Metrics in software

The meaning and impact

Is people obsessed with numbers and is there a tendency of measuring quality with quantity? Most people care about their possessions and their fortune, because these things provide possibilities and safety. For the same reasons, most people care about their group of friends and being liked by these friends as well. In the schoolyard, the most popular kid is the one with the most friends and the one who gets to pick first when deciding teams for playing kickball. At the other end of the hierarchy the least popular kid is the one with few friends and the one to get picked last or not at all. We tend to assign some higher value to the popular ones or the rich ones, because they most have done something right to get to that position. In that way the quantification of some kind of object, either money, friends or something else, is defining the good or bad qualities of a person.

This tendency isn't only restricted to the schoolyard or the physical world in general. With the technological development and increase of online human interactions, the phenomenon of quantification is highly utilized. The platform Facebook for example, is the pioneer within social medias and is the world's largest social network site depending so much on metrics. The entire business strategy for Facebook is based on the ability to sell targeted advertising, targets that are built from the metrics they collect (Grosser, 2014). The data visualization of quantification on the facebook interface, among others counts likes, comments, shares, friends, notifications, chats, messages, photos and much more. These are some of the attributes of the online schoolyard to determine popularity. Both the people behind facebook and the people using facebook put a great time and effort into thinking about these metrics. The people behind facebook considers how to make an even greater business of the platform, weighing whether each metric will increase or decrease the user participation, so that their targeting becomes even more precise. The users of Facebook are thinking about how they themselves are presented on the platform. Do they have many friends? Do they get a lot of likes? Is people commenting or sharing their posts? The effort they put into considering the metrics, lies within the eternal process of having their facebook profile, translating into themselves, appear popular and liked.

In my exam project, I would like to dig deeper into how come metrics mean a great deal for our perception and experience of the online life considering the perspective from both the business and the user. What exactly assign this importance to the visualization of numbers? Why is some metrics shown and some not? Lastly it would be interesting to discuss the impact of quantification as fulcrum when interacting online and what kind of behavior it entails.

From a starting point, my baseline would be to analyze Facebook as a network platform with a focus upon the use of and the behavior around metrics. That would then include a perspective from both the creators behind facebook and from the users using the platform every day. Here my main literature would be Benjamin Grosser's article *"What Do Metrics Want? How Quantification Prescribes Social Interaction on Facebook"*. Furthermore, the analyzation of Facebook would both be without and with the Facebook Demetricator, a web browser extension that hides all metrics on Facebook, also by Benjamin Grosser. In this way, I would have the contrast in using metrics or not and maybe be able to analyze some kind of behavior change towards the platform.

The tool for analyzing the users' behavior would be to apply B.J. Fogg's model on behaviorism to the Facebook interface. This allows me to talk about how Facebook intentionally has made their programming decisions to affect the behavior of the users. When the theory was first created, it was by some considered a billion-dollar industry, since interactive technologies has ingested people's homes and if you design is made correctly, you can have people doing or buying something – Changing behavior (Rashid, 2017).

This could first of all lead me to an analyzation of the metrics chosen to be shown and the ones chosen not to be of importance. Second, I see a flow in then starting to look into the impact of metrics on an online platform and how it affects the everyday life of the users. In coherence with the perspective from the model on behaviorism I would make use of the book *"Sluk"* by Imran Rashid, which is a doctor's point of view upon how the human behavior in the digital age both online, but offline as well controlled by our online activity. He also brings in some more medical arguments on why we are actually drawn to the social medias and why it means so much to us. His overall goal is to call for awareness about this for the ordinary citizen, and to present active actions towards being able to cope with our online life.

Perspectives:

- **Object Orientation** → I would like to draw a perspective to the concept of object orientation when talking about why some metrics are shown and some are not.

- **Temporalities** → If it makes sense, I would also like to draw a perspective to temporalities in programming since it maybe could support some arguments about why we are triggered to spend so much time online.

Literature:

Platforms to analyze:
- Facebook with and without the demetricator

Tool(s) to analyze the platform
- B.J. Fogg's model on behaviorism

Metrics:
- Benjamin Grosser," What Do Metrics Want? How Quantification Prescribes Social Interaction on Facebook," in *Computational Culture* no. 4 (2014).
  →
- Rashid, Imran. 2017. "Sluk". *Kunsten at overleve I en digital verden*. Lindhardt & Ringhof.
  → This book can contribute with a doctor's point of view upon the meeting between technology and the human brain and a number of hypotheses of the possible consequences of the increased use of technology.

Articles for inspiration:
- https://stackify.com/track-software-metrics/
  → Contributes with the benefits of using metrics as a business – The business point of view upon metrics.

Object orientation:

- Lee, Roger Y. *Software Engineering: A Hands-On Approach*. Springer, 2013. 17-24, 35-37
  → This text is about object oriented concepts. With this I will make a perspective to how the selection of metrics on facebook can be related to the concept of object orientation. Here you also choose something and leave something out.

Temporalities

- The exact texts are still to be found and considered.