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Sketchnoting

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Abstract. As a result of the pandemic situation, we have increasingly shifted our professional context to the digital world and consequently increased the amount of work in front of and with computers. Conferences, staff meetings, collaboration with research partners, and user research have mostly taken place online without informal exchanges. The essential data collection and protocoling for researchers can quickly become stressful due to the monotonous nature of the work, on the receiving side as well as on the transmitting side. Sketchnoting can be a helpful method for documenting information creatively and visually. Words and pictures are combined to better illustrate contexts, to explain facts more easily and to retain content longer or to deliver it in a sustainable way. This masterclass introduces the basics of the sketchnoting method as well as the psychological background and approaches. Practical exercises will be used to get to know the method and to discuss its use in socioinformatics and qualitative research contexts.

Contextualisation

Taking minutes and notes is part of the daily routine of many researchers, whether in conversations, joint meetings to develop common ideas, or with specific stakeholder groups in workshops or conferences and events. This of form of work can be very stressful. Informal exchanges could be used as a balance to stimulate creative thought and reduce stress away from scientific activities (Buunk and Verhoeven 1991). During the COVID-19 pandemic, work in front of and with computers increased dramatically. Collaboration with colleagues and specific stakeholder groups as well as the conduct of various events was largely done only online. This has resulted in a large increase in workload (Schmitt, Breuer and Wulf 2021). Freehand drawing can be used here as a way to balance out the flood of information and the resulting overload. In fact, drawings offer the possibility to be used as a supporting medium. In this way, drawings tend to be used subconsciously for personal expression, whether in professional or domestic contexts (Cohn 2012), which are then not shared with other work colleagues. However, these visual and thus more tangible "sketchnotes" offer many cognitive and performance potentials (Brown, 2014). Among other things, drawings can enhance creativity, improve retention, and increase memory (Dimeo 2016; Brown 2014). In groups, they can initiate exchanges, support discussion and collaborative ideation (Paepcke-Hjeltness and Henry 2017), and more easily represent processes (Sturdee 2019). So, sketchnotes are described as visual representations of information (e.g., thought processes or presentation outcomes) that are very different from ordinary text notes and transcripts because they include self-drawn images in addition to written words to highlight content intentionally (Zheng et al. 2021). Sktechnotes tell a story (Sturdee 2018; 2019) that can be used to improve retention and memorization of results through "active" listening (Dimeo 2016). Sketchnoting as a method can support collaboration with colleagues, as well as with specific stakeholder groups in the field (Lewis et al. 2019), but can also build one's confidence to create drawings (Paepcke-Hjeltness, Mina and Cyamani 2017; Camporro and Marquardt 2020).

Goals and Activities

The goal of the masterclass is to be able to understand the topic and especially the helpful use of sketchnoting as a method related to the psychological background. At the end of the event, participants should be able to use sketchnoting as a method for creative and visual documentation of information.

In addition to the method itself, participants will learn about the differences between various sketching approaches. For the interactive part, basics and forms will be introduced to be able to make their own sketchnotes. Participants will understand that no special knowledge or artistic talent is necessary for sketchnoting. Thus, a mutual exchange should take place in order to gain self-confidence to present one's own sketchnotes to the group.

Target Group

The Masterclass is intended for all students, master students, as well as PhD (undergraduate) students of HCI or CSCW, who would like to learn more about the use of visual tools in scientific or professional contexts. The event is also interesting for scientists who communicate teaching or learning information, need to overcome language barriers with different stakeholder groups, or want to learn methods for deal with information overload.

Format and Duration

The Masterclass is planned and prepared as a presence event. Alternatively, the event will be held in a hybrid format. The Masterclass will be held on Monday, 27 June from 14:00 to 17:00 UTC+1. In addition to the presentation of the contents, the participants will also perform their own exercises.

Number of Participants

In order to give all participants enough time during the interactive discussions and activities, a maximum of 12 participants will be admitted.

Required Resources

For the Masterclass, a lecture hall or a room with enough workstations (tables and chairs) for the specified number of participants is sufficient. If there are COVID-19 pandemic regulations that must be followed at the time of the conference, the workstations should have the required minimum spacing. The room should have a projector, sound system, and flipchart and multi-color flipchart makers. Should the conference and consequently the masterclass take place as a hybrid variant, a laptop or a PC with webcam is sufficient. In this case, the masterclass will be held via Zoom. For on-site participation, participants do not need a laptop. Various writing and painting materials are needed for participation. A blank booklet is also recommended to be able to use the contents afterwards. Alternatively, a stack of white A4 paper can be used, 10 sheets per participant. Alternatively, a notepad can be used at home. For drawing and painting, a pencil and eraser will be needed, as well as highlighters in different colors and a black pen. Otherwise, ballpoint pens and colored pencils can be used.

Additional Resources

Nicolai Marquardt and Saul Greenberg. (2012). “Sketchnotes for Visual Thinking in HCI” Workshop Paper at ACM CHI ’12 Workshop on Visual Thinking

and Digital Imagery;
http://grouplab.cpsc.ucalgary.ca/grouplab/uploads/Publications/Publications/2012-Sketchnotes.CHIWorkshop.pdf

The Sketchnote Handbook: The Illustrated Guide to Visual Note Taking (2012).
ISBN-13: 978-0321857897
The Sketchnote Workbook: Advanced techniques for taking visual notes you can use anywhere (2014). ISBN-13: 978-0133831719
by Mike Rohde

Visual Thinking: Empowering People & Organizations through Visual Collaboration (2017).
ISBN-13: 978-9063694531
by Willemien Brand

Organiser's Short Bio

David Struzek is a PhD student and research assistant at the Chair of Information Systems, especially "IT for the Aging Society" at the University of Siegen. Currently, in addition to teaching activities, he coordinates the internationally funded research project Active City Innovation, fostering joy of movement in public space. David Struzek graduated with a Master's degree (M.Sc.) in Human Computer Interaction at University of Siegen. David's further research interests are User Experience, Usability & Accessibility and Creative Science.

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References

Brown, Sunni. (2014). The Doodle Revolution: Unlock the power to think differently. Portfolio, pp. 17-20.

Buunk, Bram P. & Verhoeven, Koen. (1991) Companionship and Support at Work: A Microanalysis of the Stress-Reducing Features of Social Interaction, Basic and Applied Social Psychology, 12:3, 243-258, DOI: 10.1207/s15324834basp1203_1

Camporro, Marina Fernández and Marquardt, Nicolai. (2020). Live Sketchnoting Across Platforms: Exploring the Potential and Limitations of Analogue and Digital Tools. Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems. Association for Computing Machinery, New York, NY, USA, 1–12. https://doi.org/10.1145/3313831.3376192

Cohn, Neil. (2012). Explaining 'I Can't Draw': Parallels between the Structure and Development of Language and Drawing. Human Development 55, 4 (2012), 167–192. DOI: http://dx.doi.org/10.1159/000341842

Dimeo, Robert. (2016). Sketchnoting: an analog skill in the digital age. SIGCAS Comput. Soc. 46, 3 (November 2016), 9–16. https://doi.org/10.1145/3024949.3024951

Lewis, Makayla, Sturdee, Miriam, Walny, Jagoda, Marquardt, Nicolai, Hoang, Thuong, Foster, Joanna and Carpendale, Sheelagh. (2019). SketCHI 2.0: Hands-On Special Interest Group on Sketching in HCI. In Extended Abstracts of the 2019 CHI Conference on Human Factors in Computing Systems (CHI EA '19). Association for Computing Machinery, New York, NY, USA, Paper SIG12, 1–5. https://doi.org/10.1145/3290607.3311753

Paepcke-Hjeltness, Verena and Henry, Kevin. (2017). Developing Your Visual Voice: Changing the Paradigm of Communication in Team Settings.

Paepcke-Hjeltness, Verena, Mina, Mani and Cyamani, Aziza. (2017). Sketchnoting: A new approach to developing visual communication ability, improving critical thinking and creative confidence for engineering and design students. In Frontiers in Education Conference (FIE). IEEE, 1–5. DOI: http://dx.doi.org/10.1109/FIE.2017.8190659

Scrivener, Stephen AR and Clark, Sean M. (1994). Sketching in collaborative design. Interacting with Virtual Environments. Wiley, Chichester, UK.

Schmitt, Josephine B., Breuer, Johannes and Wulf, Tim. (2021). From cognitive overload to digital detox: Psychological implications of telework during the COVID-19 pandemic, Computers in Human Behavior, Volume 124, 106899, ISSN 0747-5632, DOI: https://doi.org/10.1016/j.chb.2021.106899.

Sturdee, Miriam, Mann, Samuel and Carpendale, Sheelagh. (2019). Sketching Sustainability in Computing. In Proceedings of the 2019 on Creativity and Cognition (C&C '19). Association for Computing Machinery, New York, NY, USA, 29–40. https://doi.org/10.1145/3325480.3325481

Sturdee, Miriam, Lewis, Makayla, and Marquardt, Nicolai. (2018). SketchBlog #1: the rise and rise of the sketchnote. interactions 25, 6 (November - December 2018), 6–8. https://doi.org/10.1145/3281661

Zheng, Rebecca, Camporro, Marina Fernández, Romat, Hugo, Riche, Nathalie Henry, Bach, Benjamin, Chevalier. Fanny, Hinckley, Ken and Marquardt, Nicolai. (2021). Sketchnote Components, Design Space Dimensions, and Strategies for Effective Visual Note Taking. In Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems (CHI '21). Association for Computing Machinery, New York, NY, USA, Article 466, 1–15. https://doi.org/10.1145/3411764.3445508