation", as well as how to work together successfully in a design team. The processes and methods employed with regards to ideation and value creation, aswell as the challenges of working as a team with a common design was some of our main concerns during the group project, and is consequently the focus of my individual reflection.

## Ideation - how we came up with our design solution

After visiting our users that we would design for, at the elderly centre, we needed to create an idea for our solution. During this ideation process we utilized many of the games described by Gray, Brown and Macanufo's (2010) in their book "*Gamestorming - A Playbook for Innovators, Rulebreakers and Changemakers*". Gamestorming, like brainstorming, is a method that can be utilized to generate ideas. We used these games in our ideation phase, in order to help us be creative and generate ideas. Saffer (2010, p. 114) explains the purpose of the ideation phase: "... the reason to ideate is to generate many concepts as rapidly as possible." Something gamestorming certainly helped us do. Gray, Brown and Macanufo's (2014) promise on the back cover; that gamestorming will "generate better ideas and more of them - faster then ever before" came partially to life: we did get more ideas, but unfortunately, the ideas were not that useful, they lacked practicality and feasibility, so the

promise of *better* ideas, did not hold true for us. This was not necessarily a problem, for as Saffer (2010, p. 114) points out: quality is not the main concern in this part of the process and that something feasible from these ideas might evolve later. The challenge then becomes instead to take the generated ideas and make them feasible. My criticism then, of the gamestorming methods, is that they were, so lacking in practicality, that I felt like we were unable to do so. Fortunately, we did get one, more practical, idea, which we later settled on, but the idea did not come to life in a gamestorming session.

When it came to selecting the final idea (we included the idea we got from outside the gamestorming session in this part also) we used a specific game described as a "core game" by Gray, Brown and Macanufo (2010, p. 63) called "Dot voting". It was a simple game, but perhaps the most useful to us. The game successfully forced us to "close" the ideation process, something Gray, Brown and Macanufo (2010) points out as an eventual necessity.

As a final thought. Although we did not get the desired effect that we sought with the use of gamestorming, perhaps it was just the games themselves that "betrayed" us, not gamestorming as a whole. This might be indicated by the fact that after all, we did find benefits in using one of them. In truth, games can be incredibly diverse, so maybe we just needed to find, or create ourselves, a game that fit our needs and goals better. Getting more value out of this method that way.


## Our focus on value creation

Having now produced an idea, we needed to make sure this idea had value to our potential customers and users - with the ultimate goal of creating something innovative, not just creative, creativity in itself is not useful. To do this we used the NABC model described by Carlson and Wilmot (2006) along with Hedemann (2014), although maybe not as extensively as we should. There are other applications for this model, like developing an idea, but we used it to refine our idea and making sure it created what Carlson and Wilmot (2006) calls the *desired value*. The NABC model has four criteria that needs to be satisfied: needs, approach, benefits and competition (Carlson and Wilmot, 2006). We managed to pass them all with our idea, the needs and benefits criteria was easy to satisfy, but certain areas was murkier, e.g. competition - we did not possess indepth knowledge of what already exists out there and research concerning this was hard. This part of the process was in my opinion the hardest one. Because it required not only to be creative, but to have a sense of feasibility

and practicality. Just because our idea passed these criteria we knew that it did not in any way guarantee success, though it helped the team feel more confident about said idea.

## Personal observations on the value of iteration

In our process described above, trying to deal with the issues of ideation and value creation, one thing stood clear to me. We used the process and tool of iteration all throughout. I think it would have simply been impossible to create an idea and reach a good design without rigorous employment of iteration - it was our most useful tool from my observations. Iteration is mentioned in so much of the design related literature. Saffer (2010), Hedemann (2014), Gray, Brown and Macanufo (2010), Rogers, Sharp and Preece (2015) and so many more, all put importance on iteration, either as a core part of the entire design process or as an instrumental part of the models they present. Based on the literature and my practical experience, including this project, it is clear to me: No matter the process we follow or methods we use. We designers (as flawed humans) need to go back and forth, throw away and start anew in order to reach a goal; we often can't even see.

## The challenges and benefits of using a team in the design process

In our group we had a challenge that, in retrospect, we should have tried to remedied. That is: we lacked what Carlson and Wilmot (2006, p. 20) describes as a "champion". Someone who can drive the value creation process. There are others too that advocate the value of something similar. Hedemann (2014, p. 70) advocates that each team should have a "ildsjel" a sort of enthusiast that drives the team forward, someone with passion for the idea. The lack of either of these made it feel to me like the passion, which there should have been more of, lacked from the group, which in turn made the whole design process feel more like just plain work - something to do for the sake of completing a task given to us. This did not mean that each team member did not do good work, just that we lacked the little extra to take the idea to the next level.

Our team was fairly homogenous in terms of skills held by the members. However, my background was in a different discipline then the others, giving me skills the others did not possess. This skill was instrumental in order to be able to create a physical prototype to the extent that we managed. Although we did not have to concern ourself with making a finished product, nevertheless had no group member had this skill, the prototype would have

required much more imagination from those we presented it to in order to understand it making communication with the users more difficult. Carlson and Wilmot (2006) are proponents for having multidisciplinary teams. We did not truly have such a team in this project, but if the extent to which my skills came to use is of any indication there might very well be truth to these words.

Such a multidiciplinary team, with all its benefits, might also bring with it some challenges. I got a taste of one of these challenges when trying to explain to the other members how our prototype would work in practice. They had a hard time understanding what I was telling them. To better communicate my knowledge to the other members I employed what Gray, Brown and Macanufo (2010) calls "visual language", in the form of sketches, hoping that it would convey the meaning better. They claim that visual thinking techniques like this can improve collaboration and communication. Based on this, I gave it a chance to help with my problem and had success in doing so. We humans seek and percieve structure (Johnson, 2014) and utlimately I think sketches exploits the "... strengths of the human visual system—which consists mainly of automatic processes—to allow people to perceive relationships in complex data" (Johnson, 2014, p. 177). In short: The sketches takes advantage of our human ability to percieve and seek visual structure, to make complicated concepts easier to understand. To me it was not complicated, but to them it was, so sketches was a nice aid in order for them to understand what i understood. Utilizing this visual aid might be a good way, it certainly was here, to increase the collaborative abilites and clarity in communication between team members, especially in a multidisciplinary one. Ultimately improving the final product, since each member can more easily contribute when they have a shared understanding of what is being done.

## Conclusion

In this exam project we faced design issues concerning how to conceive an idea, and in making sure that this idea had value - the idea needed to promote health among the elderly. To overcome the issues and challenges, we employed different tools and methods like gamestorming (Gray, Brown and Macanufo, 2010) to create ideas and NABC (Carlson and Wilmot, 2006) to ensure that we remained focused on what was more important than the idea itself, the value that the idea produced. However, methods are just methods - they do not guarantee success, they can only guide you in the process, hence why there are so many in the first place.

All in all, my impression is that the team is pleased with what we achieved and I think this is warranted. We put in the effort and utilized the different skills of the team members. While efforts to communicate despite these different skillsets between the members, ensured that we were all working together as a team. We ended up with a prototype that can be said to exceed our expectations while simultaneously fulfilling the requirements of the task description given. This was achieved by following a deliberate, structured, iterative design process in which we avoided relying on luck - even when not all methods exercised were helpful.

## References

Carlson, C.R. and Wilmot, W.W. (2006) *Innovation: The Five Disciplines for Creating What Customers Want*. New York: Crown Publishing Group.

Gray, Dave., Brown, S. and Macanufo, J. (2010) *Gamestorming - A Playbook for Innovators, Rulebreakers and Changemakers*. Sebastopol: O'Reilly.

Hedemann, O. (2014) *Idéutvikling i mediehuset*. Kristiansand: IJ-forlaget.

Johnson, J. (2014) *Designing with the Mind in Mind*. 2nd edn. Waltham: Elsevier Inc.

Rogers, Y., Sharp, H. and Preece, J. (2015) *Interaction design: beyond human-computer interaction.* 4th edn. West Sussex: John Wiley & Sons Ltd.

Saffer, D. (2010) *Designing for Interaction: Creating Innovative Applications and Devices*. 2nd edn. Berkeley: New Riders.