Chapter 10

Trustworthy Mobile Transactions:

A Longitudinal Study of M-PESA in Kenya

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ABSTRACT

This chapter will focus on one vital determinant of m-banking adoption and use—trust relations. It presents the case of M-PESA, an m-banking application that quickly achieved a remarkable local embeddedness in large segments of Kenyan society. Data for this case was gathered during a fourteen month ethnographic study that took place in two locations—one urban and one rural. The chapter identifies four categories of trust (interpersonal, extended, presumptive, institutional) that were a prerequisite for mobile banking, and a lubricant for its sustainability and growth. It shows that institutional trust relations were strong during the early stages of adoption whilst the interpersonal ones were weak. This means that customers trusted Safaricom, the mobile service provider offering M-PESA. They did not, however, trust the agents that facilitated cash in and cash out. The chapter also gives attention to the changing nature of these relations through time. For example, it shows that interpersonal trust relations between customers and agents strengthened with increased interaction. The chapter concludes by identifying areas for future research and delineating recommendations for managers.

INTRODUCTION

The pervasiveness of the mobile phone in developing countries has recently instigated the development of applications designed to alleviate poverty. One of the most recent is m-banking—a platform for the delivery of financial services via the mobile phone. Studies discussing these technologies tend to focus on their accessibility and adoption, addressing whether these applications have the potential to

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be "transformational", or appropriated by a large segment of the unbanked population (Ivatury & Pickens, 2006; Porteous, 2006; 2007). To date, there is very little empirical work examining the adoption of m-banking applications and discussing the numerous barriers to this process. The relevance of such barriers to understanding ICT adaptation in the context of emerging economies has also been given little attention. We will suggest that the lessons learned from the case presented here are relevant beyond the context of the "developing world" or "the South". This is because processes of social change are not solely localized in a place, but are the unfolding product of the encounter between quite different social worlds in "the South" and in "the North". The ethnographic methodology helps in unpacking such constructions. We also highlight how concepts like "institution" can be powerful in explaining this and similar cases, as far as they include local social models (tribes, as an example from this case).

This chapter will focus on one vital determinant of m-banking adoption and use—trust relations. As several authors have observed, economic transactions are contingent upon trust (Luhmann, 1979; Mayer, Davis & Schoorman, 1995; Putnam, 1993). This study presents the case of M-PESA, an m-banking application that quickly achieved a remarkable local embeddedness in large segments of Kenyan society. Data will be used from an ethnographic study that was conducted in two locations: Kibera, and informal settlement outside Nairobi; and Bukura, a village in Western Kenya. This study took place over a period of fourteen months and tracked the adoption, usage and impact of M-PESA. Using data from these two sites, the chapter identifies three classes of actors that were vital to the establishment and maintenance of trust—users, agents and Safaricom (mobile operator). It further illustrates how trust relations between these actors changed through time. The findings presented here contribute to the aforementioned m-banking literature by highlighting the numerous trust relations that must be in place before an m-banking application becomes "transformational" (Porteous, 2006, 2007).

TRUST AS THEORETICAL LENS

There exists a wide body of literature on the topic of trust. However, a concise definition of the term remains elusive as it holds a variety of meanings across disciplines. Because we are examining trust in the context of m-banking exchange, we will appropriate a definition that is inherently relational (Kramer, 1999; Mayer et al., 1995; McAlister, 1995; Mishler & Rose, 2001). The starting point to our definition of trust is that it emerges as a property of relations between two or more social actors. These actors can be individuals, or organizations such as corporations and political parties (Smith, 2007). They are interacting in some way and have expectations regarding each other's future behaviour (Barber, 1983; Dasgupta, 1988). For example, they expect that the other actor will fulfil their obligations, behave in a predictable manner, and will act fairly in situations of opportunism. In this regard, trust is the expectation that actors have of each other, and of the organizations with which they deal.

Several categories of trust relations exist within the literature. Some scholars pay attention to the trust relations that emerge between individuals. This is known as *interpersonal trust* (Boon & Holmes, 1991; Bran & Foddy, 1988; McAlister, 1995). This type of trust is established between two or more individuals whose interaction over a given period of time allows them to learn about one another, increasing the ability of each party to make judgements regarding the other's disposition, intentions and motives. The discussion below will make clear that such trust relations were weak during the early stages of M-PESA. Several authors have also pointed to something called *extended trust* to explain trust relations that extend beyond those that we know

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