

BRACE YOURSELVES, UX DESIGN IS CHANGING!

In the ever changing world, the transformation of economies desires an enhanced view on the User Experience (UX). As UX designers facing the new transformation economy [1], we aim at delivering systemic change also in everyday life, and a meaningful contribution through cooperating and empathizing. In the ongoing knowledge economy there is a recognizable change visible to the transformation economy. There is a growing value of empathizing to develop a clear understanding of our target groups, and cooperating with the growing amount of stakeholders involved. As the world gets connected more and more, companies encounter the challenge of that sustainability and well-being require behavioural change not only at an individual level but also at a societal level [2].

What does the new transformation economy mean for our current understanding of UX? How should we apply UX methods to encounter the growing amount of complex, global problems?

ATTITUDE

To handle the complexity of the upcoming transformation economy, we predict a growing attention for Human System Collaboration. For designers this requires a more holistic approach to find the values of multiple stakeholders, more knowledge about topics like shared systems [3] and the Attention-Interaction continuum [4], and a specific mindset and attitude regarding UX. The latter demands for a process where iteration is key and in which more awareness of cumulative UX [5], including the social and cultural context, are the basis of beneficial design phases. The main focus of this manifesto is appointed to the early, design and evaluation phases of the future [6].

EARLY	DESIGN	EVALUATE
<p>A clear understanding of social sciences will become indispensable in the transformation economy. The more stakeholders involved, the more complex the design space and the more important to clearly understand people’s behaviour, needs and desires [7, 8, 9]. Instead of personal UX, the cumulative UX and the growing amount of interactions between humans and sytems, become increasingly valuable to translate human needs into the products and services of the future.</p>	<p>Today we see more and more products integrated into the ecosystems where people play a crucial role. In everyday contexts such as smart homes, we live with and among products and multiple other people. Interactions with products and/or people should be designed for social translucence in order to create environmental awareness in a shared system [3]. It is relevant for UX designers of the next transformation economy to acknowledge contexts when designing new product interactions.</p>	<p>Considering the overwhelming increase of interactive products in social contexts it is essential to develop so-called calm technology [11]. In the transformation economy UX designers should beware to the limited attentional resources people have and can divide over different activities in different moments of time. All interactive technology in a context should be designed to minimize attentional resources to prevent cognitive overload and therefore provide an enjoyed experience. This can be achieved by considering the Interaction-Attention Continuum [4].</p>
<p>For the reason that the growing amount of stakeholders and their interactions in context lead to the complexity of the global problems, the designer needs to map the behaviour to understand the situation. In our opinion the current methods who tempt to do this, still lack depth. In order to comprehend the complex systems, methods such as Customer Journey Mapping [10] will require more layers to clearly understand the interactions between multiple stakeholders. We recommend UX designers to explore methods and approaches to tackle this stakeholder obstacle.</p>	<p>To get an in-depth overview of the more complex contexts of the future we propose to apply participative design. This approach demands for involvement of all people and systems in the ecosystem you are designing for. We recommend that UX designers adapt towards the new economy by identifying ecosystems as ever changing contexts.</p>	<p>To get basic understanding of this mental effort people require for certain human system collaboration we propose a method called Ranking Scale Mental Effort [12]. Although, in the upcoming economy it becomes more relevant to assess mental effort continuously, for which this method is not specifically developed. We propose to develop methods which can capture mental effort more dynamically, since interactions in complex systems change over time. We recommend that a holistic approach is advantageous for UX designers in appraising the user’s cognitive abilities in the complex contexts of the future.</p>

MESSAGE

KNOWLEDGE

APPROACH

REFERENCES

1. Brand, R., & Rocchi, S. (2011). Rethinking value in a changing landscape. A Philips Design Paper. Philips Design, Koninklijke Philips Electronics NV.
2. Gardien, P., Djajadiningrat, T., Hummels, C., & Brombacher, A. (2014). Changing your hammer: The implications of paradigmatic innovation for design practice. *International Journal of Design*, 8(2).
3. Erickson, T., & Kellogg, W. A. (2000). Social translucence: an approach to designing systems that support social processes. *ACM transactions on computer-human interaction (TOCHI)*, 7(1), 59-83.
4. Bakker, S. and Niemantsverdriet, K. (2016). The Interaction-Attention Continuum: Considering Various Levels of Human Attention in Interaction Design. *International Journal of Design* 10(2), pp. 1-14.
5. Roto, V., Law, E., Vermeeren, A., & Hoonhout, J. (2011). User experience white paper—bringing clarity to the concept of user experience available online: <http://www.allaboutux.org/files.UX-WhitePaper.pdf>.
6. Hassenzahl, M. (n.d.). User Experience and Experience Design. Retrieved March 13, 2019, from <https://www.interaction-design.org/literature/book/the-encyclopedia-of-human-computer-interaction-2nd-ed/user-experience-and-experience-design>
7. Maslow, A., & Lewis, K. J. (1987). Maslow's hierarchy of needs. Salenger Incorporated, 14, 987.
8. Hassenzahl, M. (2010). Experience design: Technology for all the right reasons. *Synthesis lectures on human centered informatics*, 3(1), 1-95.
9. Sheldon, K. M., Elliot, A. J., Kim, Y., & Kasser, T. (2001). What is satisfying about satisfying events? Testing 10 candidate psychological needs. *Journal of personality and social psychology*, 80(2), 325.
10. Nenonen, S., Rasila, H., Junnonen, J. M., & Kärnä, S. (2008, June). Customer Journey—a method to investigate user experience. In *Proceedings of the Euro FM Conference Manchester* (pp. 54-63).
11. Weiser, M., & Brown, J. S. (1997). The coming age of calm technology. In *Beyond calculation* (pp. 75-85). Springer, New York, NY.
12. Zijlstra, F. R. H. (1995). Efficiency in work behaviour: A design approach for modern tools.