Agents, Institutions, and Growth Catalysts: Towards a Process-Theoretical Model of Digital Platform Development in the Global South

People call us the Uber of tractors, but it's not that simple. Platforms in these markets aren't just about connecting demand and supply—they're about building the market from scratch and making it viable for both sides to participate.

Executive of Platform A

Introduction

Digital platforms have attracted considerable scholarly attention across a wide range of disciplines (Bonina, Koskinen, Eaton, & Gawer, 2021; Constantinides, Henfridsson, & Parker, 2018; McIntyre & Srinivasan, 2017; Reischauer & Mair, 2018). Digital platforms denote technology-enabled intermediaries that facilitate interactions and value co-creation among different market sides—independent but complementary affiliates, and users who remunerate the product or service with payments, data, or other forms of engagement (Furr, Ozcan, & Eisenhardt, 2022; Kretschmer, Leiponen, Schilling, & Vasudeva, 2022). Prominent examples of digital platforms include Amazon in e-commerce, Airbnb in hospitality, and Salesforce in cloud-based B2B CRM solutions. Given their growing prevalence and economic significance—in 2022, the top five platform companies' market capitalization was already nearly four times higher than the GDP of Sub-Saharan Africa (PwC, 2023; World Bank, 2022a)—scholars are examining how these platforms fundamentally reshape technologies and innovation, organizations, industries, economies, and societies (Altman & Tripsas, 2015; de Reuver, Sørensen, & Basole, 2018; Krämer, 2020; Rochet & Tirole, 2003).

A growing concern among platform scholars is that the existing understanding of digital platforms is largely based on theoretical premises that hold only for the so-called "developed" world (Nicholson, Nielsen, & Saebo, 2021). In fact, most theoretical advancements and empirical findings in this area are based on data from U.S., European, and Asian contexts (Bonina et al., 2021), while there is almost no systematic conceptual and empirical exploration of digital platforms in the Global South (Friederici, Wahome, &

Graham, 2020). This lack of research is problematic for at least three reasons. First, from a phenomenological perspective, "it appears that neither African markets nor funding environments are designed to cater to the Silicon Valley model of high-growth startups" (Friederici et al., 2020, p. 223). In other words, apparently, the same digital platforms that thrive in the Global North, do not thrive in the Global South.

Second, from a theoretical perspective, key mechanisms and structures underlying existing conceptual frameworks of digital platforms work fundamentally differently, or do not exist, in the context of the Global South (e.g., Khanna & Palepu, 2010). This especially relates to the institutional context, with institutions defined as the "humanly devised constraints" both formal, such as laws and regulations, and informal, such as norms and values—that structure economic, political, and social interactions (North, 1990, p. 97; Soluk, Kammerlander, & Darwin, 2021). For example, the standard literature on digital platforms assumes that markets are highly competitive and regulated, with low transaction costs, transparency, and consumer protection (Kretschmer et al., 2022). However, in the Global South, markets are generally more fragmented and less regulated, leading to high transaction costs, information asymmetries, and limited consumer protection (Parmigiani & Rivera-Santos, 2015). As such, existing theorizing is highly likely to provide only incomplete or even inaccurate descriptions and explanations (Peprah, Giachetti, Larsen, & Rajwani, 2022). In the worst case, the potentially inapplicable theoretical assumptions may severely undermine the normative validity of the conclusions that policy makers, executives, consumers, and other stakeholders draw from existing scholarship on digital platforms.

Third, from a practical and societal perspective, digital platforms may provide fundamental opportunities, but also threats, to address the profound socio-economic challenges facing the Global South—for example, Sub-Saharan Africa, the world's poorest region (Chancel, Piketty, Saez, & Zucman, 2022), where 35% of the population lives below the poverty line (World Bank, 2022b). Some highlight the transformative potential of digital

platforms in alleviating poverty and orchestrating societal change (Alaimo, Gawer, Haefliger, Micelotta, & Reischauer, 2024; Ritala, 2024). In Sub-Saharan countries, for example, institutional voids—i.e., the absence of effective market-supporting institutions—create significant barriers to participate in markets and access services, and to socio-economic mobility (George, Kotha, Parikh, Alnuaimi, & Bahaj, 2016; Khanna & Palepu, 2010). Digital platforms are increasingly recognized for their potential to fill these voids by reducing transaction costs, addressing information asymmetries, and fostering inclusive economic growth (Peprah et al., 2022). In contrast, others highlight the potentially detrimental ramifications of digital platforms for the Global South (UNCTAD, 2019; World Bank, 2021). Digital platforms could create monopolies, pave the way for "data colonialism" (Couldry & Mejias, 2019), or lead to the emergence of especially precarious gig work (Pereyra, Poblete, Poggi, & Tizziani, 2022). Moreover, they may further widen the digital divide to seriously undermine local economies, erode labor standards, and exacerbate existing (digital) inequalities (Heeks, 2022; Hsieh, Rai, & Keil, 2008).

Altogether, then, it seems pivotal to gain a deeper understanding of the emergence, growth, operation, regulation, and outcomes of digital platforms in the resource-constrained contexts of the Global South. In particular, we need more inductive theorizing "on the ground," complementing and informing more economic and econometric analysis (e.g. Aker, Ghosh, & Burrell, 2016). Only by adopting a comprehensive approach can policymakers and stakeholders ensure that digital platforms serve as tools for empowerment, rather than obstacles to sustainable development in the Global South. Moreover, insights about the idiosyncratic nature and implications of digital platforms in the Global South may also, and fundamentally inform our extant "WEIRD" (Henrich, Heine, & Norenzayan, 2010) theories of digital platforms.

This study seeks to contribute to this quest by conducting a theory-infused, inductive, process-theoretical, partially-ethnographic multiple case study (Eisenhardt, 1989; Langley,

1999) on three digital platform companies in Kenya's agricultural sector. Specifically, our international, interdisciplinary research team—joining European and African scholars and development practitioners—seeks to answer the following research question: *How do entrepreneurs adopt and adapt digital platform business models in resource-constrained environments in the Global South?*

Our study makes three key contributions. First, we challenge market-driven perspectives on platform scaling by demonstrating that platform growth in the Global South is not simply a function of technological superiority or market efficiency, but is deeply embedded in social and institutional contexts. Second, we develop a process-theoretical model that explains how platforms navigate institutional voids, adapt to socio-economic constraints, and institutionalize over time. Third, we identify two situated enablers of platform development: agents as human platforms, who build trust and embed digital solutions locally, and growth catalysts, which provide capacity-building, funding, and market access.

By positioning digital platforms as institutional entrepreneurs, our study extends research on digital platforms, institutional entrepreneurship, and development studies, offering novel insights into how platform ecosystems evolve outside the Global North. In doing so, we provide a more context-sensitive understanding of platform development, highlighting alternative growth pathways and the interplay between technology, institutions, and socio-economic development.

Theoretical background

Our theoretical vantage point combines the digital platform literature with research on institutional entrepreneurship in the Global South (Heeks et al., 2021; Mair & Marti, 2009). The digital platform literature highlights their transformative potential. In particular, scholars note that digital platforms reduce the need for extensive physical infrastructure and costly intermediaries, enabling entrepreneurship with limited resources (Bonina et al., 2021). In

addition, the modular and layered technological architecture of digital platforms allows entrepreneurs to decentralize innovation among complementors, rapidly adapt to changing conditions, and deliver services in fragmented markets (Peprah et al., 2022). Examples such as M-Pesa, which revolutionized financial inclusion in Kenya, illustrate how digital platforms could facilitate broader economic participation, particularly in resource-constrained context.

Institutional entrepreneurship highlights how actors identify, navigate, and address institutional voids by either leveraging or reshaping local conditions to foster innovation and inclusion (Battilana, Leca, & Boxenbaum, 2009). Institutional entrepreneurship emphasizes the dynamic interplay between agency and structure, allowing us to explore how entrepreneurs socially construct digital platforms and engage in strategic activities to create, disrupt, and/or transform institutions to facilitate the adoption, scale, and sustainability of digital platforms (Dorado, 2005; Tracey, Phillips, & Jarvis, 2010). Institutional entrepreneurship is particularly well-suited for unpacking the complexities of digital platforms in contexts where institutional environments are weak, fragmented, or evolving (George, Merrill, & Schillebeeckx, 2021). In fact, previous research on the evolution of digital platforms has often invoked institutional work and institutional entrepreneurship as particularly useful theoretical lenses, given the fundamental ways in which digital platforms challenge and reshape existing regulatory frameworks, norms, and belief structures (e.g., Lehmann, Weber, Waldkirch, Graf-Vlachy, & König, 2022; Neuhauser & Snihur, 2025).

Method

We adopt a qualitative, longitudinal, multiple case study approach to develop a process-theoretical (Langley, 1999), informant-based model (Van Maanen, 1979) of digital platform development in the Global South. A case study methodology is particularly suited to exploring complex phenomena within their real-world context and to theorizing processes in settings where existing frameworks may provide only partial explanations (Eisenhardt, 2021;

Eisenhardt & Graebner, 2007; Gehman et al., 2018). While seeking process-theoretical insights and rather following the so-called "Eisenhardt template" (Langley & Abdallah, 2015), our approach is emergent and non-dogmatically integrates grounded, observational, and participant approaches and inductive coding methods (Gioia, Corley, & Hamilton, 2013; Glaser & Strauss, 1967) to gain a hermeneutic, "intuitive" understanding (Tsoukas & Chia, 2002) of the emergence of digital platforms in the Global South.

Empirical context and cases

This paper asks how digital platforms in the Global South differ from those in the Global North. To explore this question, we study the current emergence of digital platforms in Kenya's agricultural sector, which contributes over 30% of the country's GDP and employs more than 70% of the rural population, predominantly through smallholder farming (Diao, Pauw, Smart, & Thurlow, 2023). By focusing on three digital platform companies in Kenya's agricultural sector, we aim to explore how these ventures—their founders and employees—navigate institutional voids, engage in institutional entrepreneurship, and drive socioeconomic development in the Global South. Notably, a substantial amount of recent research on digital platforms has focused on digital platforms in agriculture, given their particularly profound and potentially disruptive impact in that context (Van Dyck, Lüttgens, Diener, Piller, & Pollok, 2024). Importantly, agriculture remains at the center of global development goals, as food insecurity, poverty, and climate change disproportionately affect rural populations (Kenya National Bureau of Statistics, 2019).

Agricultural productivity in Kenya has stagnated over the past three decades due to low adoption of modern technologies, constrained by financial, informational, and socio-cultural barriers (Gollin, Lagakos, & Waugh, 2014; Suri & Udry, 2022). However, Kenya's vibrant startup ecosystem, known as the "Silicon Savannah," presents a promising context for addressing these barriers. Digital platforms, leveraging high mobile phone penetration and

network coverage, have attracted significant investment and are increasingly central to efforts to enhance market access and service delivery in agriculture (Tabe-Ojong, Abate, Abay, & Spielman, 2023).

We purposefully selected three cases based on theoretical sampling (Eisenhardt & Graebner, 2007) to ensure variance in platform design, platform maturity, and geographic reach within Kenya: Platform A, Platform B, and Platform C (Table 1.). To maintain anonymity, we use pseudonyms for all cases. Platform A connects smallholder farmers with tractor owners to tackle the lack of affordable mechanization; Platform B connects smallholder livestock farmers with veterinarians to enhance livestock productivity and health; and Platform C connects farmers with agribusinesses and policymakers to address fragmented value chains and improve access to training, markets, and financial services. These cases are comparable in that they fulfil four theoretically motivated sampling criteria: the ventures follow a platform business model, ensuring they reflect the core phenomenon under investigation; they have been operational for at least five years, allowing us to examine their development over time; they serve a minimum of 5000 users, providing sufficient scale to explore ecosystem dynamics; and their solutions address agricultural challenges, aligning with the study's focus on the socio-economic potential of platforms in Kenya's agricultural sector. The diversity among the three cases allows for cross-case comparison, encompassing a range of strategies used by platform entrepreneurs to engage in institutional entrepreneurship in resource-constrained environments.

[insert Table 1. Description of sample platforms.]

Data collection

We use four major data sources: (a) semi-structured interviews, (b) focus group discussions, (c) participant observations, and (d) secondary data. Facilitated by the World Bank and the International Food Policy Research Institute (IFPRI), we have conducted 44 personal, "in the

field" interviews (average length 45 minutes) and 10 focus group discussions involving a total of more than 200 key informants. Interviews are transcribed verbatim. Multiple data types allow us to triangulate across sources, for instance, regarding perceptions of past events (Huber, 1985).

We started our data collection in August 2023 with an agricultural ecosystem mapping. This involved listing and collecting data on all actors in Kenya's agricultural ecosystem using policy documents, research reports, media coverage, and platform websites. Moreover, we gathered secondary data on other relevant ecosystem actors, including complementors, users, agents, governments, and (inter-)national organizations, to gain a deeper understanding of the different actors and their relationships. Lastly, one of the author's seven years of professional experience in Kenya's agricultural sector enriched the mapping process with deep practical insights gained from participation in seminars, workshops, and conferences. This ecosystem mapping provided a solid foundation for capturing the ecosystem's complexity and evolution.

From September to November 2024, two co-authors joined the research team in Kenya to conduct a first round of field research. First, we conducted 23 interviews with platform founders and employees (average length 46 minutes), including CEOs, COOs, operations managers, and regional coordinators. We designed adaptive interview guidelines (Rubin & Rubin, 2011), with the aim to gain insights into how the different actors design, adapt, and refine their platform business models over time to address institutional voids. Second, we interviewed 12 so called "agents" (average length 25 minutes), whose role is unique to the context as they broker between platforms and farmers. The interviews sought to inform our understanding of their roles and role identities, challenges, and interactions with both farmers and platform employees. Third, we engaged with nine representatives of international organizations (average length 65 minutes) to explore their influence on platform scalability, sustainability, and integration into Kenya's agricultural ecosystem.

As part of our field research, we also traveled to rural Kiambu, Nakuru, and Machakos to conduct focus group discussions with a total of 165 farmers. Travelling across the country and engaging 'in vivo' with the relevant actors allowed us to gain a certain ethnographic insight, especially also by experiencing variations in informal institutions, agricultural practices, and platform adoption. We conducted the focus group discussions with organized farmer groups, segmented into women-only, men-only, and mixed groups. This segmentation aligns with local institutional norms and practices, which often influence the dynamics of group discussions and participation. Following established guidelines for focus group methodology (Wilkinson, 1998), we ensured a supportive environment that encouraged open and honest dialogue. In these discussions, we explored how farmers engage with digital platforms and how these platforms influence their agricultural practices, economic opportunities, and overall livelihoods. To enhance the quality of the discussions, we adhered to key criteria for effective focus groups, such as group homogeneity, balanced participation, and the use of a skilled moderator (Morgan, 2018). The regional and demographic diversity of the participants provided nuanced insights into the interplay between platform features and grassroots digital engagement, revealing how platforms complement or reshape existing behaviors in Kenya's agricultural sector.

Additionally, we acted as participant observers (Patton, 2014). We spent several days at platform offices, observing organizational cultures, workflows, and interactions among employees. Moreover, we attended a Platform A training day at Njoro University, where 80 women were trained as tractor operators, as well as farmer training sessions led by agents from Platform B and Platform C. Beyond these structured settings, we observed informal interactions between agents, platform employees, and farmers to gain a deeper understanding of the dynamics of trust-building and engagement. To ensure reliability, we maintained detailed field notes and daily journals, documenting observations systematically and recording key events, interactions, and reflections in a structured database for later analysis.

Data analysis

We began our analysis by synthesizing the data into detailed case histories for each platform, documenting their development over time and focusing on key activities, decisions, and events. Drawing on interviews, participant observations, and archival sources, we created comprehensive timelines that traced how platforms identified and addressed institutional voids. Using open and axial coding techniques and developing a data structure (Gioia et al., 2013), we conducted within-case analysis to identify emergent themes, including the role of agents as "human platforms," and the impact of growth catalysts (Figure 1.). Employing temporal bracketing (Langley, 1999), we examined how platforms progressed through what participants noted as the different phases of their business. We then compared emerging patterns in how the different actors navigated these phases across-cases, following a replication logic (Eisenhardt & Graebner, 2007). We have distilled (1) a model of the five relevant actors constituting platform ecosystems and their evolution, and (2) a process theory that highlights how digital platforms engage in institutional entrepreneurship to drive socioeconomic development in the Global South.

[insert Figure 1. Data structure: platform development in the global south.]

Actors constituting platform ecosystems and their evolution in the Global South

Our data led us to, first, to distinguish the relevant actors constituting platform ecosystems in
the Global South: digital platforms, complementors, users (i.e., farmers), agents, and growth
catalysts. *Digital platforms* drive innovation by addressing institutional voids and leveraging
technology to improve market access, resource management, and service delivery (Bonina et
al., 2021). *Complementors*, including suppliers of inputs (e.g., fertilizers, seeds) and services
(e.g., training, financing), enhance the value proposition of digital platforms by providing
essential resources and capabilities that bolster platform adoption and farmer productivity

(Peprah et al., 2022). *Farmers* face challenges such as limited access to quality inputs, financing, and output markets (Diao et al., 2023).

Agents surfaced early-on in our interviews as an idiosyncratic type of actor—one that does not play a focal role in the established digital platform literature. Agents denote individuals who act as the first critical enabler of platform development. They are "human platforms" by serving as trusted intermediaries who translate digital platform's solutions into locally relevant services. As one respondent from a development organization explains: "You can have a very sophisticated and amazing digital platform, but if it's not connected to a human being, then we find that the benefits that are needed may not reach the smallholder farmer" (personal communication, 2024). Given that smallholder farmers often use basic phones and are wary of unfamiliar technology, agents—typically trusted members of the local community—train farmers on how to use the platform and act as intermediaries by interacting with the platform on their behalf.

The textbook literature on entrepreneurship and digital platform development highlights venture capitalists as the central resource providers for growth, especially in the early stage, which is capital-intensive and low-return (McIntyre & Srinivasan, 2017). Our data tell a different story when it comes to platform development in the Global South. Here, venture capital is largely inaccessible (Jalang'o Anyango et al., 2022). Instead, *growth* catalysts act as the second critical and unique enabler of platform development. Growth catalysts denote the international organizations, governments, and development partners that provide not only financial resources but also critical infrastructure—such as nationwide data on smallholder farmers—and direct access to local stakeholders and farmer groups. For example, by connecting digital platforms to networks of agents and farmers, they eliminate the need for platforms to individually identify and recruit their customers. In other words, their roles substantially deviate from, and extend those of, standard venture capital providers.

Process theory of platform development in the global south

Our informant-based process theory delineates three sequential phases: platform opportunity framing and ecosystem seeding, platform building and ecosystem bricolage, and platform institutionalization and ecosystem scaling (Figure 2.).

[insert Figure 2. Process theory of platform development in the global south.]

Platform opportunity framing and ecosystem seeding

The statements from our interviews revealed that the entrepreneurs began their entrepreneurial activities by identifying institutional voids and framing them as opportunities for value creation. In other words, during this first phase, digital platforms act as "classic" institutional entrepreneurs (Battilana et al., 2009) by building solutions that actively address institutional voids, effectively seeding nascent ecosystems. However, while all platforms in our study followed this broad pattern, the specific institutional voids they targeted and the strategies they employed varied, reflecting differences in their positioning within the agricultural sector. As our cases show, this initial phase of platform opportunity framing and ecosystem seeding lasted between three to five years.

Diagnosing institutional voids

Across our cases, interviewees described how they first diagnosed institutional voids—the absence of effective market-supporting institutions (Mair & Marti, 2009). In the context of Kenya's agricultural sector, entrepreneurs diagnosed fragmented markets, unreliable information flows, and limited access to critical resources, resulting in high transaction costs, limited scalability, and reliance on informal structures. They began mapping these voids, recognizing them as fundamental challenges that needed to be addressed to alleviate poverty and foster socio-economic development.

Although all three organizations in our study diagnosed institutional voids that hinder agricultural productivity, the specific voids they targeted varied. Platform A diagnosed the

lack of affordable mechanization, noting that fragmented supply chains and limited financing mechanisms prevent smallholder farmers from accessing tractors. One executive described the gravity of this challenge: "The lack of mechanization is putting significant pressure on yields. Farmers are unable to plant their crops on time, which directly impacts their productivity. Introducing mechanization in an affordable and reliable way addresses what we consider to be one of the biggest challenges facing farmers" (personal communication, 2024). Platform B, in contrast, diagnosed the absence of structured veterinary services, noting that farmers struggle with livestock health due to unreliable advisory services and a lack of formalized networks connecting them with veterinarians. Platform C diagnosed the financial exclusion of smallholder farmers, noting that weak financial literacy, limited connectivity to financial institutions, and a lack of tailored credit solutions constrained their ability to access financing.

Despite these differences, all three platforms identified institutional voids, which they sought to address through digitally-enabled business models. However, their interpretations of these voids shaped their business models in distinct ways. These distinctions influenced how each platform positioned its initial value proposition.

Defining an initial value proposition

Having diagnosed institutional voids, platform entrepreneurs framed them as entrepreneurial opportunities, positioning their platforms as tailored solutions to address these voids. This process involved identifying how digital platforms could mitigate institutional voids, while also ensuring that their business models were scalable and viable within the local economic context.

Although all three platforms sought to improve market access and service delivery in agriculture, they did so through distinct entry points and business models. Platform A positioned itself as a multi-sided platform for mechanization, introducing an on-demand tractor rental platform that connects smallholder farmers with tractor owners. Platform B, on the other hand, positioned itself as a multi-sided platform for livestock services, facilitating

connections between farmers and animal health workers, such as veterinarians and artificial insemination providers. Platform C initially did not operate as a multi-sided platform but rather as a provider of digital financial training content for smallholder farmers. The platform sought to bridge knowledge gaps in financial literacy by offering structured training programs.

Despite these differences, all three organizations in this first phase defined initial value propositions that contributed to addressing the institutional voids they had identified.

However, their approaches to structuring these value propositions and sustaining operations varied. A critical enabler in implementing these initial value propositions was the use of agents.

Embedding agents to build trust and facilitate adoption

Despite the inherent scalability of digital platforms, entrepreneurs quickly realized that technology alone was insufficient to drive adoption in institutional contexts characterized by low trust, digital illiteracy, and entrenched informal networks. Additionally, most smallholder farmers did not own smartphones, further limiting direct engagement with digital platforms. To overcome these barriers, all three platforms embedded local agents—trusted intermediaries who acted as bridges between platforms and farmers, facilitating adoption and sustained engagement.

While all three platforms embedded local agents to facilitate adoption, the specific roles and functions of these agents varied depending on the platform's business model and the challenges it sought to address. Platform A found that without face-to-face interaction, trust in digital tractor rental services remained low. In response, the platform recruited agents who were trusted community members to connect farmers with tractor owners, facilitate bookings, and address operational concerns. These agents played a key role in ensuring that farmers understood the benefits of mechanization and felt confident engaging with the platform. As the COO explained: "We have been so focused on looking at our platform business the way

that there's no going away from the physical aspect of the business" (personal communication, 2024). Platform B, similarly, initially operated as a fully digital platform but soon realized that farmers not only lacked trust but also required support in accessing veterinary services. To address this, Platform B embedded agents who acted as intermediaries between farmers, the platform, and animal health workers. These agents facilitated service access, ensuring that farmers engaged with the platform to receive professional veterinary care. Platform C adopted a similar model to facilitate financial training for smallholder farmers. Many farmers lacked direct access to financial literacy programs or were unfamiliar with digital training tools. To address this, Platform C identified trusted community members and trained them as agents who could deliver Platform C's financial training to farmers. As an HR employee explained, "We look for individuals who have influence and can create real change in their communities. These are people who are trusted community members, well-connected, and capable of driving impact" (personal communication, 2024).

barriers, built trust, and ensured that their services services were integrated into smallholder farming communities. However, embedding agents alone was not sufficient to sustain platform operations, particularly in the early stages. To scale their business models and formalize their ecosystem roles, all three platforms depended on growth catalysts.

Engaging growth catalysts as enablers to support early-stage capacity-building and funding Beyond trust-building and adoption strategies, platform entrepreneurs engaged growth catalysts as critical enablers of early-stage development. In the first phase, growth catalysts—including international organizations, governments, and development partners—played a pivotal role in capacity-building, financial sustainability, and market access. Specifically, growth catalysts supported platform entrepreneurs in three key ways: (1) providing initial training and capacity-building programs for entrepreneurs, (2) facilitating introductions to

By embedding trusted local agents, all three platforms tried to overcome adoption

county governments and trusted community leaders to support customer acquisition, and (3) offering early-stage funding through grants or service contracts that allowed platforms to operate from the outset. By addressing these foundational challenges, growth catalysts played a key role in helping platform entrepreneurs navigate the chicken-and-egg dilemma typically associated with platform business models, where platforms need to acquire supply-side and demand-side users simultaneously to create value (Dattée, Alexy, & Autio, 2018).

Although all three platforms benefited from growth catalyst support, the type and extent of this support varied. An initiative by a large development organization equipped Platform A and Platform B with training and capacity-building opportunities, helping them develop their pitch and refine their strategies. As one founder reflected: "A friend of mine shared a link and told me to take on the challenge [a competition for start-up support]. The challenge opened doors for Platform B—I got a chance to be trained on how to pitch. It was the first time I heard the word 'pitch'" (personal communication, 2024). Additionally, growth catalysts facilitated introductions to county governments, enabling all three ventures to connect with farmer groups and community leaders—helping them establish trust and accelerate customer adoption. To further support their development, Platform B and Platform A secured early-stage grants to test and scale their business models, while Platform B and Platform C received direct payments to train farmers—allowing them to immediately begin addressing the institutional voids they had identified. This revenue stream provided an early proof of concept, helping these organizations transition from growth catalyst-dependent operations to self-sustaining business models over time.

By supporting early-stage training, market access, and funding, growth catalysts enabled platform entrepreneurs to launch their organizations. However, as platforms evolved, they faced the challenge of reducing dependence on external support while maintaining financial sustainability, a tension that shaped their strategic decisions in later stages of development.

Summary of platform opportunity framing and ecosystem seeding

In the first phase, digital platforms identified institutional voids, framed them as opportunities, embedded trust-building mechanisms, and leveraged growth catalysts to seed their ecosystems. While all three platforms followed a common developmental logic, they targeted different institutional voids and employed distinct strategies based on their positioning in the agricultural sector. These early decisions shaped their transition into the next phase: platform building and ecosystem bricolage.

Platform building and ecosystem bricolage

All three of the platforms we observed, at some point of their evolution, entered a second phase of platform development, namely, when the platform entrepreneurs begin to expand the platform's service offerings and deepen their engagement with ecosystem actors. From comparing across cases, we induced that, during this second phase, digital platforms act as institutional entrepreneurs by engaging in ecosystem bricolage—creatively combining available resources and building partnerships to navigate constraints imposed by weak institutional frameworks. However, while all platforms followed this broad pattern, the ways in which they adapted their business models, expanded their value propositions, and leveraged ecosystem actors differed, reflecting variation in their strategic growth trajectories. As our cases show, the second phase of platform building and ecosystem bricolage spanned three to five years.

Navigating informal institutional voids

As platforms moved beyond their initial phase, entrepreneurs encountered deeply embedded informal institutions (North, 1990)—social norms, cultural expectations, and community behaviors—that shaped adoption and usage patterns. While formal institutional voids had been diagnosed and addressed through digitally-enabled business models, informal institutional voids remained significant obstacles to platform scalability and engagement.

Entrepreneurs found that farmer mindsets, gender norms, and perceptions of pricing and land ownership influenced how services were received.

Although all three platforms encountered informal institutional voids that shaped adoption and engagement, the specific challenges they faced varied. Platform A faced resistance to adopting mechanization not only due to financial constraints but also to cultural norms. Many farmers were hesitant to adopt new technologies due to generational farming practices and skepticism of solutions from outside organizations. As one agent explained: "Where I come from, land is a very sensitive and personal issue. The moment you step onto someone's land, it raises many questions, and gaining trust takes time" (personal communication, 2024). Similarly, Platform B struggled to engage farmers due to gender dynamics. Agents noted that when they introduced farming solutions to female clients, husbands often became suspicious, limiting women's participation in digital platforms. As one agent recalled: "When you pitch a farming idea to a female client, her husband might get angry, thinking you're trying to start an affair with his wife" (personal communication, 2024). Platform C encountered resistance to paid financial training, as many farmers expected services to be free, given historical donor-driven programs. One agent noted: "The issue of price is not to be taken lightly. Because we appear as an organized institution, many of our customers expect a discount" (personal communication, 2024).

Despite these challenges, all three platforms iteratively adapted their approaches, engaging local stakeholders and refining service delivery models to align with informal norms and expectations. As they strengthened their position within the agricultural ecosystem, they expanded their value propositions by forming strategic partnerships that enhanced their service offerings and extended their reach.

Expanding the initial value proposition through strategic partnerships

As platforms matured, they addressed adjacent institutional voids by leveraging local resources and fostering informal networks that enhanced their value propositions. While their

initial models had enabled them to establish a foothold in the agricultural sector, financial pressure and impact-driven ambitions pushed them to expand further. Many smallholder farmers, who formed their core user base, lived below the poverty line and had limited disposable income, making it difficult for platforms to generate enough revenue from their original offerings. At the same time, platform entrepreneurs sought to maximize their impact by broadening their service portfolios and deepening their engagement with ecosystem actors. As the CEO of Platform C explained: "Our model is designed to protect the interests of smallholder farmers who lack negotiating power and are extremely poor. Our focus is simple: How can we increase their productivity? How can we raise their income levels? To achieve this, we bring ecosystem actors together" (personal communication, 2024). Recognizing that no single platform could address all agricultural constraints alone, platform entrepreneurs pursued strategic partnerships to integrate financial services, input supply chains, and post-harvest solutions, expanding their initial business models.

Although all three platforms expanded their value propositions through strategic partnerships, the scope and nature of these collaborations varied, reflecting differences in their business models. For Platform A, partnerships became essential for bridging financing gaps and providing complementary services. In 2017, three years after its launch, the founders expanded the platform's activities by facilitating access to financing and maintenance services for smallholder farmers. As one Platform A executive described: "The idea was to bundle through partnerships on top of the digital infrastructure we built, ensuring farmers are organized and clustered while bringing in other partners to enhance value without overstretching ourselves" (personal communication, 2024). To achieve this, Platform A introduced a financing model for tractors in collaboration with banks, allowing farmers to access mechanization without traditional credit history requirements. Similarly, Platform B expanded beyond its role as a matching platform for veterinary services by partnering with pharmaceutical companies to facilitate direct access to animal health products. Over time, it

also partnered with input suppliers, broadening its scope beyond veterinary services to become a comprehensive livestock management platform. These partnerships enabled farmers to not only connect with animal health workers but also access essential medicines and other agricultural inputs, ensuring a more integrated approach to livestock care. Platform C, which had initially focused on digital financial training, evolved into a platform business model by enabling partner organizations to provide training content for diverse agricultural value chains. Their microlearning platform connected organizations that sought to train farmers with smallholders accessing these resources via Platform C's agent network. By expanding to a platform model, Platform C positioned itself as an intermediary, linking agricultural education providers with smallholder farmers to scale knowledge dissemination beyond financial literacy.

By embedding strategic partnerships into their business models, all three organizations broadened their value propositions, ensuring a more holistic offering to smallholder farmers. These partnerships not only allowed them to expand their service offerings but also played a critical role in enhancing financial sustainability by enabling cost-sharing and unlocking new revenue streams. While the scope and structure of partnerships varied, they collectively strengthened the platforms' ability to address institutional voids. However, scaling these expanded models required more than just partnerships—it depended on the continued role of agents as human platforms to aggregate demand and scale adoption.

Mobilizing agents as human platforms to aggregate demand and scale adoption

Although agents played a pivotal role in building trust and facilitating adoption in the first phase, their role evolved as platforms scaled. Agents were no longer just adoption facilitators—they became central to aggregating demand and linking farmers to a growing network of platform partners, effectively acting as "human platforms."

As platforms scaled, agents transitioned from trust-builders to key drivers of demand aggregation and service delivery, adapting their roles to support platform growth in different

ways. For Platform A, agents became the primary bottleneck to growth, as demand aggregation depended on their ability to convert hesitant farmers into active users. As the COO explained: "We need more agents on the ground because they continuously aggregate demand on behalf of farmers. They are crucial to our model, serving as a bridge to help farmers overcome challenges in adopting digital solutions" (personal communication, 2024). While Platform A's agents focused on aggregating demand for mechanization services, Platform B expanded the role of its agents beyond farmer engagement, positioning them as intermediaries who also facilitated connections with agribusinesses. As one executive described: "The way our model is structured is in such a way that the agents are enablers of the services that we offer to the farmers at the last mile" (personal communication, 2024). Similarly, Platform C's network of trained agents evolved into the primary mechanism for delivering a wide range of training programs. No longer limited to financial literacy, these agents facilitated smallholder farmers access to diverse agricultural education initiatives offered by partner organizations. By linking farmers with microlearning opportunities tailored to various agricultural value chains, agents played a crucial role in expanding Platform C's platform reach and impact.

While agents initially served as trust-builders in the first phase, their role evolved as platforms matured. Rather than focusing solely on onboarding new users, agents became integral to platform operations by aggregating demand, expanding service offerings, and integrating ecosystem partners. Across all three platforms, agents transitioned from intermediaries to key enablers of platform scalability, ensuring sustained farmer participation. However, while this agent-driven expansion strengthened platform reach, it did not resolve the challenge of financial sustainability. To ensure their survival, platforms relied on growth catalysts as venture clients.

Leveraging growth catalysts as venture clients to sustain expansion

As platforms matured, growth catalysts transitioned from initial funders to venture clients, becoming a critical source of revenue. Venture clients are organizations that support early-stage firms through revenue-generating contracts rather than equity investments, thereby validating their solutions and supporting their scaling efforts (Gimmy, Kanbach, Stubner, König, & Enders, 2017). While strategic partnerships helped platforms expand their service offerings, financial sustainability remained a pressing challenge. Given smallholder farmers' limited purchasing power, platforms relied on growth catalysts to sustain operations and scale impact. Growth catalysts not only funded training initiatives but also enabled platforms to experiment with new business models and become part of broader development agendas.

To sustain their growth and reduce reliance on external funding, all three platforms transitioned from viewing growth catalysts solely as funders to engaging them as venture clients, offering services that aligned with broader capacity-building and development initiatives. Platform A, for instance, leveraged funding from growth catalysts to explore new revenue streams beyond its core tractor-booking model. The company piloted physical hubs where farmers could access tractor maintenance services and purchase agricultural inputs like fertilizer, aiming to diversify revenue while increasing engagement with smallholders. Platform B ensured a steady income stream by offering farmer training programs aligned with the development priorities of growth catalysts. As a sales manager noted: "Development partners aren't selling a product—they aim to drive behavior change. That's why we provide farmer training as part of their initiatives" (personal communication, 2024). Platform C also leveraged growth catalysts as partners, expanding its role beyond farmer training to become one of the primary educators of agents in the agricultural sector. In this phase, Platform C trained agents not only for its own platform but also for other ecosystem actors, including Platform A and Platform B, as well as growth catalysts seeking to strengthen last-mile service delivery. By embedding itself within large-scale capacity-building initiatives, Platform C

positioned its platform as a central actor in agricultural knowledge dissemination and workforce development.

By securing growth catalysts as venture clients, all three platforms transitioned from donor-reliant funding to revenue-generating service models. Whereas in the first phase, growth catalysts primarily provided initial capacity-building, funding, and market access, in this second phase, they became integral to platform sustainability—offering contracts for farmer training, linking platforms to development initiatives, and integrating them into governmental agendas. This shift allowed platforms to expand their reach and impact while securing financial stability. However, despite these efforts, platform entrepreneurs continued to face the challenge of building fully self-sustaining business models independent of external funding, shaping their strategic priorities in subsequent phases.

Summary of platform building and ecosystem bricolage

In this second phase, digital platforms navigated informal institutional voids, expanded their value propositions through partnerships, mobilized agents as demand aggregators, and leveraged growth catalysts as venture clients. While all three platforms followed a similar developmental trajectory, they pursued different expansion strategies based on their evolving business models and roles within the agricultural ecosystem. These strategic shifts shaped their transition into the next phase: platform institutionalization and ecosystem scaling.

Platform institutionalization and ecosystem scaling

In the third phase of platform development in the Global South, digital platform founders begin to focus on scaling operations and embedding platforms within broader institutional frameworks. In this phase, digital platforms act as institutional entrepreneurs by strengthening formal governance structures, standardizing practices, and aligning ecosystem actors around common goals, aiming to achieve institutionalization and scalability. However, while all platforms follow this broad pattern, the ways in which they institutionalize their models,

formalize their ecosystem roles, and embed themselves within policy structures differ, reflecting different paths to long-term sustainability. As the platforms in our study currently enter this phase, their institutionalization and ecosystem scaling is an ongoing process, with both opportunities and challenges in achieving scalable and sustainable impact.

Establishing platform as novel institution

As platforms gain traction, they evolve from niche solutions into institutional actors shaping agricultural systems at scale. Rather than operating as independent service providers, platform entrepreneurs actively position their ventures as part of the agricultural institutional infrastructure—integrating into national strategies, influencing policy discussions, and expanding their role in public-private partnerships.

Although all three platforms institutionalize their models, the extent and form of this institutionalization varies. Platform A is leveraging its traction to influence mechanization strategies at the national level, aiming to embed its digital infrastructure into public sector initiatives. The company is transitioning from a rental platform to a key enabler of national mechanization programs, working closely with government agencies and financial institutions to scale tractor access for smallholder farmers. Similarly, Platform B is positioning itself as an institutionalized platform for livestock management, integrating into government-led livestock initiatives. Platform C, by introducing a novel digital platform, is working to become part of the national digital public infrastructure, cooperating with all relevant organizations and growth catalysts to scale agricultural knowledge dissemination and ecosystem coordination. As the CEO described, "With our platform and agents, we are creating an institutional structure there" (personal communication, 2024).

By embedding themselves into national agricultural strategies, all three platforms are transitioning from private-sector ventures to key enablers of systemic agricultural transformation. However, their institutionalization depends on successful ecosystem

orchestration, as aligning multiple stakeholders around shared goals is essential to driving impact at scale.

Co-creating and bundling value propositions through ecosystem orchestration

As platforms institutionalize their roles, they are transitioning from service providers to ecosystem orchestrators, integrating complementary services to create holistic agricultural solutions. Rather than operating in isolation, platform entrepreneurs facilitate collaborations among input providers, service firms, and other market actors, ensuring a seamless experience for farmers. While ecosystem orchestration began in the second phase as platforms expanded their value propositions through partnerships, in this third phase, platforms shift from forming ad hoc collaborations to actively structuring entire agricultural ecosystems. This evolution is driven by both financial pressures and impact-driven ambitions, as platforms seek to enhance their long-term sustainability while maximizing their role in transforming agricultural markets at scale.

Although all three platforms are navigating this transition, the ways in which they engage with ecosystem actors and expand their role as orchestrators differ. Platform A is evolving beyond mechanization by bundling tractor services with input access, output market facilitation, and storage solutions, ensuring that increased farm productivity translates into higher farmer income. As the CEO described, "That's exactly how I would describe our role—an orchestrator" (personal communication, 2024). He elaborated further with an analogy: "The lead guitarist is the one with all the fans and accolades, right? But you're the one who wrote the music, made sure they were on key, and that they came in at the right time" (personal communication, 2024). Platform B, too, moves from connecting individual actors to embedding services into a broader ecosystem. As one executive noted, "We digitize records and connect farmers to quality inputs, track their purchases, and link them to cooperatives or buyers based on their production. This system also enables credit providers to assess farmers' creditworthiness using our data, helping to integrate them into broader financial systems"

(personal communication, 2024). Platform C is taking the most expansive approach, transitioning from a training provider to a platform that unifies all agricultural value chain actors. With its novel digital platform, Platform C is positioning itself as the digital backbone for agricultural coordination, aiming to connect all relevant product and service providers with every smallholder farmer across Kenya's agricultural sector. As the CEO emphasized, "We are working as an ecosystem orchestrator, putting together all the ecosystem actors. This is physical, but it's a digital world [...] it's a platform plus people approach" (personal communication, 2024).

By integrating ecosystem actors, all three platforms ensure that smallholder farmers can access a suite of complementary services, enhancing long-term platform engagement.

However, scaling ecosystem orchestration also requires rethinking the role of agents—not just as intermediaries, but as independent entrepreneurs capable of driving localized service delivery

Empowering agents as local entrepreneurs to strengthen rural economies

As platform entrepreneurs scale their operations, they move beyond using agents to facilitate adoption and aggregate demand. Instead, they position agents as local entrepreneurs who can independently offer services, strengthening rural economies while enhancing platform integration.

All three platforms empower agents as entrepreneurs, shifting their roles from facilitating initial adoption to becoming independent service providers. While some platforms are still refining the scope of activities agents should perform or how to manage their agent networks, Platform C has institutionalized agent entrepreneurship at a national scale, training thousands of youth to operate as agricultural service providers. As one project manager emphasizes, "20,000 youth entrepreneurs are now being institutionalized in the country, thanks to our effort." In the end, as she explains, "The goal is to create opportunities for these agents that they can leverage to provide services to farmers, either directly or indirectly."

(personal communication, 2024). Through this approach, Platform C strengthens rural economies and enhances the role of agents within its ecosystem, ensuring they play a crucial role in agricultural service delivery.

By shifting from employing agents as intermediaries to enabling them as independent entrepreneurs, all three platforms create decentralized service networks that scale platform reach while fostering local economic growth. However, sustaining these models requires continued engagement with growth catalysts—not just as funders, but as long-term partners driving systemic change.

Harnessing growth catalysts as partners to drive meaningful change

As platforms institutionalize, they redefine their relationships with growth catalysts—not as short-term funders but as strategic partners aligned around shared goals of agricultural transformation. Rather than relying on grants, platform entrepreneurs engage governments, NGOs, and multilateral agencies as collaborators in shaping agricultural policies, scaling interventions, and embedding platforms into national development agendas.

Although all three platforms harness growth catalysts as partners, the depth and focus of these partnerships vary. Platform A is working closely with government agencies to align mechanization strategies with national agricultural policies, recognizing the role of public investment in fostering agricultural markets. As one executive explains, "Governments play a crucial role in creating what I call the 'playing field'—an environment that enables businesses to be competitive not just domestically, but internationally as well" (personal communication, 2024). Platform B is expanding its international footprint by securing partnerships that support expansion beyond Kenya. As the CEO highlights, "We now have partners who are very interested in supporting us to actually scale to other countries, and we are very open to that" (personal communication, 2024). Platform C is strengthening its collaborations by embedding co-creation mechanisms into its engagements with development partners. As the COO notes, "At least our focus is not so much on grant money. It's not like somebody would

come and give a grant and say, 'Okay, now you go change the world.' We co-create most of our programs with partners" (personal communication, 2024).

By cultivating long-term partnerships with growth catalysts, all three platforms ensure sustained impact while integrating into global development frameworks. However, despite their progress in becoming key players in agricultural ecosystems, platform entrepreneurs continue to navigate tensions between impact-driven missions and financial sustainability.

Summary of Platform Institutionalization and Ecosystem Scaling

In this third phase, digital platforms establish themselves as institutional actors, expand their service portfolios through ecosystem orchestration, empower agents as local entrepreneurs, and engage growth catalysts as long-term partners. While all three platforms follow a shared trajectory, their approaches diverge based on their business models, partnerships, and ecosystem positioning. These shifts enable platforms to transition from scaling their operations to structuring entire agricultural ecosystems, embedding themselves within national and international frameworks. However, as they seek to balance impact-driven missions with financial sustainability, a critical question remains: Which platforms will successfully sustain their models, and how many ecosystem orchestrators can coexist in the agricultural sector—especially given the overlaps and competition across value chains?

Discussion

Our findings challenge existing assumptions in platform literature that emphasize market-driven scaling logics—the idea that successful platforms grow primarily through network effects, technological efficiency, and private-sector investment (Kretschmer, Leiponen, Schilling, & Vasudeva, 2020; McIntyre & Srinivasan, 2017). Dominant frameworks suggest that digital platforms scale by leveraging low transaction costs, seamless digital connectivity, and self-reinforcing cycles of user adoption (Van Alstyne, Parker, & Choudary, 2016). However, these models largely emerge from studies in mature, regulated markets, where

formal institutions—such as legal enforcement mechanisms, financial infrastructures, and market governance frameworks—support platform growth. In contrast, our study reveals that digital platform entrepreneurs in the Global South do not simply scale through market mechanisms but instead rely on social embeddedness, informal trust networks, and development-oriented partnerships to navigate institutional voids. Given the absence of efficient legal systems, standardized financial markets, and established digital infrastructures, platform entrepreneurs engage in institutional bricolage (Mair & Marti, 2009)—leveraging existing social structures, informal relationships, and development partners to establish trust and enable scaling.

To capture this unique trajectory, we have developed a process-theoretical model that highlights the sequential phases of platform emergence, adaptation, and institutionalization. Rather than following a linear, market-driven scaling path, platforms in the Global South evolve through context-sensitive cycles of ecosystem seeding, bricolage, and scaling, shaped by ongoing negotiations with both formal and informal actors. Through this model, we identify two novel, situated enablers—agents as "human platforms" and growth catalysts—that fundamentally shape the evolution of digital platform ecosystems in resource-constrained environments. Agents act as trust brokers and intermediaries, embedding digital solutions within local networks and overcoming barriers of technological unfamiliarity, literacy, and service accessibility. Growth catalysts—development organizations, NGOs, and public institutions—serve as hybrid funders, capacity-builders, and market-makers, filling the gap left by absent venture capital and providing early-stage capacity-building, funding, and access to fragmented agricultural markets.

Fundamentally, our study reveals that digital platforms in the Global South do more than facilitate transactions or enhance market efficiencies—they actively reshape economic participation and institutional structures. By integrating local actors and development-oriented partnerships, platform entrepreneurs address institutional voids, alleviate poverty, and foster

socio-economic development. Rather than merely building digital marketplaces, they expand access to essential agricultural services, enhance financial inclusion, and strengthen rural economies. Through these mechanisms, digital platforms do not only adapt to existing constraints but serve as institutional change agents, bridging market failures and transforming agricultural systems. However, while this study demonstrates their potential, it also shows that their ability to scale and sustain impact remains highly dependent on growth catalysts whose funding priorities and strategic agendas shape the platforms' trajectories.

Theoretical Contributions

We contribute to research at the intersection of digital platforms, strategic entrepreneurship, institutional entrepreneurship, and development studies by extending existing theories to resource-constrained environments. First, we challenge market-driven perspectives on platform scaling by demonstrating that platform growth in the Global South is not simply a function of technological superiority or market efficiency, but is deeply embedded in social and institutional contexts. Second, we develop a process-theoretical model that explains how platforms navigate institutional voids, adapt to socio-economic constraints, and institutionalize over time. Third, we identify two situated enablers of platform development: agents as human platforms, who build trust and embed digital solutions locally, and growth catalysts, which provide capacity-building, funding, and market access. Finally, we highlight platforms as institutional entrepreneurs, reshaping norms, structures, and economic participation in ways that contribute to poverty alleviation and societal change, while also revealing their dependence on external funding and institutional fragility. Consequently, our study contributes to a broader, non-WEIRD (Henrich et al., 2010) theorization of digital platform ecosystems, offering novel insights into how platform entrepreneurship unfolds outside of the Global North's institutional contexts.

Practical & Policy Implications

Our study highlights that platform entrepreneurs in the Global South scale not solely through market-driven mechanisms but by strategically integrating social and institutional enablers. Our findings highlight that local agents are not merely intermediaries but essential trust brokers who can accelerate adoption and embed platforms within existing social networks. However, beyond agent deployment, successful platform growth also depends on strategic partnerships with growth catalysts, such as development organizations and NGOs, which provide capacity-building, financial resources, and market access. To fully leverage these enablers, platform entrepreneurs should carefully design business models that balance flexibility and alignment with growth catalysts, ensuring that reliance on external support does not create long-term vulnerabilities. Thoughtful orchestration of both agents and growth catalysts can serve as a game changer, offering platforms a distinct competitive advantage in navigating institutional voids and sustaining long-term impact.

For policymakers and development organizations, enabling digital platform growth in the Global South requires a shift from traditional regulatory oversight to proactive ecosystem support. Governments should focus on strengthening institutional infrastructures, fostering digital and financial inclusion, and creating public-private collaborations that reduce uncertainty for platform entrepreneurs. Development organizations, in turn, should structure their support in ways that promote long-term financial sustainability, ensuring that platforms do not become overly dependent on external funding. A balanced policy approach is needed—one that provides catalytic funding and capacity-building while simultaneously incentivizing revenue diversification and self-sustaining business models. Recognizing that platforms are not just market actors but institutional change agents, policymakers should design frameworks that support their role in poverty alleviation, financial inclusion, and rural development while mitigating risks associated with external funding dependencies.

Limitations and implications for future research

While our study provides valuable insights into digital platform development in the Global South, several limitations should be acknowledged. First, our case selection focuses on Kenya's agricultural sector, which, while illustrative, may not fully capture the diversity of platform evolution in other regions or industries. Future research could explore or compare how similar mechanisms unfold in different institutional contexts, such as urban mobility, health tech, or fintech platforms, to assess the broader applicability of our findings.

Second, the reliance on qualitative data, while well-suited for process theorization, limits the generalizability of our findings. Our study provides rich, context-sensitive insights into how platform entrepreneurs navigate institutional voids, but further research could complement this approach with large-scale quantitative analyses to test the prevalence and scalability of the identified mechanisms across multiple settings. Comparative studies across different digital platform types and geographies could also enhance the robustness of these insights.

Third, given the rapid evolution of digital platforms and shifting policy landscapes, longitudinal follow-up studies are necessary to understand the long-term sustainability of platform-driven institutional transformations. While our study captures the emergence and adaptation phases, future research should investigate whether the strategies identified here lead to durable ecosystem integration, financial self-sufficiency, and sustained socioeconomic impact over time. This would help assess whether platforms remain dependent on external growth catalysts or eventually develop autonomous scaling capabilities within their respective markets.

Beyond these limitations, our findings point to several promising directions for future research. One avenue is to further investigate the role of agents as human platforms across different industries and institutional settings, examining how their functions vary in enabling platform adoption and trust-building. Additionally, the concept of growth catalysts as venture

clients warrants deeper exploration, particularly in relation to how such dependencies shape platform governance, decision-making, and long-term viability. Finally, future research could examine the tensions between impact-driven and financially sustainable platform models, shedding light on the challenge of achieving scale while maintaining alignment with developmental objectives. Investigating these trade-offs could provide crucial insights into how digital platforms balance social impact with long-term viability.

Conclusion

Digital platforms have been widely heralded as transformative forces, reshaping markets, industries, and societies. However, their development in resource-constrained environments of the Global South follows distinctive trajectories, shaped by institutional voids, informal networks, and non-market actors. Our study highlights the critical role of agents and growth catalysts in enabling platform emergence and scaling, emphasizing that platforms are not merely digital intermediaries but socio-technical systems embedded within broader institutional frameworks.

As platform entrepreneurs transition from ecosystem participants to orchestrators, they face a paradoxical challenge—balancing impact-driven missions with financial sustainability. Whether these platforms can establish lasting business models, and how many ecosystem orchestrators can coexist in the agricultural sector, remain open questions. By theorizing platform development through an institutional process lens, we provide a foundation for further research into how digital platforms evolve, embed themselves in institutional infrastructures, and drive societal change.

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