



Metrics in Software

The meaning and impact

Measurement has always meant a great deal to all humans. Measurement is a way of drawing perspectives to other people to set your position in comparisons to others. Numbers is something very concrete you can relate to and the concept of quantification somehow becomes a way of measuring quality. What are you, your family and friends worth? If it comes to a measurement of this, the most tangible way to do so is to consider and compare any number connected to you. How many likes and friends do you have for example? This becomes a part of how much you are worth in the concept of measurement.

The History of Metrics

Immediately metrics is something you mainly talk about in the business world. The financial and marketing oriented website 'Investopedia', states that metrics are parameters or measures of quantitative assessment used for measurement, comparison or to track performance or production. Even though some of the first examples of the use of metrics can be tracked back to the venetians in the mid 1400's, the measurement of business performance didn't gain great importance in the US until the industrial revolution and the increase of business growth. Metrics was and is still used to track and better the rising businesses in order to keep growing and to stay competitive.¹ The shift from talking about metrics not only in the context of business growth, but also in the matter of computer science, came with was considered the computer age and the beginning of the digital industry. When Alan Turing in 1936 invented the computer that was no longer referred to as a person but instead a machine, the foundation of computer science was established and presented to the world. Later on, in the 1970's the personal computer as we know it today, was distributed to the US markets. In this connection, the matter of software starts to gain its importance in the industry and market as well.² Today software consists of both the interface that users see, read and manipulate, as well as the underlying algorithms.³ ...Continuation of the algorithms behind⁴ and data visualization⁵...

Metrics in Facebook

Metrics and the visualization of these, take up a great part of a lot of social media platforms and there are many metrics to take into account when analyzing these platforms and interfaces. In Benjamin Grosser's paper upon what metrics want and how quantification prescribes social interaction in a social media site like Facebook, he defines metrics within the context of Facebook, as enumerations of data

categories or groups that are easily obtained via typical database operations, and that represent a measurement of data: “These metrics are everywhere within the Facebook interface. They are the numbers, counting ‘likes’, comments shares, friends, mutual friends, pending notifications, events, friend requests, messages waiting, chats waiting, photos, places, and much more.”⁶ Even though it might look like every metric available is being utilized in Facebook, there are still metrics not counted as being relevant as a visualization in the interface. How come some metrics are shown and others not? A further look into this, reveals a lot about how Facebook as a corporation thinks and how decisions are made in the mindset of doing business. In order to decide whether a metric is shown or concealed, Benjamin Grosser argues that Facebook’s primary criterion for such decisions is based on whether a particular metric will increase or decrease user participation. User participation is essential for a corporation like Facebook, since it depends on its ability to sell targeted advertising, and those targets are built from the metrics they collect.⁷ The more Facebook users interact on the platform, the more data the company will gain about you, which is what keeps facebook as a business running.

Behaviorism and Metrics

From a business perspective, what motivates a company like facebook to utilize the use of metrics, is driven by having the users participate as much as possible. What happens when you change the perspective to consider the users and how they actually behave on social media platforms like Facebook, which different factors are then of great meaning? Behavior psychologist B.J. Fogg has developed a model to better understand human behavior. According to this model target behavior is a product of three factors: motivation, ability and triggers. There need to be some motivation connected to the user’s action, the ability of interaction should be high, measured in the amount of effort the user needs to put into the action. Lastly the triggers are part of telling people when to perform a behavior.⁸ When it comes to analyzing the user’s behavior in facebook according to metrics, you can draw a relation between the metrics shown and what B.J. Fogg calls a signal trigger. The function of a signal trigger actually isn’t about motivating people or simplifying the task, it works as a reminder of action and indicator for when a behavior is appropriate.⁹ All the metrics shown in Facebook are a visualization of quantifications, and when they are reminded about these quantitative elements, they keep on participating and interacting on the platform.

Demetricator

If Facebook, as we are used to it, utilizes these factors aiming for target behavior through the use of metrics, how would the platform be received and used if there were no metrics at all?

The Impact of Social Media

The use of social media is widely discussed in our contemporary western world and a lot of different opinions apply to this topic. The Danish doctor and author Imran Rashid, expresses his concerns about a number of consequences in the meeting between technology and the human brain. He for example addresses how we through our daily use of technology is transforming our brain, behavior and thus the society we live in. “The most thoughtful, perhaps, is how much impact the development in so few years has had in our basic way of being and behaving. How did it really happen that we today are most likely to look more at our smartphones than our children or spouses? And how the free will and control over our own time and attention almost seems to have disappeared?”¹⁰

On the opposite site, a research on computer in human behavior focus upon how online social networking enhance life satisfaction. With the growing use of social network sites, certain studies have found that there are positive psychological outcomes from engaging in social networking on various online platforms. The social support you can give and receive through online social networking, is considered to be one of the most important reasons for online social networking. Through a research including several test persons, it becomes clear that their life satisfaction increases through their online network.¹¹

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Notes

¹ Investopedia.com

² <https://blogs.scientificamerican.com/guest-blog/how-alan-turing-invented-the-computer-age/>

³ Grosser, Benjamin "What Do Metrics Want? How Quantification Prescribes Social Interaction on Facebook," in *Computational Culture* no. 4 (2014).

⁴ Goffey, Andrew. *Algorithm \ A lexicon*, ed. Matthew Fuller, 15-21. Cambridge, MA: MIT Press, 2008.

⁵ Wright, Richard. *Data Visualization \ A lexicon*, ed. Matthew Fuller, 78-87. Cambridge, MA: MIT Press, 2008.

⁶ Grosser, Benjamin "What Do Metrics Want? How Quantification Prescribes Social Interaction on Facebook," in *Computational Culture* no. 4 (2014).

⁷ Grosser, Benjamin "What Do Metrics Want? How Quantification Prescribes Social Interaction on Facebook," in *Computational Culture* no. 4 (2014).

⁸ Fogg, B.J. (2009): A behavior model for persuasive design, Persuasive Technology Lab, Stanford University.

⁹ Fogg, B.J. (2009): A behavior model for persuasive design, Persuasive Technology Lab, Stanford University.

¹⁰ Rashid, Imran. 2017. "Sluk". *Kunsten at overleve I en digital verden*. 78-79. Lindhardt & Ringhof

¹¹ https://ac-els-cdn-com.ez.statsbiblioteket.dk:12048/S0747563213002926/1-s2.0-S0747563213002926-main.pdf?_tid=0b86496f-70f2-4b5e-89e9-452c1adab8cf&acdnat=1524725378_5a6f1844d2ed710f602d7e1705397676