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Part IV

Design and Practice

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As mobile phones and related technologies become increasingly common in even the most remote parts of the world, new modalities have emerged to connect hitherto marginalized individuals and communities to formal financial services and institutions. This opportunity has not been lost on policymakers or the private sector, and hundreds of initiatives are currently underway that attempt to replicate M-PESA, the successful mobile-money program created by Safaricom in Kenya. However, most of these initiatives have struggled to attract and sustain an active base of customers. The reasons for such struggles are manifold, and in many instances the regulatory environment and other macro factors undermine carefully designed technologies for financial inclusion.

However, as the authors in this part each articulate in a different way, the tensions that arise most often at the technological interface between money and people occur at the micro level, when one size only fits some, and when design does not meet practice. Indeed, this is a theme that reverberates throughout this volume, so it is fitting to conclude with four chapters that bring into focus the many frictions, as well as the occasional successes, that arise when an existing financial interface is transported from one context to another. For, as these chapters show, many of the most evocative and powerful narratives around money, and the possible role for technology in such cases, exist at the margin.

Here we encounter four technologies enduring the growing pains of adoption, in four very different settings around the globe: game networks in Colombia, business correspondents in India, a conditional cash-transfer program in rural Philippines, and social payments in Ethiopia. In each case the authors move from careful ethnography to a set of insights that can inform the design of technologies for financial inclusion. What is quite remarkable is that despite the geographic and cultural distances that separate these different communities, the conclusions are markedly similar.

Echeverry and Cuartas dissect the success of Colombian game networks, a system of point-of-sale operators who initially facilitated ticket sales but now support a range of financial transactions. Through in-context interviews with street sellers in Medellin, the authors work toward a series of design guidelines for new financial applications. "Proximity, immediacy, and simplicity" is perhaps the most emphatic recommendation that emerges, in part because it resonates in each of the other chapters in this part. For the informal workers, microtransactions have tangible appeal and perhaps offer an entry point to credit and other financial services, but only insofar as they serve the need to "purchase, pay, send, and save in small amounts and without having to leave their workplace." For workers who are constantly on the move and who have little to save at the end of the day, a means to micro-accumulate is a promising complement to the existing formal services that are slow and laden with bureaucratic restrictions.

Nandhi's account of the EKO mobile banking system carries this same theme to the study of low-income workers in Delhi. Here, Nandhi documents the need for "convenience, efficiency, and flexibility," noting that 73 percent of those surveyed ascribe their increased savings to the fact that EKO has allowed them to make smaller and more frequent transactions. For instance, in one of the case studies in the chapter, we encounter a small shopkeeper who uses microdeposits to avoid temptation goods. Absent EKO, he tells us, the petty cash would have been kept on hand and used for more whimsical expenditures. Access to EKO, however, helps him to gradually accumulate microdeposits until he has sufficient funds to convert the balance into other savings instruments such as a ROSCA (rotating savings and credit association). In this way, Nandhi's shopkeeper exemplifies a second theme that all of the chapters in this part touch upon: the strong complementarities that exist between new financial technologies (in this case, EKO), and existing formal and informal systems (such as the group savings account or *gulak* piggy banks).

The juxtaposition of old and new systems of money is perhaps most striking in Gusto and Roque's account of indigenous people in the Philippines, where a government-aid program is providing several communities with their first regular and formal engagement with currency and banking. "Indigenous people beneficiaries," the authors note, "must be appreciated as a new and unique client segment that is economically vulnerable, with relatively low levels of education and who are still likely to be more comfortable operating in the informal sector." Yet here again we see that as currency is injected into the society, it is integrated so as to complement the existing barter-based socioeconomic ecosystem. Thus, "upon receiving the [cash transfer], they specifically spend it for their children's education and health expenses. When it is all used up . . . they go back to doing barter." The new system and the old thus coexist, though the complementarities are delicate and Gusto and Roque end on a note of caution. The critical juxtaposition here is not just between formal and informal but also between those who have access to both systems and those who do not. Thus far a strong sense of solidarity has encouraged the individual beneficiaries to redistribute newfound formal currency within the community; we are warned, however, that this may not be a sustainable equilibrium.

Complex systems of formal and informal exchange are likewise the focus of Woldmariam Mesfin's careful analysis of social payments among the poor in rural Ethiopia. In his account, Mesfin provides rich detail on the norms regarding gifts and payments around weddings and funerals, the processes that have evolved to document social debts and favors, and of how "families compete for social prestige" through the act of giving. When current practices of monetary exchange are so deeply enshrined in social interaction, it is perhaps difficult to envision a new technology that could capture such nuance. However, Mesfin's narrative follows a parallel trajectory to that of Echeverry and Cuartas, working from a detailed ethnography to a normative discussion around the design of appropriate mobile-money services. It is fitting, then, to observe several of the themes common to this part reflected in Mesfin's guidelines: the need for small and flexible contributions in Ethiopia, for instance, evokes the mandate for "proximity, immediacy, and simplicity" from the chapter set in Medellin.

Together, the chapters in this part thus provide a powerful glimpse into several communities struggling at the interface between money and technology. There are cases of successful integration – for instance, when strong communal norms stimulate redistribution or when microdeposits enable savings accumulation – but there are also many tensions and frictions. Each in a different way, we see the communities react against the rigid formalities of the current iteration of the technology. In Colombia it is the bureaucratic complexity and onus of documentation that overwhelms informal workers; in India, an illiterate rickshaw puller is intimidated by the user interface and for a long time is prevented from registering; for indigenous people in the Philippines, "it was hard to tell how many of the beneficiaries actually knew how to count or recognize the numbers on the ATM keypads. One thing was for certain: they . . . were scared that something might go wrong."

That such challenges materialize during a community's initial encounter with a new technology is not unexpected. Nor is it surprising that two parallel recommendations emerge: to remove complexity from the system and to ensure that new technologies complement existing modes of economic exchange and accumulation. However, to see these correlated insights resonate in four vastly different contexts is a powerful reminder of the chasm between current design and current practice.

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