Individual UX Portfolio

User Experience Design Theory and Practices

Julia van Zilt

Master Student of Industrial Design University of Technology Eindhoven j.v.zilt@student.tue.nl

INTRODUCTION

In this User Experience Portfolio I will portrait my individual understanding and deductions regarding the topic User Experience.

At the beginning of the elective User Experience Theories and Practices I expected to gain understanding of existing UX models, theories and tools that are relevant and could be applied to the field of design. My expectation was not only to acquire this knowledge but to then also be able to apply this knowledge into my future work.

As a designer I envision a world where technology is seamlessly integrated within our environment, guiding people intuitively throughout their everyday activities. This aspired level of integration and intuitiveness does not only require the professional design skill but also an in depth understanding of the psychology and reasoning of the potential users.

Personally, I want to be able to design from a scientific perspective. Meaning that next to using my own professional intuition I want to use scientific methods and theories within the design process and to be able to defend my designs within a business environment.

Aesthetics forms a big part of my identity. While this is mostly perceived as a casing or by product of a concept I believe that aesthetics can play a main role when designing a user

experience, since it has a big impact on physical, sociological I read more in depth and analysed. and emotional aspects of interactions.

UX DEFINITIONS AND DESCRIPTIONS

In order to create a solid understanding throughout my portfolio of my definition of user experience and what it means in relation to interaction design I have described them

User Experience could be defined as the perceived sensorial, emotional reaction caused by the interaction design as well as the reaction before and after the interaction with a product and/or environment.

Interaction design could be defined as the mapping and creation of aesthetic, visuals and haptics with the purpose of provoking certain interpretations and actions in the user which will eventually influence the user experience.

WEEKLY LOGBOOK/ACTIVITIES

During the first three weeks of the elective I have looked at all paper by initially reading every abstract and then reading over each paper provided by the lecturer in the study guide. The papers that I considered most relevant to my development

WEEK 1 - USER EXPRIENCE, NEEDS, PARADIGMS, VALUE BASED DESIGN

When designing we take into account the way the user feels and acts with the designer product/system/service. In the past I mostly approached this from an interaction design perspective, which meant that the experience was an outcome. This week I will be looking at what user experience entails and how this can have a direct impact on the design process and outcomes when taken into consideration from the beginning of a design process.

What Is Satisfying about satisfying Events? Testing 10 Candidate psychological Needs.

"(...) popularity-influence and money-luxury are of little or no importance, and money-luxury experiences may even be detrimental to satisfaction (...) " (Sheldon, 2001)

User experience white paper

"The verb 'experiencing' refers to an individual's stream of perceptions, interpretations of those perceptions, and resulting emotions during an encounter with a system. "(Roto V et al. 2011)

Rethink value in a changing landscape

The transformation Economy. "Social innovation and social ventures have moved beyond philanthropy, turning social and environmental challenges into market opportunities." (Brand, R., & Rocchi, S., 2011)

WEEK 2 - BEHAVIOR, ATTENTION, DECISION MAKING, SOCIAL AWARENESS, EVERYDAY LIFE

When designing I am always very interested about the individual behaviour of people and how one can create in such a way that they like the eventual outcome. Next to liking the product/service/system it is also very relevant what makes people interact with it and how they will interact with it.

Maximizing Versus Satisficing: Happiness Is a Matter of Choice

"Those with fewer options expressed greater satisfaction with the choices they made" (Schwartz B. et al, 2002)

Habit and Intention in Everyday Life: The Multiple Processes by Which Past Behavior Predicts Future Behavior

"The kind of reasoning that people engage in when consciously deliberating about intentions depends on their level of motivation and their ability and opportunity" (Ouellette, J. A., & Wood, W., 1998)

Theory of Reasoned Action, Theory of Planned Behavior, and the Integrated Behavioral Model

"A particular behavior is most likely to occur if (1 a person has a strong intention to perform it and the knowledge and skill to do so, (2) there is no serious environmental constraint preventing performance, (3) the behavior is salient, and (4) the person has performed the behavior previously.)" (Montaño, D. and Kasprzyk, D., 2008)

WEEK 3 - EMPATHY, DESIGN THINKING AND UX EVALUATION

I like to think of myself as a person who truly appreciates

other people, this is also an aspect I take into consideration within my identity as a designer. To create something people can feel connected to, one needs to design something that reflects certain familiarity and appreciation towards the potential user. Being aware of this I read the following papers in depth.

Incremental and Radical Innovation: Design Research vs. Technology and Meaning Change

"We start the paper by suggesting that radical product innovation is driven by either advances in technology or a deliberate change in the meaning of the product, rather than being driven by the human-centered design philosophy widely used in product design." (Norman, D. A., & Verganti, R., 2014)

Eliciting User Experience Information in Early Design Phases

"A user experience can never be "designed" itself, as a designer can never foresee actual use (...)" (Pettersson, Ingrid, 2018)

Spark Innovation through Empathic Design.

"Empathic design pushes innovation beyond producing the same thing only better" (Leonard & Rayport, 1997)

RELEVANT KEY ASPECTS

WEEK 1 - USER EXPRIENCE, NEEDS, PARADIGMS, VALUE BASED DESIGN

In the paper What is satisfying about satisfying events? They partly look into how different cultures perceive satisfaction differently. And although there are some similarities there were also some clear differences (Sheldon, 2001). I consider this to be an important attitude due to our changing world. More specifically, we are living in a world which is becoming more and more globalized, meaning that different cultures do no longer only live in different geographical areas of the world but can also be encountered within the same environment. This is important when designing due to the fact that you might be creating an experience which would need to adapt

or come across fulfilling the same purpose for people with different cultural associations.

A very intriguing part of this paper was also the conclusion that social pressure and comparison often lead to negative satisfaction and pleasure in an experience. This might seem like an odd thing to be intrigued about, but recently social media platforms such as Facebook, Instagram and Youtube thrive of social comparisons (and pressure). From this we could potentially deduce that product/service/systems are not merely designed for positive impacts, but can also just have the purpose of engaging people and making business thrive.

The paper Rethink value in a changing landscape could potentially be used as a tool to determine certain design goals taking into account the duration of the design process and the market implementation process. I believe that we are in-between a knowledge economy and a transformation economy. This is extremely relevant to be able to design something meaningful. I think I could almost say that this is a zoomed out view on User experience because it takes into account that it is a dynamic concept. This can also be considered a meet point between design and business, since the economical success might depend on the relevance of the design to the potential consumer. This is something that might be necessary to implement more than is currently done, as mentioned in the paper "many companies naturally tend to create future strategies and innovation roadmaps based only on their existing paradigm" (Brand, R., & Rocchi, S., 2011).

The User experience White paper gives us a good insight into the fundamentals of User Experience (UX). From my perspective, the most relevant aspects of UX for design is UX as a phenomenon o truly understand what it entails and how it works, and UX as a practice since this knowledge is then applied and used to create other concepts. To design a relevant UX it is important to understand what kind of experience happens at what stage of interaction as seen in the model below.

A final important aspect that this paper mentions and which I completely support is that the insights and tools used within UX design have to be implemented appropriately but it is up to the designer or design team to handle these appropriately and use their professional judgement for adequate implementation .

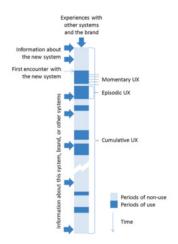


Image UX stages. (Roto V et al, 2011)

WEEK 2 - BEHAVIOR, ATTENTION, DECISION MAKING, SOCIAL AWARENESS. EVERYDAY LIFE

To maximize is essentially to consider and compare all options available to then be able to choose the very best option, while to satisfied is not to pursue the best option but the good enough option (Schwartz B. et al, 2002). This is an important theory to take into account due to the fact that we live in a society where there is an overload of information and choice, which can lead to stress and potential regret for not having choses the most optimal choice. As a designer and researcher I think it is better to have the attitude to make something that is good enough for someone rather than the best, since the best is also something difficult to define. How I see it right now it that for the maximiser it would be best to design something that wont require them to have to chose from many rather something that decides for them, while for the satisficer you can design something meaningful and specific that will help them and they would appreciate (Schwartz B. et al, 2002). Something important mentioned in the paper is the choice should not be confused with sense of control.

In the paper Habit and intention in everyday life habits are explained as behavioral tendencies (Ouellette, J. A., & Wood, W., 1998). Being aware of these behavioral tendencies can help to design on the periphery of attention which might

be more relevant in certain design project than in others. Intentions can direct behaviour and happen mostly though reasoning (Ouellette, J. A., & Wood, W., 1998), as a designer one can design to steer intentions to achieve certain goals. This would not work with task that are carried out through "automatic repetitions" but would work when tasks are carried out through a reasoning thought processes. Understanding habits can help to understand how to provoke new behaviour or change existing behaviour, this can only happen when the reward of the change can be reasoned and is (immediately) worthy of the effort, (The most effective change strategies are likely to be ones that impede performance of established behavior while facilitating formation of new behaviors into habits.). A final thing to consider is that the validity of past bahaviour as an indicator of habit depends importantly on how accurately people can report on their past acts (Ouellette, J. A., & Wood, W., 1998).

The paper Theory of reasoned action, theory of planned behaviour and the integrated behavioral model can indirectly be linked to the previous paper since it mentions construct (attitude, subjective norm, and perceived control) that can help to predict certain behaviours (Montaño, D. and Kasprzyk, D., 2008).

I think that what is very interesting about this paper is that it maps and takes into account the different external variables. This show the dependencies and the relationships of different aspects such as attitudes and individual beliefs which mentions that we can understand people through interviews, a method that is frequently used within the faculty of Industrial Design.

What I found most interesting was how some indirect aspects would have a big impact on for example is something was associated with positive or negative feelings. This model presented in this paper can be used to get an in depth understanding of the target audience which will increase the likelihood of provoking the right experience.

From this week I mainly uncovered different attitudes that people can have towards choice/products. I think this new knowledge that I acquired it very relevant because it gives a greater insight and understanding of the psychology of the user one designs for. Using different techniques such as using past behavior to introduce new habits or new behaviours is something to take into consideration when designing.

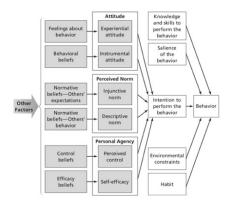


Image model. (Montaño, D. and Kasprzyk, D., 2008

WEEK 3 - EMPATHY, DESIGN THINKING AND UX EVALUATION

In the paper Incremental and radical innovation I specially thought that the part of radical innovation was very interesting. They suggest that radical innovation is driven by two major possibilities: the development of a new enabling technology, or the change in meaning of the object (Norman, D. A., & Verganti, R., 2014). Looking from a UX perspective I would propose a third one; the creation of an experience. The paper claims that something new can come by change or through a better understanding of potential patterns of meanings (from a more socio-cultural perspective) (Norman, D. A., & Verganti, R., 2014), but from a UX design perspective I believe that something new can also arise through a unique combination of different factors that result in a unique experience.

The Eliciting user experience information in early design phases was a very interesting text to read. I read until chapter 3 because after scanning the entire text the first two chapters seemed most relevant to me and for the context I am working in.

I really like how this text draws it knowledge from previous work and shows how these are related or complementary. From the frameworks created by Patric Jordan (2000), Don Norman (2004) and Desmet and Hekkert (2007) there are three main topics we can deduce; emotions (Psycho-pleasure,

Behavioural Design and The emotional level), the physical aspect of an experience (Physio-pleasure, Visceral Design and The aesthetic level) and the perceived value (Phsycho-pleasure, reflective design and The meaning level) (Pettersson, Ingrid, 2018). They are all described slightly different but being aware of these the themes helps when determining what knowledge we want to obtain from the target group.

The paper specifies how and why a certain experience could never really be designed (Pettersson, Ingrid, 2018). Even though I understand the reasoning behind it as a designer I do not totally agree. In my opinion there is, indeed always a part of the response that cannot be foreseen, yet when an in depth user research is carried out and the key emotional, physical and values are determined there are a lot of things that we can make or do to steer these outcomes.

An other interesting aspect that is mentioned is how with some techniques we risk being steered too much by the interviewer and they capabilities of deduction and expression. This is a clear risk but as mentioned in the User experience White paper a design professional should be able to implement their judgement to appropriately select relevant information and guide the design process.

The text Spark innovation through empathic design mainly talks about an empathic method to obtain reliable information from the target group through observing them in their natural environments (Leonard & Rayport, 1997). This seems like a good starting point because it uses the affective component by observing someones emotional response, but a limitation of this method would be that it doesn't not directly mean that the observer truly understands the emotional state of the people observed (cognitive component). This is good to take into account as a designer since seeing is not the same as understanding, yet I believe that this tool is can best be implemented at the end of the design process to access and refine the final product/service/system.

INTEGRATION IN (PREVIOUS) WORK DONE

In the past I considered user experience to a consequence or a by product of interaction design instead of something that I had to design. Looking back I can see that a lot of the things that I did could have been substantiated or further elaborated with UX literature, methods, and tools.

During my final bachelor project I designed a platform where people could set a goal. To motivate them to achieve that goal they could chose a designer on the online platform who would make a print on a garment which would only become completely visible to them once they had achieved their goal. Each time got closer to their goal the more of the design would become visible. Within this project there were two main stakeholders: the goal setters and the designers. I tried to design from both perspectives to make the platform as attractive as possible for both parties to interact with it and commit to it. This design process had a very user centred approach. Looking back I tried to create an experience but was not fully aware of what this actually entailed. I did carry out user tests and surveys but I did not specifically look at the primary needs for a determined experience. Instead I focused on only the perceived value and I focused more on the interaction with the system and the interaction between the two parties involved, from which an experience emerged. Looking back it would have been good to look at one of the UX frameworks and how the system could show empathy towards the goal setters to motivate and engage them.

During the first design project of my master the concept was focused on creating a new shopping experience for future clothing consumers. This was mainly done from a technological perspective by looking what would be possible to be implemented in such a system (because we wanted to achieve a radical change). During this project we also designed mainly from our own experiences and our designer views. What would have made this concept even stronger is if we would have been able to substantiate certain claims with for example the maximizing vs satisficing paper that mentions how an overload of choice can lead to consumer dissatisfaction. Further more, was this project a lot about innovation, one way of uncovering opportunities would have been through an empathic approach were we would observe the consumer in the current shopping experience to get insights on how and where there would be obstacles that could be prevented or overcome more easily.

These were just two examples of how I previously dealt with a user experience. Through out these first three weeks I believe that I have gained sufficient knowledge to confidently start to approach user experience in a more professional way in my

future work.

PERSONAL UX PROPOSITION FOR FUTURE WORK

Looking back at these first three weeks I can see that I have not only have a deeper understanding about users experience but that I am also more conscious of what causes this user experience. Having this clarity allows me to place this new skill within my professional design work.

As mentioned at the very beginning of this portfolio, a key aspect of my identity as a designer is to design aesthetics for interaction. My goal when combining aesthetics and interaction is to be able to give people a certain experience, thus a user experience. I will be able to use tools such as the framework of Desmet and Hekkert (2007) to gain in-depth understanding to the target group that I am designing for. To then use different advanced design methods () to ideate and conceptualise ideas. To then finally add, substrate and refine using my own professional insights. This would mean that the eventual outcome and the intended experience could potentially be more aligned.

An other aspect in which I will be able to use this knowledge and where it will be valuable is within a business setting. Through argumentation and scientific substantiation I will be able to defend and show the value of my work within a business environment. This could result in more profitable outcomes for the business but it will also help in the interdisciplinary value and concept communication.

REFERENCES

- 1. Brand, R., & Rocchi, S. (2011). Rethinking value in a changing landscape. A model for strategic reflection and business transformation. A philips design paper.
- Leonard & Rayport Spark Innovation through Empathic Design. Harvard Business Review, November - December 1997
- 3. Montaño, D. and Kasprzyk, D. (2008), Chapter 4
 Theory of Reasoned Action, Theory of Planned
 Behavior, and the Integrated Behavioral Model, In
 Health Behavior: Theory, Research, and Practice,
 5th Edition, Karen Glanz (Editor), Barbara K.
 Rimer (Editor), K. Viswanath (Editor).
- 4. Norman, D. A., & Verganti, R. (2014). Incremental and radical innovation: Design research vs. technology and meaning change. Design Issues, 30(1), 78-96
- Ouellette, J. A., & Wood, W. (1998). Habit and intention in everyday life: The multiple processes by which past behavior predicts future behavior. Psychological bulletin, 124(1), 54. Ian Editor (Ed.). 2018. The title of book two (2nd. ed.). University of X Press, City, Chapter
- 6. Pettersson, Ingrid (2018), chapter 2 Related Theory, from Eliciting User Experience in Early Design Phases. PhD thesis, Chalmers University of Technology, Gothenburg.
- 7. Roto V et al (2011) White paper UX
- 8. Schwartz B. et al (2002): Maximizing vs Satisficing: Happiness is a Matter of Choice. Journal of Personality and Social Psychology, Vol. 8 (5), 1178-1197.
- 9. Sheldon (2001) What Is Satisfying About Satisfying Events? Testing 10 Candidate Psychological

Needs. Journal of Personality and Social Psychology 2001. Vol. 80, No. 2, 325-333.