



Selected Papers of #AoIR2024:
The 25th Annual Conference of the
Association of Internet Researchers
Sheffield, UK / 30 Oct - 2 Nov 2024

TRUST ISSUES AND RESPONSIBILITIES: SOCIAL IMAGINARIES, RISK, AND USER LABOUR IN DIGITAL BANKING APPS

Yuening Li
National University of Ireland, Maynooth

Aphra Kerr
University College Dublin

Linzi Ryan
National University of Ireland, Maynooth

The launch of M-Pesa in 2007 served as an early and archetypical example, utilising telecommunications networks for payments and marking a shift towards converging banking with media functions, and fostering social interaction through finance (Maurer, 2015). This trend has been propelled by the growth of finance applications with social functionality, leading to a blurring of distinctions between service providers and users, and resulting in the new financial technology (FinTech) industry (Swartz, 2020). The development of payment platforms (e.g., Meta Pay) by social media providers which emphasise the transactional and exchange functions of payment, along with neobanks like Revolut and N26, represents a challenge from decentralised digital financial paradigms to traditional payment models (Mezei and Verteş-Olteanu, 2020). While these novel digital services have gained widespread acceptance, they also raise concerns regarding social inclusivity, accessibility, algorithmic discrimination, and data security. These issues necessitate scholarly attention to examine the evolving FinTech industry, focusing on the design and service affordances of banking innovations and their social impacts.

This paper draws upon conceptual frameworks of platformisation (van Dijck, Poell, and de Waal, 2018), media convergence (Jensen, 2022), trust in digital banking (Mezei and Verteş-Olteanu, 2020; van Esterik-Plasmeijer and van Raaij, 2017), and social imaginaries (James, 2019; Mansell, 2012; Gillespie, 2018). It views digital banking apps as platforms that enable personalised interactions (Poell, Nieborg, and van Dijck, 2019), and aim to investigate the datafication (van Dijck, 2014; Sadowski, 2019) and platformisation of banking. This approach underscores the transformation of service

Suggested Citation (APA): Li, Y., Kerr, A., Ryan, L. (2024, October). *Trust Issues and Responsibilities: Social Imaginaries, Risk, and User Labour in Digital Banking Apps*. Paper presented at AoIR2024: The 25th Annual Conference of the Association of Internet Researchers. Sheffield, UK: AoIR. Retrieved from <http://spir.aoir.org>.

dynamics and the challenges brought by digital banking concerning public accessibility and social inclusion (Swartz, 2020). We ask: a) What are the dominant imaginaries of payment reflected by contemporary financial services? and b) How do the design and affordances of digital payment services impact trust, responsibility, and user labour?

This paper employs a modified walkthrough method (Light, Burgess, and Duguay, 2018) including detailed content analysis of the Terms and Conditions (T&Cs) documents required for initial access to seven digital banking apps in Ireland. The sampled banking apps include Bank of Ireland (BOI), N26, An Post Money, Revolut IE, Chase UK, Starling Bank UK, and Klarna. Given the heightened security and legal vetting requirements required by digital banking apps, the modified walkthrough method encompasses six stages: a) anticipated use; b) entry page; c) T&Cs; d) authentication and verification; e) customer support (replacing the original 'everyday use step'); and f) suspension and withdrawal of service.

The modified walkthroughs highlight a significant convergence between the finance and media industries. Our analysis identified three dominant social imaginaries of payment leading to different designs for digital banking apps: a) the *Institutional Imaginary*, b) the *Transactional Imaginary*, and c) the *Digital Imaginary*. The *Institutional Imaginary* views payment as a state-sanctioned and surveilled economic activity. Two variations of this approach were identified: pillar banks (e.g., BOI) and community-centric financial systems (e.g., An Post Money and credit unions). This imaginary reflects the state theory of money (i.e., *Chartalism*) (Knapp, Lucas and Bonar, 1973). The *Transactional Imaginary* focuses on the exchange function of payments (Simmel, 2011; Dodd, 2014; Zelizer, 2017; Swartz, 2020) leading to a convergence of media and finance. Again, there are two design variations of this imaginary: economic trading networks like neobanks (e.g., Revolut IE and N26) and interpersonal communication-enabled payment solutions such as WeChat Pay and M-Pasa that are more common in the global south (Chuhan-Pole and Angwafo, 2011). The *Digital Imaginary* emphasises technology and promotes the design of dematerialised and decentralised FinTech innovations using biometric and blockchain technology (Westermeyer, 2020; Lemieux and Dodd, 2023). Adopting the concept of social wholes (Castoriadis, 1998), we view these imaginaries as arising from diverse, intersecting social groups and communities that contribute to collective thought processes. These groups shape the broader understanding and design of money and digital banking services, influenced by cultural norms, historical contexts, technological advancements, and economic practices.

The content analysis of T&Cs documents identified accessibility and readability barriers, and ambiguities and anomalies of user consent and user labour. T&Cs are often lengthy and written in complex legal and technical language and only provided in English for the Irish market. At the same time, the apps may be accessed via different language settings based on the mobile language settings of users—this creates barriers for users with varying levels of literacy for the English language and financial knowledge. Additionally, the visual design of T&Cs documents is not mobile-friendly and often links to external web pages. This may discourage users from thorough reading and hinder fully informed consent. The T&Cs analysis also uncovered the problematic use of implied consent, in contrast to explicit consent, hidden options to withdraw consent, and a lack of transparency regarding the collection and analysis of personal data. The

investigation of sample banking apps operating environments reveals broader concerns about social inclusion and user agency. By enabling users to open banking accounts solely through the apps and providing digital-only service, digital banking apps emphasise them as app users over banking customers, transferring responsibilities onto users. Digital banking apps incorporate self-verified steps turning users into unpaid labourers (Jarrett, 2022) for the platform. Users are expected to perform tasks traditionally managed by service providers, such as document verification, reporting technical issues, and navigating complex consent and security processes. This shift requires users to have higher levels of digital and financial literacy, which may exacerbate the digital divide and potentially exclude those less proficient. Additionally, with 'rewards' for referral links, digital banking apps impose risk on users for sharing information to their social networks for the banks without adequate support or compensation. This trend raises ethical concerns about user agency and the equitable design of essential financial services within the increasingly app-centric ecosystem.

This paper traces the development of the FinTech industry through the lens of current digital banking app designs in Ireland. It identifies the convergence between the media and finance industries and their digital infrastructures, highlighting a collective shift towards platformisation and datafication. Three different imaginaries are represented in the designs of the digital banking apps examined. They are resonant of classical social theories of money and contemporary collective understandings and expectations of personal finance. These imaginaries are not separate but converge and interact with each other, leading to app designs such as Revolut IE and An Post Money that reflect more than one imaginary. The analysis of T&Cs documents reveals ambiguities and risks that may create barriers to continuous app use, withdrawal of the service, and questionable consent obtained from users who are not fully informed. The deployment of automated self-verification and customer service imposes additional responsibilities on users, including more user labour, challenging the industry's promise of personalised banking accessible anytime, anywhere. This paper lays a foundation for further exploration into how the FinTech industry could foster a more inclusive and equitable financial services network.

Funding

This research was funded by Science Foundation Ireland under Grants number 18/CRT/6222.

References

- Castoriadis, C., 1998. *The Imaginary institution of society*. 1st MIT Press pbk. ed ed. Cambridge, Mass.: MIT Press.
- Chuhan-Pole, P. and Angwafo, M. eds., 2011. *Yes Africa can: success stories from a dynamic continent*. Washington, D.C: World Bank.
- Dijck, J. van, Poell, T. and Waal, M. de, 2018. *The platform society*. New York, NY: Oxford University Press.

- van Dijck, J., 2014. Datafication, dataism and dataveillance: Big Data between scientific paradigm and ideology. *Surveillance & Society*, 12(2), pp.197–208. <https://doi.org/10.24908/ss.v12i2.4776>.
- Dodd, N., 2014. *The social life of money*. Princeton, New Jersey: Princeton University Press.
- van Esterik-Plasmeijer, P.W.J. and van Raaij, W.F., 2017. Banking system trust, bank trust, and bank loyalty. *International Journal of Bank Marketing*, 35(1), pp.97–111. <https://doi.org/10.1108/IJBM-12-2015-0195>.
- Gillespie, T., 2018. *Custodians of the internet: platforms, content moderation, and the hidden decisions that shape social media*. New Haven London: Yale University Press.
- Jensen, K.B., 2022. *Media Convergence: The Three Degrees of Network, Mass, and Interpersonal Communication*. 2nd ed. [online] London: Routledge. <https://doi.org/10.4324/9781003199601>.
- Knapp, G.F., Lucas, H.M. and Bonar, J., 1973. *The state theory of money*. [Abridged ed ed. Reprints of economic classics. Clifton [N.J.]: A. M. Kelley.
- Lemieux, V. and Dodd, N., 2023. 'Life World' on Ledger: A 'Scenic' View. *Journal of Digital Social Research*, 5(2), pp.21–54. <https://doi.org/10.33621/jdsr.v5i2.145>.
- Light, B., Burgess, J. and Duguay, S., 2018. The walkthrough method: An approach to the study of apps. *New Media & Society*, 20(3), pp.881–900. <https://doi.org/10.1177/1461444816675438>.
- Mansell, R., 2012. *Imagining the Internet: communication, innovation, and governance*. Oxford: Oxford University Press.
- Maurer, B., 2015. *How would you like to pay? how technology is changing the future of money*. Durham; London: Duke University Press.
- Mezei, P. and Verteş-Olteanu, A., 2020. From trust in the system to trust in the content. *Internet Policy Review*, [online] 9(4). <https://doi.org/10.14763/2020.4.1511>.
- Poell, T., Nieborg, D. and Van Dijck, J., 2019. Platformisation. *Internet Policy Review*, [online] 8(4). <https://doi.org/10.14763/2019.4.1425>.
- Sadowski, J., 2019. When data is capital: Datafication, accumulation, and extraction. *Big Data & Society*, 6(1), p.2053951718820549. <https://doi.org/10.1177/2053951718820549>.
- Simmel, G., 2011. *The philosophy of money*. Routledge classics. Abingdon, Oxon; New York: Routledge.

Swartz, L., 2020. *New Money: How Payment Became Social Media*. Chicago University Press.

Westermeier, C., 2020. Money is data – the platformization of financial transactions. *Information, Communication & Society*, 23(14), pp.2047–2063.
<https://doi.org/10.1080/1369118X.2020.1770833>.

Zelizer, V.A.R., 2017. *The social meaning of money*. New Princeton paperback edition ed. Princeton, New Jersey: Princeton University Press.