

MODERN MINING

Datafication and the rise of information gathering

Not so long ago, in the year 2000, only a quarter of all the information of the world was digital. Information was mostly stored on paper, film and other analogue media. Since the rise of the internet and later social media, the amount of digital data is growing very quickly, doubling in amount every three years. In 2013 only 2% of all stored information was non-digital.

This is why we can state that we now live in an era of big data and datafication.

Big data refers to data that is huge in volume (large datasets), high in velocity (data that is being produced and collected in real-time) and diverse in variety (different types of data: text, images, movies, likes, etc.).

Datafication refers to the technological trend of turning many aspects of our life into data. Think about Google that transforms our searches online into data, Facebook that transforms our friendships into data, Netflix that transforms our watching of TV-shows and films into data, Tinder that transforms our dating activities into data or Amazon's Alexa that transforms our grocery shopping into data.

KEY IDEAS

Given the increasing importance of big data and the widespread character of datafication, we need to examine what the impact of big data and datafication on our society is. We will explore two case studies: personalised media and privacy.

Personalised media: big data and datafication enabled media to become much more personalised, tailored around our own personalities, preferences and previous use of media. Think about how Netflix suggests a new TV-show the moment you have finished one. This is done by using algorithms. Algorithms originate from mathematics and computer science and are a step-by-step set of operations to be performed. It makes use of a certain input (if) and results in a certain output (then). This is where big data and datafication comes into play: algorithms are trained

on our data (what music we consume on Spotify, what pictures we share on Instagram, what films we watch or comments we add on YouTube). More data means more possibilities to train algorithms; the smarter algorithms become, the more efficient they are in offering us new content that is tailored around what we have consumed and enjoyed before.

Privacy: while personalised media and advertising content (targeted advertising is another reason why companies like Facebook and Google are after your data), can be a good thing (you get more TV recommendations for stuff you have enjoyed in the past and you no longer get boring ads for laundry products that are totally irrelevant for you), there is also a dark side on the debate about big data and particularly datafication. Big media companies like the ones mentioned have so much information about who we are, what we like, who our friends are, etc. that some thinkers have warned that our privacy might be at risk in a world where we are sharing everything over digital platforms. Former Google CEO Erik Schmidt made some important statements about this some years ago: "We know where you are. We know where you've been. We can more or less know what you're thinking about." Does this sound okay to you? Do you find it normal or rather scary?

KEY READINGS

Cukier, K. N. and Mayer-Schoenberger, V. (2013). The rise of big data: How it's changing the way we think about the world. *Foreign Affairs*, 92(3). Available from: fam.ag/2H4jIM7.

Fuchs, C. (2013). *Social media. A critical introduction*. London: Sage.

Kitchin, R. (2014). *The data revolution*. London: Sage. Available from: bit.ly/2Jq8ijZ.

ACTIVITIES

1. Think about what different types of data (personal data, user-generated-data and data about what you're doing on social media) you are sharing on your favourite social media platform. List it for yourself and then compare and discuss with your classmates.
2. Think about what data your mobile phone is collecting. Also think about who has access to that data/for what purpose. Create an overview and discuss whether you are happy with this or not.
3. What do you understand by the term 'privacy'? Discuss in your group what you think is important and compare it to the generation of your parents and grandparents. Do you think they have the same opinion as you?