

CA115 Digital Innovation Management Enterprise

Week 8

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These notes will be posted to Loop.

Social Experience of the Internet

1990s

Cautious Optimism

In a summer **1996** interview with the World Wide Web Journal, in an issue called *The Web After Five Years*, **Tim Berners-Lee was optimistic**. He looked forward to greater bi-directionality on the web and less friction in the publishing process.

In 1998, Jaron Lanier wrote in *Taking stock*:

So, what's changed in the last five years?, Wired, January 1998, p. 60, that, "[t]he Internet has created the most precise mirror of people as a whole that we've yet had ... we can breathe a sigh of relief. **We are basically OK**". The new century began with optimism about the world wide web.

Challenges

In the same issue of the World Wide Web Journal, Berners-Lee discusses the **challenges**. One was **to maintain the web open, free from exploitation** by one dominant commercial player. Berners-Lee acknowledged this but was hopeful that the incentives to keep the web from fragmenting in this way would be enough. That working together would trump fragmentation.

2000s

How Can We Make Money?

In the beginning, at the turn of the millenium, people were still figuring out how to make money online. And the model that won out - at least until recently - was a **surveillance, advertising and social validation** model. In return for services that cost nothing, or very little, people would consent to sharing their personal data and viewing advertisements.

Google Has an Answer

When Google launched Gmail in 2004, the aim to reach as many people as possible meant that the model of offering a free service supported by advertising won out over a paid service.

As a step further, however, Gmail required users to allow **access to their personal data**, their emails, **to allow targetted delivery of advertising**. This was controversial at the time, despite Google's assurances that only computer systems would review emails.

Facebook

"**I have a new addiction**. It is powerful. It is disturbing. **It is thefacebook.com**". March 25th 2004, The Daily Pennsylvanian. Quoted in Facebook's pitch deck.

Facebook explicitly pitched targetted advertising based on about 16 pieces of information, at that time, about the user.

2022

Observations

It can be argued that:

- A handful of corporations dominate significant portions of the world wide web: search and advertising, as well as browsers, mobile operating systems and email. Social media. Mobile computing. Shopping and cloud computing. Desktop software. **The web is dominated by about six companies.**
- Competition is not tolerated.
- Current **business models promote platform lock-in**. It's in a company's interest to keep users on their platform and to discourage interoperability with other competing systems.
- Keeping users on the platform and engaged drives **system design** that **is often suboptimal for society**, with a constant stream of new information provided by the algorithms designed to maintain engagement.
- Maintaining engagement using some version of social validation reward, likes and so on, promotes exhibitionism and **leads to polarised and exaggerated online interaction**.
- Engagement **algorithms provide whatever seems to engage the user**, regardless of its effects on the user. Promises to police the algorithms, to break harmful engagement - for example, over-exposure of the gullible to conspiracy material and so on, are not in the interests of the business model. This is not well aligned with corporate missions to maximise shareholder value.
- Business models create a market for meta sites that swamp the internet and search results with low-quality clickbait.
- User-generated content is promoted as a means to generate content for enagement, reasons to feel validated and, subsequently, platform lock-in.

Additionally, it seems that **trust online seems in low supply**, with bad acting and misinformation expected as a matter of course.

Berners-Lee Revisited

Tim Berners-Lee, in 2019, wrote that he broadly sees three sources of dysfunction affecting today's web:

1. **Deliberate, malicious intent**, such as state-sponsored hacking and attacks, criminal behaviour, and online harassment.
2. **System design** that creates perverse incentives where user value is sacrificed, such as ad-based revenue models that commercially reward clickbait and the viral spread of misinformation.
3. **Unintended negative consequences** of benevolent design, such as the outraged and polarised tone and quality of online discourse.

It's a Structural Issue

Improving behaviour at an individual level and as a society is one goal. **This is mostly a structural issue** although, as always, personal choice can help. Negative externalities created by corporations must be internalised as expenses. Tim Berners-Lee's Contract for the Web is a good statement of intent but nothing less than a technological and social overhaul will have an impact.

Solutions

After Tim Berners-Lee and Cory Doctorow, some of the structural things that may help solve these problems include:

- Dismantling the surveillance/advertising/social validation business model is a first step and replacing it with **something that aligns corporate aims, often profit, with what is good for society**.
- **More transparency and control** over the automated decision making algorithms (ADM) or AI that control the platforms. By changing the business model, the aims of the platforms should change the goals of the algorithm AI.
- **Interoperability and decentralisation**, i.e. having systems work with each other according to open standards, creating what Doctorow calls the ComCom, competitive compatibility. In the same way that any telephone can call another, or any email address can be used to contact another.
- To have **personal control over data**, i.e. to have personal data shared with systems on a need-to-know basis from an easily controlled virtual identification card. Instead of having to review the many terms and conditions at each website you visit, the browser checks what you are willing to share.
- Control over data on platforms; users ought to be able to move all their data, easily, from one platform to another, or to remove it completely.
- Education of children (and adults) about how these systems work and the psychological pressures that the ADM algorithms and the surveillance/advertising/social validation business models subject them to.
- **Changing the focus** from exhibitionism **to community**, from polarised shouting to discussion. Again, changing the business models may promote this.
- Creating the structures, perhaps through education, for less tolerance for:
 - Bad acting and misinformation. It seems strange that malicious hacking and negative social behaviour is accepted as something normal online.
 - Monopolistic capitalism and cronyism: how can a few firms dominate a market? This is not a free market.
 - Spying and state control of the internet. See Edward Snowden.

The Future

Making the internet better is perhaps one of the most important areas for technical innovation for the future, alongside solving the problems of climate change and AI.

Next time: a more positive take on the internet.

References

See Loop.

Blog This Week

Write a little about about your social experience of the internet.

What is your opinion about the **Automated Decision Making** (ADM) algorithms that power modern platforms?

How might they be improved from the perspective of the individual and society?