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Appification in the Age of AI

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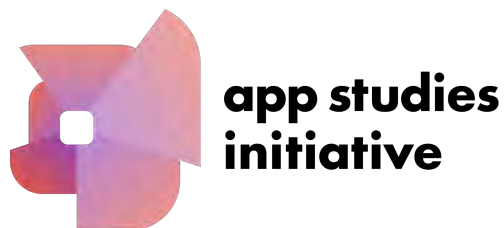
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Fernando van der Vlist · Esther Weltevrede
(Editors)

Appification in the Age of AI

Exploring AI App Cultures and Economies

ASI Sprint Report
May 2025



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The **App Studies Initiative** (ASI) is an international research network comprising academic experts in app-related media research who contribute to the study of apps and platforms. The research network involves researchers and faculty from the University of Amsterdam and Utrecht University (the Netherlands), the University of Warwick and Goldsmiths, University of London (United Kingdom), Concordia University and the University of Toronto (Canada), among others. Its directors are Anne Helmond, David Nieborg, Fernando van der Vlist, and Esther Weltevrede.

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About this Report

The **ASI Sprint Report Series** serves as a conduit for exploring the phenomenon of 'appification' and its various societal, cultural, and political-economic impacts worldwide. Dedicated to critical app studies inquiry, this series showcases ongoing research efforts conducted by researchers associated with the **App Studies Initiative** (ASI) in collaboration with Master's students. Published by the ASI, each report features the latest research generated during recent 'sprints', with the aim of disseminating ongoing research within the broader app and platform studies research community.

This second ASI Sprint Report stems from the 2024–2025 Master's elective course '**Appification: The Cultures and Economies of Apps**', and the Cultural Data & AI Master's **Embedded Research Project** 'The Appification of AI: Exploring Emerging AI App Ecosystems and Infrastructures', both developed, taught, and supervised by the editors in the Department of Media Studies at the University of Amsterdam, Faculty of Humanities. The chapters present the research undertaken by students as part of the Embedded Research Project and the course's concluding themed 'data sprint', organised within the Department of Media Studies. All contributors are listed in the Contributors section of the report.

1 Editorial Introduction

Appification in the Age of AI

Fernando van der Vlist · Esther Weltevrede

Abstract

As artificial intelligence (AI) becomes increasingly integrated into everyday life and digital environments, its presence in applications ('apps') warrants closer examination. This report explores what we call the 'appification of AI'—the process by which AI technologies are embedded into daily life and practices via apps and app ecosystems. Drawing on insights from app studies, platform studies, and critical AI studies, the report investigates how different kinds of AI apps and app ecosystems—whether marketed as applications, 'agents', 'solutions', 'custom models', 'GPTs', or other forms—are shaping user experiences, business models, and digital infrastructures. It maps the rapidly expanding landscape of AI apps across multiple spheres, from generative AI mobile apps and chatbots like OpenAI's ChatGPT to enterprise-focused AI tools distributed through cloud AI marketplaces. Combining app ecosystem analysis and a 'multi-situated' approach to app studies and collaborating with Master's students, the report presents a series of mappings and case studies that highlight how AI apps are reshaping different sectors and spheres of everyday life. Ultimately, the report underscores the significance of critical app and platform studies in understanding the cultural, economic, and political dimensions of AI technology across various application contexts and cases.

Keywords: appification · app studies · artificial intelligence (AI) · app ecosystems · app stores · mobile apps · AI app cultures · political economy · data-sprinting

Referenced Actors: Agentforce · AI Agent Space · Alexa · Amazon · Amazon Web Services · Andreessen Horowitz · Anthropic · App Store · App Studies Initiative · Apple · Apple

Intelligence · Appification: The Cultures and Economies of Apps · AWS Marketplace · ChatGPT · ChatGPT API · Claude · Copilot · Data.ai · Deepseek · Digital Methods Summer and Winter Schools · Echo · Gemini · Gojek · Google · Google Cloud · Google Cloud Marketplace · Google Play · Grok · Hugging Face · HuggingChat · Humanities Labs · Joule AI Agents · LAB42 · Master's Cultural Data & AI · Microsoft · Microsoft 365 · Microsoft Azure · Microsoft Azure Marketplace · Nova · OpenAI · Perplexity · Realtime API · Replika · Responses API · Salesforce · SAP · Sensor Tower · University of Amsterdam · WeChat

Introduction: Emerging AI App Cultures and Economies

How can app studies—and the ‘appification’ concept—help us understand the current development, emerging cultures, and economies of artificial intelligence (AI)?

November 30, 2024, marked the second anniversary of [OpenAI](#)'s launch of [ChatGPT](#). While not the first of its kind, since its debut, AI applications (‘apps’) have experienced significant advancements, reflecting AI’s rapid integration into various technologies and daily life. Also in late 2024, [Google](#) launched [Gemini 2.0](#), an advanced AI model capable of generating audio and images, marking a leap in multimodal AI capabilities. This development paves the way for ‘agentic’ (agent-based) AI applications, including autonomous web navigation and code debugging tools ([Pichai et al., 2024](#); [Pierce, 2024](#); [Zeff, 2025a](#)). [Apple](#) has similarly pitched [Apple Intelligence](#) (‘AI for the rest of us’) in iOS 18, embedding AI seamlessly across iPhones, Macs, and other devices ([Davis, 2024](#); [Perez, 2024b](#)). Meanwhile, [Amazon](#) introduced its [Nova](#) AI models, designed to enhance user experiences across (voice AI) services such as [Alexa](#) and [Echo](#) devices ([Peters, 2024](#)). OpenAI has also contributed to the emerging AI application landscape with its [Realtime API](#), enabling near-instantaneous speech-to-speech experiences ([Zeff, 2024](#)). These developments highlight a broader industry trend: major technology companies are embedding increasingly sophisticated AI models into their core products and services, reshaping user interactions and setting new standards for technological innovation.

Over the past two decades, software apps have become central to culture and the economy, influencing daily routines worldwide. Academic discussions on mobile apps, their infrastructures, and the ‘appification’ of everyday life highlight how apps have transformed communication, access to information, payment methods, and digital services ([Dieter et al., 2019](#); [Dieter et al., 2021](#); [Gerlitz et al., 2019a](#); [Goggin, 2021](#); [Miller and Matviyenko, 2014](#); [Morris and Murray, 2018](#); [Steinberg et al., 2022](#); [Van der Vlist et al., 2024b](#)). As analytics firms like [Data.ai](#) track annual global app downloads and expenditures, the shift toward mobile-first media consumption and production becomes increasingly evident. App stores play a crucial

role in shaping global app cultures and economies, serving as primary gateways or entry points for distribution, monetisation, and discovery ([Dieter et al., 2019](#); [Van der Vlist et al., 2024a](#)).

Against this backdrop, AI is now rapidly becoming an integral part of digital life, accelerating transformations in industries and altering how we communicate, work, and interact with technology. The incorporation of AI into software apps—what we term the ‘appification of AI’—marks a shift not only in how AI technologies are deployed, embedding them into a growing range of applications and supporting expansive app ecosystems ([Van der Vlist et al., 2025a: 21–24](#)), but also in how AI *interfaces* and *interacts with* end-consumers, industries, business, and developers. Apps are increasingly acting as the point of contact between complex AI systems and everyday practices across various aspects of life. This perspective highlights how users, knowingly or unknowingly, engage with AI technologies as they become integrated into digital routines. Developers use apps as platforms to integrate, extend, innovate, and market AI capabilities. Enterprises primarily use AI to transform workflows, drive efficiencies, and create novel business models. This trend has gained momentum due to both rapid advancements in AI and its increasing accessibility for developers, businesses, and end-consumers alike ([Van der Vlist et al., 2024a](#)).

A key example is [OpenAI’s ChatGPT](#), which has not only popularised AI but also expanded its application domains, positioning AI as a foundational technology across industries and daily life. Similar initiatives from [Microsoft \(Copilot\)](#), [Google \(Gemini, initially named Bard\)](#), [Anthropic \(Claude\)](#), [Perplexity](#), [Hugging Face \(HuggingChat\)](#) reinforce this trend, with conversational (‘natural language’) user interfaces—especially chatbots—emerging as the first ‘killer app’ for AI platforms. Meanwhile, the rise of generative AI tools has led to an influx of AI apps across app stores, a trend accelerated by OpenAI’s release of the [ChatGPT API](#) in March 2023.

This report investigates the ongoing appification of AI by mapping the emerging landscape of AI-powered applications and analysing how it unfolds across different spheres, industry sectors, and levels of analysis. Through app ecosystem analysis ([Van der Vlist et al.](#); [Van der Vlist et al., 2024a](#)) and a ‘multi-situated’ approach ([Dieter et al., 2019](#)), we examine AI’s cultural, economic, and political dimensions through case studies and collaborative research with our Master’s students, including embedded student research assistants.

App Studies meet Critical Platform and AI Studies

The Concept of Appification

The concept of ‘appification’ refers to the process through which aspects of daily life—from communication and information access to financial transactions and social interactions—are translated into the language and logic of mobile applications. Scholars in app studies have examined how apps, as forms of ‘mundane software’, introduce the datafication and formalisation of previously amorphous social practices ([Dieter et al., 2019](#); [Gerlitz et al., 2019a](#); [Goggin, 2021](#); [Morris and Murray, 2018](#); [Van der Vlist et al., 2024b](#); [Weltevrede and Jansen, 2019](#)). In many global contexts, especially in non-Western regions, ‘super apps’ such as [WeChat](#) (China) and [Gojek](#) (Indonesia) consolidate multiple services within a single platform, shaping everyday practices ([Steinberg et al., 2022](#); [Van der Vlist et al., 2024b](#)). Moreover, super apps—much like AI apps, as we contend—uniquely challenge a categorical separation between apps and platforms, emphasising the strategic dynamics involved and the necessity for case-by-case empirical analysis to ground this distinction ([Van der Vlist et al., 2024b](#); cf. [Van der Vlist, 2022](#)).

An important aspect of appification is its ‘dual-layered’ nature’ ([Burton and Weltevrede](#)). On one level, apps reformat everyday interactions into discrete, embodied actions—such as swiping, tapping, or scrolling—that reflect new action grammars, associated practices, and cultures of use ([Gerlitz et al., 2019b](#)). These gestures are not merely functional; they shape how users experience and internalise their routines, effectively serving as interfaces through which AI and digital technologies are integrated into daily life. As [Morris and Murray \(2018: 3\)](#) observe, appification marks ‘a historically specific moment when an increasing number of everyday activities and routines are being expressed through, carried out by, and experienced as apps’.

At the same time, these embodied interactions are systematically transformed into data and processed within underlying infrastructures. This infrastructural dimension of appification is critical for understanding the full scope of the phenomenon. While the ‘front-end’ processes capture the immediate, sensory engagement of users with digital systems, the ‘back-end’ infrastructures—comprising e.g. advertising platforms, content delivery networks, data analytics systems, and software development kits (SDKs)—repackage these interactions into formats that can be redistributed, monetised, and repurposed at scale ([Chao et al., 2024](#); [Dieter et al., 2019](#); [Lai and Flensberg, 2021](#); [Pybus and Coté, 2024](#)). It is within this layered

environment that everyday practices are both authenticated and transformed, laying the groundwork for broader cultural and economic shifts.

Platforms and Generative AI's Evolving Uses: Apps, Agents, and Enterprise

Underpinning this process of appification is a 'platformisation of AI' ([Van der Vlist et al., 2025b](#)), where AI functions as both a tool and a foundational platform. AI is increasingly structured around 'foundation models', with prompting emerging as the primary technique for directing these models ([Burkhardt and Rieder, 2024: 2](#)). This, amongst others, has led to new types of AI applications tailored to enterprise and industry-specific practices ([Van der Vlist et al., 2024a: 10–11](#)), as well as the creation of 'agentic' AI apps presented in the form of 'personae' ([Van der Vlist et al., 2025a](#))—envisioned by some as a replacement for websites and apps as the primary interface between consumers and company services. These specific platform and app developments should be viewed within the broader trajectory of AI systems, evolving from research and development to practical, real-world commercial products and services across various industry sectors—what we term the 'industrialisation of AI' ([Van der Vlist et al., 2024a](#)).

Major app stores, market observers, and analysts report a proliferation of AI-powered apps across mobile app stores and web and desktop platforms (e.g., [Apple, 2024](#); [Moore and Zhao, 2025](#); [Weatherbed, 2024](#)). For instance, [Apple](#) highlighted this trend in its 2023 App Store Awards, noting that 'Generative AI captured our collective imagination this year', and naming it the 'Trend of the Year' ([Apple, 2024](#)). In 2024, AI apps saw over \$1 billion in consumer spending—a 200% increase year-over-year ([Perez, 2024a](#)). The release of developer tools, such as [OpenAI's ChatGPT API](#) and the [Responses API](#), has further accelerated the creation of AI 'agents' that can perform actions on users' behalf, such as conducting web searches, scanning company files, and navigating websites ([Edwards, 2025](#); [Zeff, 2025b](#)).

Furthermore, amid growing competition, major cloud computing providers, such as [Google Cloud](#), [Microsoft Azure](#), and [Amazon Web Services \(AWS\)](#), continue to introduce new AI tools, products, and solutions. For instance, [Google Cloud's AI Agent Space](#), an AI agent ecosystem programme, is designed to help businesses discover, deploy, and co-create AI agents on their platforms ([Ichhpurani, 2024](#)). These tools primarily target the enterprise (and business-to-business) market rather than end-consumers, competing with major industry players such as [Microsoft](#) (agents in [Microsoft 365](#)) ([Ray, 2024](#)), [SAP](#) ([Joule AI Agents](#)), and [Salesforce](#) ([Agentforce](#), 'The Digital Labour Platform').

Clearly, the AI app economy is booming, with companies continually launching new types of AI tools, some of which are becoming 'daily staples' (Moore and Zhao, 2025). According to a recent [Andreessen Horowitz](#) market report from January 2025, based on market research data from Sensor Tower, the top categories among AI consumer apps by revenue include 'Photo/Video Editors', 'Beauty Editors', 'ChatGPT Copycats', and 'General Assistants', followed by more specific categories like 'Language Learning', 'Companion Apps', 'Plant Identifiers', 'Nutrition Apps', 'Translators', 'Music', 'Dictation', 'Math', 'Read Aloud Apps', and 'Writing Assistants'. The sheer variety and number of AI apps being created right now across these 'spheres'—from consumer-facing web, desktop, and mobile AI apps to AI apps distributed via cloud AI platforms and model marketplaces—could lead to 'chaos' in the app stores, with some suggesting that 'we may need an AI just to solve the AI app management problem' ([Acharya and Moore, 2025](#)). Indeed, by lowering deployment barriers for people around the globe, these diverse platforms and marketplaces for the distribution, monetisation, and discovery of AI apps—whether marketed as applications, 'agents', 'solutions', custom models, 'GPTs', or other forms—'present one of the trickiest platform governance challenges seen to date' ([Gorwa and Veale, 2024: 341](#)). According to Gorwa and Veale, one reason is that AI technologies can manifest as either content or open-ended tools.

Using a methodology involving online forums Reddit and Quora, [Zao-Sanders \(2025\)](#) finds that the top AI use cases have shifted from *technically*-oriented to more *emotionally*-driven between 2024 and 2025. According to their findings, the share of use case themes related to 'Content Creation and Editing' decreased from 23% in 2024 (1st rank) to 18% in 2025 (2nd) and 'Technical Assistance and Troubleshooting' from 21% (2nd) to 15% (4th), while 'Personal and Professional Support' increased from 17% (3rd) to 31% (1st).

These top three categories were followed by 'Learning and Education' (16%), 'Creativity and Recreation' (11%), and 'Research, Analysis, and Decision-Making' (9%). Within these broader themes, 'therapy and companionship' emerged as the leading use case, encompassing structured psychological support and companionship based on ongoing social and emotional interaction, often with a romantic dimension ([Zao-Sanders, 2025](#)). Other prominent activities included 'organising my life', 'enhanced learning', 'healthier living', and 'creating a travel itinerary'. This shift toward emotive and companionate uses illustrates how AI appification increasingly extends into intimate, affective, and everyday domains of life, shifting the line between natural and artificial connections in social interactions ([Savic, 2024](#)).

Furthermore, AI apps are known to be 'opinionated', showcasing differences in terms of capabilities, personalities, and responses, reflecting the underlying design choices, training data, and the specific goals set by developers. This is 'not a bug, it's a feature', as the saying

goes—applicable not only to AI companionship apps, such as [Replika](#), but to other application contexts as well. These differences can result in varying user experiences, as each AI app may approach tasks in unique ways, offering diverse solutions, communication styles, or even ethical considerations. However, such variability also underscores the challenge of establishing universal standards and governance for AI apps. Furthermore, the mobile apps of leading AI chatbots—[Gemini](#), [Claude](#), [Copilot](#), [Deepseek](#), [ChatGPT](#), [Perplexity](#), and [Grok](#)—all collect data through smartphones. Gemini currently leads the way, collecting 22 different data points across 10 categories from its users. This includes contact information, location, user content, history, identifiers, diagnostics, usage data, purchases, and other data ([Lu, 2025](#)).

Finally, users are exploring and discovering new applications of generative AI not only in consumer contexts but also across enterprise settings. [Fernandez \(2025\)](#), using an online search-based approach and public data about 530 case studies, finds that generative AI is being adopted across various departments—including customer support, marketing, IT, operations, and R&D—with ‘customer issue resolution’ (part of customer service) emerging as the most prominent use case. Over half of the identified implementations occurred in the tech sector, predominantly in North America. This growing enterprise adoption underscores the breadth of AI appification, illustrating how generative AI is not only shaping everyday consumer practices but also becoming embedded in core business operations, further reinforcing its infrastructural and cross-sectoral integration ([Van der Vlist et al., 2024a](#)).

There’s an AI For That: Exploring Three Spheres of AI Appification

Based on our previous empirical research and conceptualisation, we propose that the appification of AI can be understood as an unfolding process encompassing at least three dimensions (1) the development of *AI-powered applications*, where AI capabilities are integrated directly into the app’s functionality; (2) the *everyday applications of AI technology*, focusing on how AI becomes embedded in and transforms routine practices; and (3) the *infrastructural integration of AI technology*, in which AI is woven into existing app architectures, reconfiguring underlying digital infrastructures ([Van der Vlist et al., 2025a: 21–24](#)). This framework underscores the multi-sided and multi-layered nature of AI appification, where apps function as immediate interfaces for interacting with AI (front-end appification, targeting distinct user groups) while also serving as conduits for its deeper infrastructural embedding (back-end appification). The design choices made by developers and the adoption practices within industries shape—and are shaped by—how users engage with AI. This interplay

provides insight into the broader cultural, economic, and political dimensions of AI's evolving role in our digital environments.

Existing app studies provide various foundational empirical strategies and resources for examining the cultures and economies of apps, including sourcing relevant apps, demarcating collections, identifying themes, digital traces of AI infrastructures, models, and services embedded within applications. A notable methodological approach is the 'entry point' approach, which allows researchers to analyse AI appification through app stores, app descriptions, interfaces, archives and repositories, software packages, network connectivity, backend dependencies, and more (Dieter et al., 2019; Helmond and Van der Vlist, 2019). Query design strategies facilitate the collection of AI apps, while screening techniques reveal hidden software integrations (Gerlitz et al., 2019a; Gerlitz et al., 2019b; Weltevrede and Jansen, 2019). By studying AI apps and mapping the ecosystems they belong to, we illustrate how various actors drive the expansion of AI across industries, shaping its cultural and economic impact, while also providing a foundation for further critical analyses focused on political economy and power.

This framework is explored through an overarching ecosystem approach (Van der Vlist et al.), which recognises that different types of apps, app developers, businesses, partners, and other actors all play distinct roles in driving the expansion of AI technologies—rather than focusing solely on end-consumers (or their interface affordances, action possibilities, content, engagement, etc.) in isolation. These integrations, spanning diverse domains, actively shape the cultural and economic dimensions of AI's role in everyday life and across various industries. By mapping the current state of AI appification and studying developments across these distinct spheres, this research underscores the complex and evolving integration of AI into daily practices and its transformative impact across multiple sectors, as well as its ongoing 'industrialisation' (Van der Vlist et al., 2024a).

In all, this report explores how AI apps integrate into everyday activities and workflows, and conversely, how these apps aim to reshape daily tasks, roles, and practices. In doing so, it contributes both empirically and conceptually to our understanding of AI as 'mundane software', while bridging ongoing discussions in the often disjoint subfields of app studies, platform studies, and critical AI studies. Specifically, the report further investigates AI's ongoing appification across three primary sites for the distribution, monetisation, and discovery of AI applications (whether they are called 'apps', 'agents', 'custom models', 'solutions', or other):

1. *AI apps in mobile app stores*: There is a growing presence of consumer AI apps in popular mobile app stores (i.e., iOS apps on Apple's [App Store](#), Android apps on [Google](#)

- [Play](#)). Our previous findings show that AI in these stores focuses on content production, creative expression, language assistance, and companionship, with AI increasingly facilitating interactive and generative actions ([Van der Vlist et al., 2025a: 21–24](#)).
2. *AI apps and ‘agents’ in model marketplaces*: Custom models and ‘agents’ within emerging model marketplaces, such as user-created ‘Custom GPTs’ on OpenAI’s [GPT Store](#)—described as ‘custom versions of ChatGPT that combine instructions, extra knowledge, and any combination of skills’ ([OpenAI, 2023](#)). AI in the GPT Store offers persona-based models for assistance, companionship, and content creation.
 3. *AI apps and ‘solutions’ in cloud marketplaces*: Enterprise-focused AI apps and solutions offered through leading cloud computing and AI platform marketplaces (i.e., [Microsoft Azure Marketplace](#), [Google Cloud Marketplace](#), Amazon’s [AWS Marketplace](#)). AI in these cloud marketplaces primarily targets enterprise settings, integrating AI into existing business processes across industries.

By mapping the current state of AI appification and studying developments across these diverse spheres, this research highlights the evolving integration of AI into daily practices and its societal impact across industry sectors and spheres of life. Furthermore, this provides important insights aiding ongoing efforts to tackle the challenges of governing digital societies ([Van Dijck et al., 2025](#)).

Practical Context and Setting: ‘Appification’, ‘Data-Sprinting’, and the App Studies Initiative

As apps increasingly embed themselves into the fabric of everyday life across the globe, it’s imperative to grasp and tackle the unique challenges they present. Achieving this demands methodical and empirical exploration, involving a multitude of perspectives and diverse contributions. Recognising this need, the [App Studies Initiative](#) (ASI) urges its members, students, and researchers within the broader fields of app and platform studies to expand their horizons beyond conventional disciplinary boundaries and research methodologies. Instead, we advocate for the formation of collaborative teams dedicated to methodological and empirical exploration.

Since around 2015, ASI researchers have fostered collaborations with numerous colleagues and students across universities in the Netherlands, the United Kingdom, Germany, and beyond. This collaboration has been facilitated through various on-site workshops and ‘data sprints’, which are a collaborative, interdisciplinary format commonly used in ‘digital methods’

research (e.g., [Berry et al., 2015](#)) and ‘digital controversy mapping’ ([Munk et al., 2019](#)). This includes numerous sprint projects that we organised within the annual [Digital Methods Summer and Winter Schools](#) at the University of Amsterdam, Department of Media Studies.

The Master’s elective course, ‘[Appification: The Cultures and Economies of Apps](#)’, examines probing questions surrounding the culture and economies of apps and app stores. How do apps mediate and shape cultural practices? How are social norms and values embedded into apps? And, how do app stores reflect our cultural and social landscape? In parallel, the course critically investigates the political economy of apps and app stores. How do app stores organise and govern app ecosystems? Who are the key stakeholders in the commodification of app-based data? What kinds of data markets and infrastructures have emerged around apps?

In a relatively short 6-week period, students were introduced to the methodological and theoretical foundations of ‘multi-situated app studies’ ([Dieter et al., 2019](#)), equipping them with approaches, concepts, methods, and tools that leverage the different ‘entry points’ and empirical research materials available for critical app studies research to tackle these types of questions. Throughout the course weeks, they were introduced to relevant tools for collecting, analysing, and visualising app and app store data, providing them with the skills needed to navigate this complex landscape effectively. At the end of this period, they participated in a one-week data sprint, organised within the Department of Media Studies on March 24–28, 2025. The insights gained during this week form the basis of the contributions collected in this report, rooted in the research conducted during this intensive collaborative endeavour.





Figure 1.1. Spring Data Sprint and Festive Poster Presentations, ‘Appification: The Cultures and Economies of Apps’, held at the **Humanities Labs**, Amsterdam Institute for Humanities Research (AIHR), University of Amsterdam, Netherlands, from March 24–28, 2025. Photos by the authors.

In addition, the Master’s **Embedded Research Project** (ERP), titled ‘The Appification of AI: Exploring Emerging AI App Ecosystems and Infrastructures’, ran in parallel with the course. Designed and led by us, this ERP project builds directly on an ongoing **App Studies Initiative** (ASI) research collaboration with Anne Helmond (e.g., **Van der Vlist et al., 2025a**). As part of the **Master’s in Cultural Data & AI** (MA Media Studies), students had the opportunity to apply for this embedded research project as an elective. This year, five students from a cohort of approximately 135 were selected. From February to May 2025, these students worked with the **App Studies Initiative** as embedded student research assistants, contributing to this research while auditing the ‘Appification’ course for conceptual and methodological training purposes. Simultaneously, they developed and wrote their Master’s theses under our supervision. Some of the results of this embedded research project are included in this report.

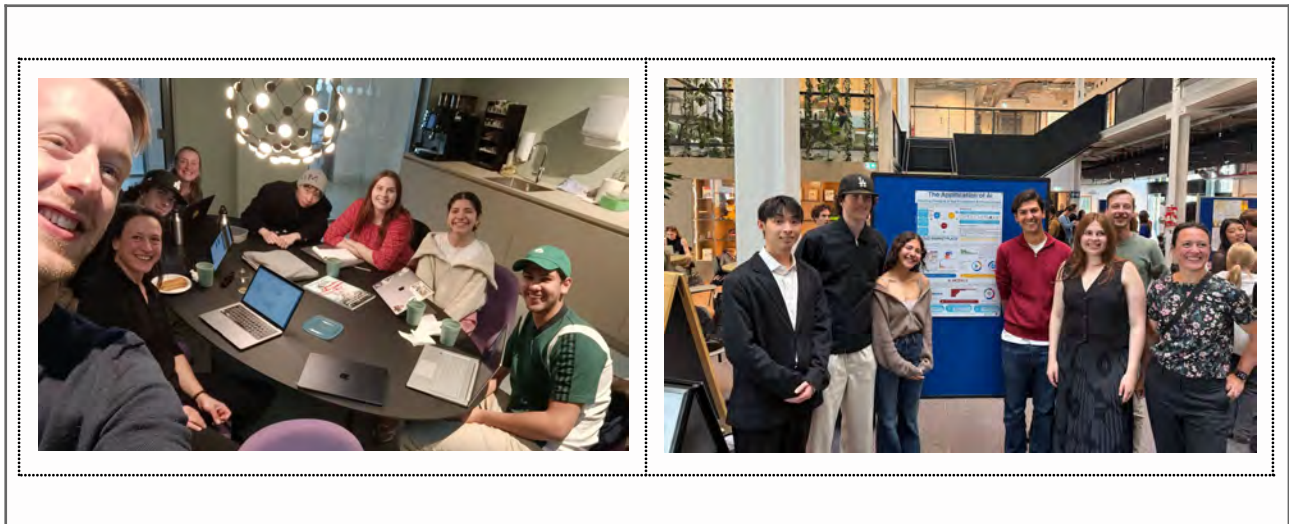


Figure 1.2. ‘The Application of AI: Exploring Emerging AI App Ecosystems and Infrastructures’ Embedded Research Project (ERP) lab meeting at the *Humanities Labs*, and Festive Poster Presentations, held at *LAB42*, Science Park, University of Amsterdam, Netherlands, on May 9, 2025. Photos by the authors.

Despite their diverse methodologies and perspectives, the contributors—our students—share a common interest in apps and are committed to addressing issues and concerns related to the ongoing process of appification, which unfolds in various ways across the globe. Moreover, engaging in app studies research transcends mere critical conceptual exploration; it necessitates collaboration and a sincere interest in and engagement with the distinct materialities, infrastructures, and relationalities of apps and platforms (Gerlitz et al., 2019; Van der Vlist, 2022). This is crucial for critically assessing the material politics and political economy of apps and platforms, including beyond the mobile ecosystem. Our objects of study, along with their ‘native’ techniques and materials, are in a constant state of flux, impacting and at times significantly limiting our research opportunities without announcement. Staying closely attuned to and critically monitoring these changes is imperative for effective critical enquiry in this dynamic and complex field.

Overview of the Chapters

This report comprises five original research contributions, each exploring appification in the age of AI. The chapters are organised from broader, general themes to more specific, focused studies. This structure allows readers to first grasp overarching trends and cultural dynamics before diving into particular app categories. These contributions are part of a larger collection

of research reports originating from the Spring Data Sprint, not all of which are included in this publication.

In [Chapter 2](#), [Selin Dineç](#), [James Doherty](#), [Tobias Martins Adami](#), [Ava Weinstein-Wright](#), and [Xiao Yang](#) present the results of the [Embedded Research Project 'The Appification of AI: Exploring Emerging AI App Ecosystems and Infrastructures'](#), conducted with us as embedded student assistants at the [App Studies Initiative](#) from February to May 2025. This extended chapter provides a systematic, multi-layered investigation into how AI is being deployed and distributed across three key domains: *mobile app stores*, *cloud infrastructure marketplaces*, and emerging *model marketplaces* such as the new GPT Store. Using a mixed-methods approach adapted to the distinct affordances and constraints of each platform, the authors map and critically analyse how visibility, access, and categorisation are shaped within these ecosystems. Building on existing ASI research, their findings underscore structural asymmetries and infrastructural dependencies that shape the appification of AI, highlighting, for example, how cloud platforms reward longevity and integration, how mobile stores curate dominant use cases, and how model marketplaces systematically privilege in-house offerings over third-party alternatives. Together, the chapter lays critical groundwork for understanding how emerging AI app ecosystems—spanning both *consumer* and *enterprise* domains—are governed, who benefits from their design, and how platform dynamics shape the public experience of AI across everyday life and industry or organisational contexts.

The remaining chapters present outcomes from the themed collaborative research sprint in March 2025. Each chapter explores a distinct sector or sphere of life where AI is currently emerging or slowly gaining a foothold—from intimate companionship and religious practice to education and travel planning.

In [Chapter 3](#), '[Worshipping \(Through\) AI: How AI Is Appifying Religious Practices](#)', [Zuzana Ľudviková](#), [Anna Papastylou](#), [Hugo van Steenis](#), [Vilma Strandvik](#), [Finnegan Vitello](#), and [Krisztina Vizoli](#) analyse over 300 religious apps across three major platforms—Apple App Store, Google Play, and OpenAI GPT Store—to examine how AI is integrated into spiritual practices. Their study identifies new forms of AI-mediated religious engagement (e.g, algorithmic guidance, AI personas, and chatbot prayer assistants), highlighting a shift towards personalised, individualised spirituality. The chapter also draws attention to how app store rhetorics frame AI as a legitimate spiritual actor while embedding monetisation and platform logic into religious experiences.

In [Chapter 4](#), '[AI and the Appification of Education](#)', [Caner Sucuoğlu](#), [Damla Arslantaş](#), [Anil Atay](#), [Yiran Hu](#), [Başak Raşa](#), and [Jin Zou](#) investigate how AI is embedded in educational apps and how this integration is shaping pedagogical models, learner engagement, and platform

priorities. Combining digital methods with app store analysis and AI-based categorisation, the authors show how personalisation and adaptive learning dominate the landscape, while other educational sectors remain underserved. Their findings also raise concerns around ethical data use and pedagogical transparency, offering a critical perspective on how AI is reshaping the logics and economics of educational technology.

In [Chapter 5, 'From Travel Agent to App: AI and Appification in the Travel Sector'](#), **Hanqiong Ding, Tianzhirou Guo, Anna Hohwü-Christensen, Xuanyue Hu, Zhiying Li, and Larissa van Wijlick** explore how AI-driven travel apps are transforming the way people plan and experience travel. Drawing on walkthrough analysis and store-based research, they show how generative AI tools facilitate itinerary creation and personalisation, while marketing narratives frame AI as a trustworthy 'companion' or 'expert'. They unpack the commercial logics behind these apps, such as subscriptions, gamification, and recommendation systems, and examine how user agency is constrained by algorithmic design and platform monetisation strategies.

Taken together, these contributions trace the rapid integration of AI into everyday life, documenting the diversity and cultural specificities of emerging AI app cultures and economies across both established and emerging app marketplaces. They provide case studies and empirical evidence of how apps are influenced by and adapt to current AI technology developments. This collection of studies highlights the process through which AI technologies are embedded into daily life and practices via apps and app ecosystems—that is, the *appification of AI*—and lays the groundwork for future studies and critiques of the cultures and economies of AI apps.

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