

...MEDIA AND TECHNOLOGY?

The four paradoxes of media innovation

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A TIME TRAVEL THROUGH DIGITAL MEDIA LIFE

For 15 years, our research group at the University of Ghent and imec has been observing the changing relationship to media and technology of a particular demographic group in the heart of Europe: the Flemish.

At a time of significant changes within the media and technology landscapes, we consistently monitored their media ownership and use, as well as their attitudes towards media and technology. Comparing the findings with previous data revealed several profound shifts.

Media are ubiquitous, with more content being produced by an increasing number of creators and made available to a global audience on a multitude of devices and platforms. In today's world, people live in media—as media scientist Mark Deuze put it in his book *Media Life*—, and they often move effortlessly between traditional and online media. This form of media nativity, however, comes with its own challenges.

FROM TECHNO-OPTIMISM TO TECHNO-REALISM

We observed the emergence of four “technology paradoxes”, where people simultaneously experience both positive and negative consequences from the use of the new media and technologies. Over the years, (the majority of) the Flemish have shifted from an attitude of techno-optimism to techno-realism. While they mostly remain positive and enthusiastic about technology, they are also increasingly aware and (partly) more concerned with technological achievements. We detected their growing awareness that not everything that is technologically possible is also desirable from a personal or societal point of view. Also, being part of an expanding digital ecosystem can mean being pulled in opposite directions, as appears to be the case for the people of Flanders, observed over the past 15 years. Data drawn from the imec.digimeter survey yielded four pairs of oppositional poles—paradoxes, if you will. We would like to invite you to compare your own media experiences and perception to those of the Flemish:

HOW DO YOU FEEL ABOUT...

PARADOX 1

The dependency paradox: connected, yet also reliant

Katrien woke up and immediately reached for her smartphone, feeling a pang of anxiety until she checked her notifications. She spent hours scrolling through social media yet didn't feel it took up much of her time. One day, she decided to limit her use by setting screen time restrictions but found herself constantly overriding them. Despite her efforts, she still enjoyed the connection and entertainment her phone provided. Eventually, she realised she was stuck in a cycle of dependence, craving the very thing she wanted to control.

Never before have people spent so much time on their smartphones, nor have they attached so much importance to their mobile devices or to being connected via social media. At the same time, people have never been more worried about dependency and addiction.

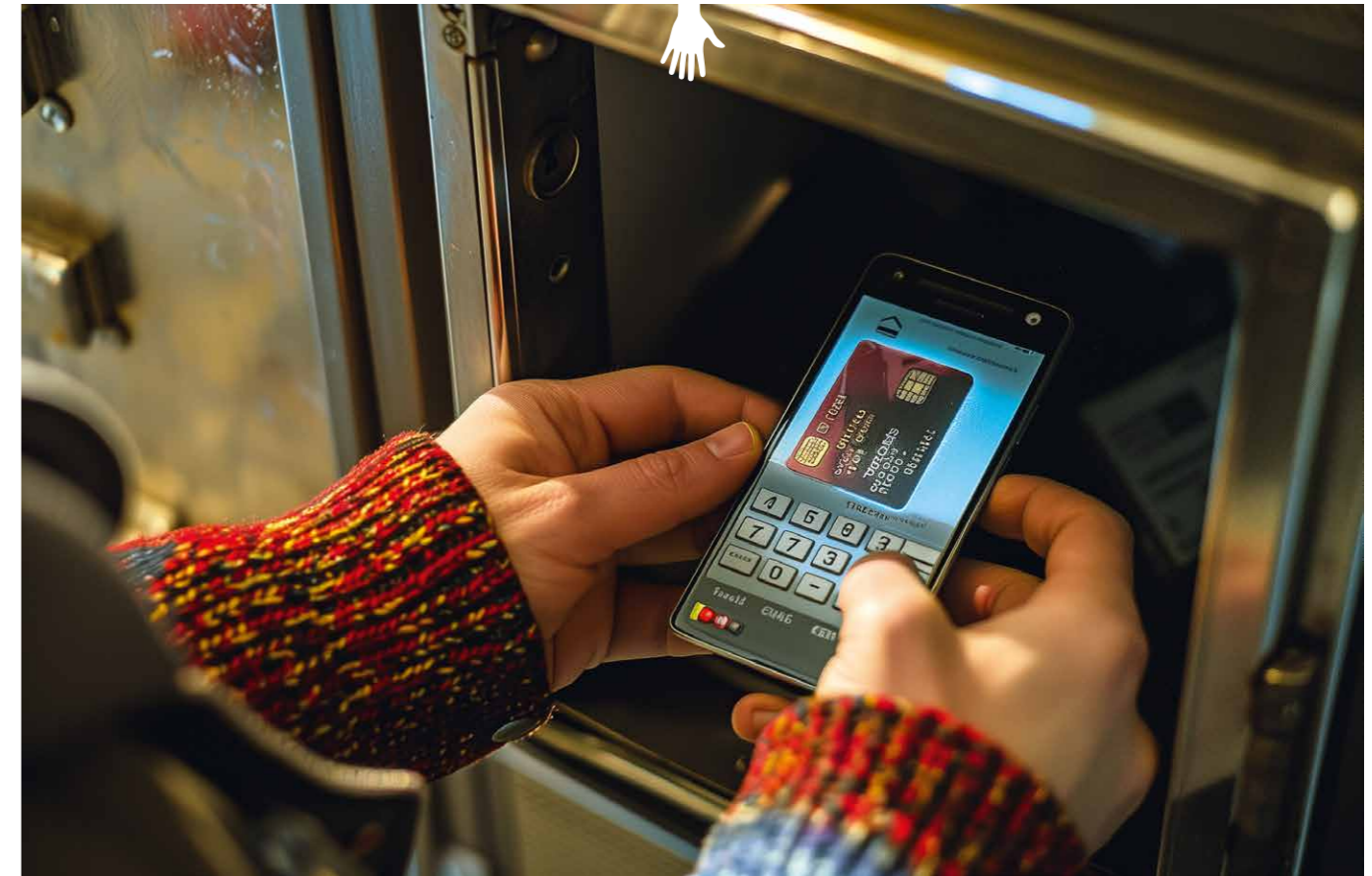
The dependency paradox refers to the balancing act of preserving digital well-being. As media and technology are increasingly integrated into individuals' daily routines, a corresponding sense of reliance on these tools has become apparent. In 2012, most Flemish social media users reported daily usage but did not see it as time-consuming.

By 2015, a dependency paradox emerged among Flemish users, influenced by smartphones and social media, leading some to seek distance from platforms like Facebook.

In 2016, 20% of Flemings felt dependent on their smartphones and 29% on social media. Despite this, many continued to enjoy these technologies. To manage dependence, they set self-imposed rules, striving to balance their usage.

By 2023, 80% of individuals used such rules, but only 40% found them effective. Enthusiasm for these rules waned, with people feeling less in control. Additionally, a quarter of Flemings felt addicted to their smartphones, and 40% worried about excessive use.

The paradox highlights the struggle to balance digital well-being and connectivity.



PARADOX 2

The data paradox: sharing data, yet also concerned

Pieter loved the convenience of online banking and shopping, appreciating how apps remembered his preferences and made transactions smooth. However, he couldn't shake the nagging worry about his personal information being exposed. Even as he shared more data to get personalised recommendations, he grew increasingly anxious about privacy breaches. Pieter tried to manage his digital footprint by adjusting privacy settings, but the trade-off for convenience was always in the back of his mind. He found himself in a constant struggle between enjoying the ease of digital life and fearing for his online privacy.

Over recent years, people have (forcibly or not) embraced online platforms for close to all services (media in particular, but also banking, shopping, work, health, government interaction, etc.). Platforms whose constant availability people greatly appreciate, and whose convenience is due to personalisation based on data their users knowingly or unknowingly share. At the same time, however, we also see peaks in concerns about privacy and the extent to which companies are transparent about their data collection. Consistently, we can interpret this data paradox as a call for more control over personal data (on digital platforms).

The rise of social media (and broader big tech companies, including Meta and Google) has been accompanied by concerns about personal data online.

In 2012, one in three Flemings believed social media violated their privacy.

By 2015, concerns about online privacy grew, even as people increased their social media use.

By 2023, the data paradox became more pronounced, with 56% worried about online privacy. This concern, initially driven by social media, now also relates to the digitisation of public services. The shift to an "online first" approach has led to the disappearance of physical counters and a reliance on app-based authentication, such as ItsMe.

The paradox underscores the need for greater control over personal data amidst digital shifts.

PARADOX 4

The AI paradox: curious, yet also concerned

Raheem was fascinated by the capabilities of AI, particularly the way it could streamline his work and offer personalised recommendations. He eagerly explored new AI tools, hoping to enhance his productivity. However, he also worried about the implications of AI on privacy and job security, especially as chatbots and automation became more prevalent. Despite his curiosity, Raheem found himself unsettled by the idea that he might not be able to distinguish between human and machine interactions in the future. His excitement was tempered by a growing sense of unease about the potential downsides of AI.

2023 was the year of generative artificial intelligence (AI). In addition to the three existing paradoxes (dependence, truth and data), we witnessed a fourth paradox emerge. We observed a clear divide between passionate supporters and staunch opponents of AI. Meanwhile, more than half of the population remains undecided, still seeking to form a definitive stance on the issue.

On one hand, AI sparks significant curiosity and admiration among Flemings. Seven in ten are impressed by AI's capabilities, and three out of five are eager to explore its applications (61%) and learn more about it (57%). Initially, this interest stems from the belief that AI will enhance professional efficiency, with about half (48%) convinced of its productivity benefits. Additionally, one in three is interested in AI's broader applications in daily life.

On the other hand, concerns about AI have surged this year. AI's role in spreading disinformation has heightened the truth paradox. Two-thirds (64%) worry about AI's negative impacts, a significant increase, and over half are concerned about privacy (56%) and distinguishing humans from chatbots (51%).

Thus, people are caught in a paradox: AI evokes both curiosity and concern. This shift from techno-optimism to techno-realism is evident as the number of unwaveringly positive individuals declines (-9). Currently, one in three (31%) believes AI's benefits outweigh its drawbacks, but this optimism wanes as AI becomes more tangible, exemplified by ChatGPT.

Conversely, there has been a notable rise in those strongly negative about AI (21%, up 11 points), with fears about job impacts (35%). Meanwhile, about half (51%) remain undecided or have no opinion on AI. The future acceptance of AI will depend on their experiences in the coming years.

The paradox reflects a shift from techno-optimism to techno-realism, with increasing skepticism. Future acceptance of AI will depend on personal experiences and tangible outcomes.

EMPOWERING THE PARADOXES

The four identified paradoxes highlight the need for an inclusive digital transformation. Imecc.digimeter categorises people into five segments based on their relationship with technology, ranging from "passionate supporters" to those with "no relationship." These segments vary significantly in how they grapple with the paradoxes.

To achieve an inclusive transformation, we must empower all people to feel 'in control' of today's technology, ensuring they can fully embrace future advancements. Without this, we risk widening the digital divide, with a leading group pulling further ahead—i.e. creating a new digital divide instead of closing a gap towards inclusivity. Empowering and convincing people of their control over technology is a crucial task for the government and media sector.

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→ The imecc.digimeter Reports "Digitale trends in Vlaanderen" 2009—today

PARADOX 3

The truth paradox: better informed, yet also concerned about disinformation

Sofie felt more informed than ever with news apps and social media updates at her fingertips. She loved reading the latest articles and watching live news streams, believing she was staying on top of current events. Yet, as stories of fake news and misinformation spread, she began to doubt the reliability of her sources. During the pandemic, she turned to trusted local news, but the influx of conflicting information online made her wary. Sofie grappled with the challenge of discerning truth in a sea of information, feeling both empowered and confused.

The Truth paradox results from the rise in online and social-news use. From 2018 onwards, there appeared to be increasing concern about the possible influence of "fake news" and disinformation on themselves and society. The truth paradox highlights the complex relationship between individuals and the digital information landscape. While they have unprecedented access to information, people must also grapple with the challenges of discerning truth from falsehood and navigating a space in which misinformation can proliferate.

In 2019, over half of Flemings enjoyed digital news channels and felt better informed, yet worried about their reliability.

In 2020, at the start of the Corona crisis, Flemings faced a wave of disinformation, making fake news feel immediate. Traditional news sources saw increased trust during the pandemic. Local news brands were seen as beacons of trust during times of disinformation.

By 2023, 51% of the population still struggles with the truth paradox.

The truth paradox, however, also extends beyond disinformation to include concerns about phishing and AI, where people fear they are unable to distinguish between human and machine-generated content. The challenge remains to empower people to regain control over online information and maintain trust in digital sources.

The paradox highlights the need to empower individuals to trust and control digital information.

