

# Mobile Financial Services at the Base of the Pyramid: A Systemic view for Cross-Sector Governance and Embedded Innovation

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Mobile financial services is one of the uprising movements to bank the unbanked by integrating philanthropic and business approaches for financial inclusion. In this paper, we address how a systemic view help integrate the Philanthropic Initiatives (PI) and the Commercial Initiatives (CI) to get a sustainable impact on the unbanked micro-entrepreneurs. However, each approach has pros and cons as they go along the stages of design, deployment, and sustainability. Using the soft system thinking we theorise the Base of the Pyramid (BoP) as a business system to mix-up the relatively high start-up capabilities of the PI with the relatively sustainable impact of CI. Our mobile money case shows that donors, local private enterprises, and multinational corporations follow the BoP strategy to develop an online grid that offers a reconciled balanced scorecard for economic returns, social benefits and local impact. Such a strategy guarantees flexible, long-term investments and facilitate developing innovative financial services.

**Keywords:** BoP, Soft System Thinking, Value chain, Embedded Innovation, Financial Inclusion, Mobile Money

## INTRODUCTION

Poverty and disenfranchising from the financial system stays one of the humanity's lasting challenges (Chambers, 1983; Margolis & Walsh, 2003). In response, the interest of donors and enterprises in using market-based strategies have increased to enfranchise the poor micro-entrepreneurs and link them to the financial system (Hulme & Arun, 2009; UNCTAD, 2011; Yunus, 2003). Despite the growing trend toward these approaches, critiques are still rising and convincing (Copestake, 2007; Jaiswal, 2008; Karnani, 2007; Morduch et al., 2009). However, the expansion of mobile devices and other forms of Information and communication technologies (ICTs) facilitated inter-organizational communication, universal access to multistakeholders (Heeks, 2010), and creates a networked society (Castells, 2007 & 2011). In the mobile financial services, Philanthropic Initiatives (PI) and the Commercial Initiatives (CI) run independently of one another, because the economic goals of the latter are irreconcilable and sometimes conflicting with the social goals of the former (London & Anupindi, 2011). Getting both approaches compatible may contribute to achieving sustainable development with wider outreach (Kelly, 2009; Hart, 2011; London, 2011). The "Base of the Pyramid" (BoP) is candidate business system that explains how this synergy could take place (Prahalad, 2010; Prahalad & Hammond, 2002). *"What insights, then, does the BoP lens offer for enhancing that synergy between the PI and the CI?"*

To address this research enquiry, our chapter concerns first with comparing the PI and CI and their underpinning business systems. In doing so, we draw upon the recent literature from the

mobile financial services to conceptualize the system design, deployment, sustainability in both types. Then we examine how the BoP lens better integrate the pros of both systems alone the three stages of system development. We see this study as an essential move toward highlighting the broader inquiry of “*how can we develop market-based business systems that serve the poor?*”.

As this research addresses a socioeconomic complex phenomenon, an *interpretive qualitative* approach has been adopted (Myers, 2013). Our data have been collected from “e-Masary”, a case of mobile money in Egypt. Using the BoP business system we provide analysis of different Philanthropic and business networks in the e-Masary and how these networks prompt to integrate in a new business form to bank the unbanked Egyptians estimated to be 80% of the population. *Semi-structured interviews, focus groups*, field visits and archival studies are the data collection methods used to provide an extensive answer to the research enquiry (Bryman, 1989). *Template analysis* was also used to interpret the huge amount of data into the key findings (King, 2004).

Following Soft System Methodology (SSM) (Chekland, 2013), we start our chapter by revisiting the challenges of banking the unbanked (such as investment and profitability, digital infrastructure and mobile-based supply chains, regulations and the overall regulatory legal frameworks) to frame the problem situation. Then in the second section, we provide a body of gray literature, including empirical cases of mobile financial services in order to build-up a candidate conceptual framework based on which we explain the motivation for integration between both of the PI and the CI in our targeted e-Masary case study. In the third section, we discuss our theorization of the BoP as a business system. Afterward, we discuss the e-Masary case in depth to draw our templates and study results. In section five, we show the research findings the results of considering the BoP business system as a lens for cross-sector governance and embedded innovation. The last section, offers a conclusion, including potential contribution, research limitations, and future recommendation.

## **FINANCING THE BASE OF THE PYRAMID:**

About 2.6 billion people, 70% of the population in the developing countries, are disenfranchised from the financial system clarifies that banking is simply not a mass market proposition (World databank, 2011). Those people live in misery without proper food, shelter and education. If they got access to microcredit, they would be able to create microenterprises and set aside some money on each pay day a part of the due amount and its interest (Mas, 2011). Such micro-savings would improve their livelihood and their ability to manage their cash flows more simply as well as to secure stable daily food consumption for their families along seasonal income fluctuations (Demirguc-Kunt, 2008; Duncombe, 2006). They would also be able to use this money to pay for their children’s education, invest in fridge to store their dairy or buy hay to feed their livestock. In addition, they would be able to amass assets to bulwark themselves from unexpected live shocks such as diseases or work related problems. It is undeniable that such practices may help them self-funding their microenterprise one deposit at a time, rather than going through the microcredit cycle again (I. e. Paying high interest-rate charges one loan repayment at a time) (Beck et al., 2007; Matin et al., 2002).

The ability to transfer micropayments safe and cheaply to remote individuals (e.g. Family members living in villages) or organizations (FMCGs and utilities) is also one of the benefits

that micro-entrepreneurs would gain, if they get access to the financial system (Hughes & Lonie, 2007). Further, they could receive international remittances from migrant relatives or companies they supply in other towns without going to the physical branches of financial service providers (Ivatury & Mas, 2008). Based on the above discussion, we can argue that all of these financial services are complementary and have mutual impacts on the livelihood of the poor people specially the micro-entrepreneurs. Once they get access to one of these services, they become more willing to pay for the other financial services as long as they are packaged in a way that is relevant to their needs, sized appropriately, and delivered conveniently (Hulme & Thankom, 2011).

The success of financial service providers in Asia (e.g. Grameen, SKS and SMART Money), in Africa (e.g. M-PESA and Celpay) and in Latin America (e.g. Banco Sol and No Borders) have built a massive network of retail agents serving villagers (Mendoza & Vick, 2010). Those agents are usually non-branch licensed physical outlets such mobile retails or grocery kiosks who conduct credit evaluations and collect repayments. Despite this potential for micro-entrepreneurs and to the whole poor, service providers see it as *unprofitable* and needs huge *infrastructures* and *regulatory frameworks* (Mas, 2011).

Financial Service Providers attribute the “*unprofitability*” of the poor market to low balances, small amounts per transaction and seasonality of transactions (Cull et al., 2009). They doubt the poor’s credit worthy without sources of collaterals (Morduch, 1999). Then it is surprising to find U.S 50 worth products such as a bottle of Coca Cola, a mobile prepaid card, a small jar of vitamin-full yogurt and a sachet of shampoo in almost all the village stores in the developing countries. Probably Financial Service Providers neglect so many customers who might want to pay for affordable financial services as they do for a bottle of Coca Cola<sup>1</sup>. This controversial question is highlighted by Hamada (2010) as the main character of the first paradigm shift in microfinance. There are two paradigm shifts in microfinance: the first paradigm started in the second half of the 1980s, when microfinance shifted from Agri-credit or microcredit subsidized by government and/or donors funding small farmers to microenterprise finance via market-based approaches. This paradigm focused on overcoming the high transaction costs and risks because of information asymmetries (Zeller & Meyer, 2002); the second paradigm shift emerged in the middle of the 2000s when CGAP called for building inclusive financial sectors in the developing countries (Hamada, 2010). The latter resulted in three domains micro, meso, and macro (Duncombe & Boateng, 2009). The macro-level includes state legislative and policy frameworks, while the micro-level includes financial service providers (banks and non-bank) that offer services to the poor. In the middle, the meso-level that includes the financial system’s basic financial infrastructure and its range of services (e.g. Microfinance mechanisms and ICT application). In this respect, it is important to explore how service providers employ operating models suitable for the poor.

Building suitable “*infrastructure*” is the second challenge faces the financial service providers targeting the poor. For the poor, money is a physical value of needs (e.g. Food, shelter and cloths) whilst for the rich it is an electronic value where financial institutions process accounting information. Electronic banking bridged the physical cloud with the electronic cloud using Automated Teller Machines (ATMs), Visa cards, and Points-of-Sale (PoS) terminals in retails (Lyman et al., 2006). In doing so, electronic banking enables the

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<sup>1</sup>See Robinson (2001), and Armendariz and Morduch (2005) that studied the profitability mechanism in the market-based financial services for the poor.

rich people to use money that is already uploaded to their bank accounts in sort of information.

Conversely, the poor people get paid in cash that needs to be transformed to the electronic format. Financial service providers think that the poor needs too many branches to deposit their money in an electronic form which is unprofitable considering the huge fixed costs for building new branches and recruiting suitable staff. Mass (2011) agrees with that the majority of financial service providers are still following direct distribution model while many other service providers (e.g. Utilities and railway companies) adopt the multi-distribution model. Whilst financial service providers see physical branches as the main challenge, the other providers partnered with third-party like mobile operators to facilitate prepaid billing platforms (Barnes, 2002).

Financial service providers will reach the huge market at the BoP only if they found a way to eliminate costs. The alliance between Grameen Bank, Grameenphone, developed a network of “Phone Ladies” in Bangladesh to operator “Village Phones”. The phone ladies are borrowers who get equal to US 200 dollar loan from Grameen Bank to subscribe to Grameen phone. Once they subscribe, they get trained on how to operate mobile phones and how to charge others with a profitable price. In April 2012, the village phones exceeded 471,423 phones operating in 297,079 villages around Bangladesh and serve 162,220,762 clients (Grameen Bank, 2012). This program has been replicated in Nigeria, Uganda, and Rwanda (Islam, 2005; Keogh et al., 2005). Given that some of the Phone Ladies have decades of experience with the bank, they represent a very cheap distribution network that achieved revenues of nearly \$30 billion and net profits approaching \$600 million by the end of 2011 (Grameen Bank, 2012). Banco do Brasil acquired a network of 8,600 retail agents equipped with point-of sales readers to upload cash into electronic accounts (CGAP, 2010). These retails sell white-goods in the Brazilian villages and hamlets serving 1,461,850 unbanked clients including 528,792 active clients of Microfinance Institutions (MFIs) (CGAP, 2011).

Despite that financial service providers in developing countries have begun turning fixed costs into variable costs and use new channels; they are often hampered by “*regulation*” (Weber & Darbellay, 2010). M-PESA in Kenya is an example of how governmental regulations may facilitate (or hinder) the success of mobile-based financial services. The Kenyan banks claimed that their regulated services have been overwhelmed by M-PESA who, within two years of operation, had 13,142,550 in comparison to 8,600,258 existing bank customers (CGAP, 2011). Regulators focus on the aggregation of funds through receiving deposits from the poor than the rich people while offering the same interest rate (Ivatury & Mas, 2008). Bankers are restricted by operational regulations that govern how they develop their products, distribution channels, information systems and management structure. Altogether affect their ability to innovate and drive up costs and in turn decrease their profitability in such market (Mas, 2011). In Kenya, for instance, bank branches are subject to periodical physical inspection by an authorized representative of the central bank. In case of service termination, they are also required to give six months “closing notice” to the central bank (Mas, 2011). It does not mean M-PESA runs free of risks. Ivatury & Mas (2008) reported lots of operational problems<sup>2</sup> concerning the possibility of data leaks at the retail agents and low level of security in the rural kiosks. However, evidence showed that the

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<sup>2</sup>Examples of the problems and other associated risks are credit risk, liquidity risk, reputational risk and potential for money laundering. See Ivatury and Mas (2008).

Central Bank of Kenya dedicated all efforts not to organise M-PESA as a bank, but to operate outside the casual banking rules (Hayes & Westrup, 2011).

Concluding this section, we think that bankers and traditional financial service providers serving the poor twist the regulators' arms with the risks associating the new models, rather than innovating new business models (including new distribution channels) or even improving their competitive advantage and sustainability in the poor market. In the next section, we explore how pervious projects of mobile financial services tackled the above mentioned challenges following either the PI or the CI.

## **LITERATURE REVIEW: BUSINESS SYSTEMS IN FINANCIAL INCLUSION**

In their seminal work Linstone & Meltsner (1984) refer to three stages to develop technology-based business system; design, deployment, and sustainability stages. While the first one focuses on finding the business paths (including value proposition and value network, value architecture and financing), the latter stages focus on how to put this design into action (Al-Dubai & Avison, 2010). The "design stage" explain the business vision, value chain, and key performance indicators (Porter, 1985). It ends with a detailed feasibility and an audit plan to whether or not to commence the deployment stage. The "deployment stage" involves deploying the business system, integrating with networks, resolving political conflicts among the relevant real-real stakeholders. The "sustainability stage" concerns with removing the gap between the designed business system and daily business processes to assure the system sustainability (Linstone, 1981).

The previous projects for mobile financial services confirm that PI and CI are the main roots of business systems (Simanis & Hart, 2009; London & Anupindi, 2010 & 2011). PI adopted in financial inclusion programs targeting poor micro-entrepreneurs in which, the implementing partner acts as a network engineer. This partner does not join the value chain nor perform the change in the business system, rather, facilitates the changes necessary to stimulate the demand for products/services as well as for increasing the supply of higher performing local subcontractors. In the CI, private enterprises act as the network engineer. They integrate with the value chain and develop growth strategies through new competitive opportunities beyond the traditional market (Simanis & Hart, 2009). Investments are viewed through a rational (financial) perspective and need to be complemented with sustainable business relationships and transferable capabilities.

Recently, the rate of donors and international aid organizations counted for 73% of the worldwide efforts toward poverty alleviation (MicroRate, 2012). These institutions are mostly funded by mega donors such as the USAID, Swiss Aid organization, Germany's Gesellschaft für Technische Zusammenarbeit, the Department for International Development in the UK, the World Bank, International Finance Corporation (IFC) and different other development agencies and foundations (Bauchet et al., 2011; London & Anupindi, 2011). Such donors struggled to develop their existing value chains for integrating micro-entrepreneurs into the domestic and international financial markets, as well as providing a wide range of financial services for the poor (Helms, 2006).

The CIs founded in Africa, Asia, and elsewhere, looking for innovative sources of finance via new value chains and non-traditional opportunities to pull the unbanked poor in these value chains (Mas, 2011). With almost no prior knowledge or expertise in the unbanked environment, these CIs face a challenging journey to start and scale-up their innovative business models (Valadez & Buskirk, 2011).

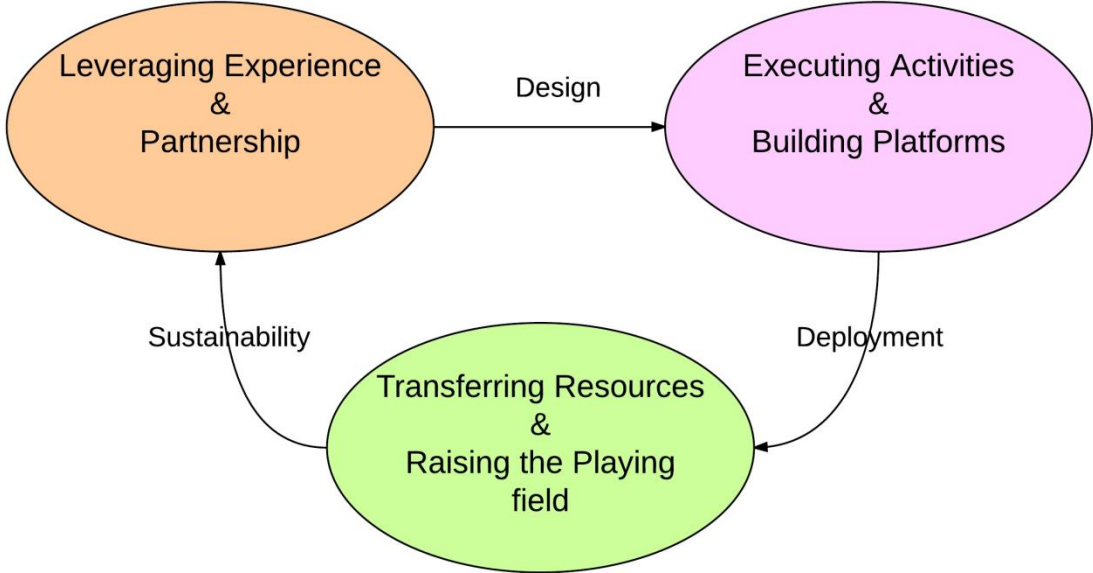
**Philanthropic Business Systems:**

In this section we explain the three stages (i.e. Design, deployment and sustainability stages) that the PI follows to develop their business system as shown in Figure 1 below.

*Design stage.* This stage leverages the initial experience and builds partnerships via two steps. First, the donor decides to invest resources in a targeted industry (such as agriculture, handicrafts, fast moving consumer goods microfinance or mobile telecommunication) or Subsector (such as dairy, livestock breeding or micro-lending) and call organizations for bids (London & Anupindi, 2011).

In doing so, the donor issues “Request for Proposal” and “Requests for Assistance”. Each state the general objectives (including performance indicators) required to improve the competitiveness of the chosen sector.

FIGURE1  
Philanthropic Business Systems



Source: the author’s literature review

The USAID-Zambia, for instance, sponsored the Production, Finance, and Technology (PROFIT) project to help unbanked farmers collect payment from cotton ginneries and food processors via mobile banking agents like airtime dealers, gas stations, or grocery retailers. Further, it enables them to pay for supplies (e.g. Veterinaries and fertilizers' providers) against purchases of inputs (Ducker & Payne, 2010).

At the design stage, USAID-Zambia identified the country-level needs as wider access to the poor markets, enhanced value added and production technologies, increased financial and business development services, improved enabling environment for growth and infrastructure for electronic payment platforms. Then USAID/ Zambia requested proposals from third party or implementing partner to address these issues. The selection metrics include the implementing partner's ability to increase the customer outreach, increasing value of per unit production of harvested lands, and increasing number of female workers in producer organizations (Snodgrass & Woller, 2006, p. 6). Further, candidates had to identify the resources they dedicated to the project, their potential partners, and their action plans (including yearly activities, budgets, and expected outcomes). Above all, IPs had to have long experience and enough knowledge of the problems and challenges face the poor farmers. Potential partnership is an asset for the selected implementing partner who identifies the key organizations and individuals enlisted to execute the project and the business model to be implemented. For instance, the Cooperative League of the United States of America (CLUSA) has been selected as the implementing partner for the PROFIT project due to its five decades of experience in developing countries and extended worldwide network of partners.

**Deployment Stage.** Once the implementing partner is selected, they act according to the presented plan, including detailed metrics with measurable objectives. Because the PIs are usually short-term, there is no chance for trialling and learning from mistakes (Woolcock, 1999). So the implementing partner and its network of allies are responsible for educating, transferring knowledge, and help creating social capital among bottom line performers (Woolcock & Narayan, 2000). They are also responsible, in some cases, for providing technical and/or financial inputs.

One of the main sources of investment and support is private partners who, with the help of the implementing partner, get access to local markets to a wide range of products/services (Arora & Romijn, 2012). However, such partners might mislead the implementing partner and misinterpret the poor needs either intentionally or unintentionally. In some cases, they might exercise monopoly, and even impose a new demand for unneeded products rather than removing the poor misery (Jaiswal, 2008; Karnani, 2007). This justifies why the PI usually includes multiple layers of private companies to prevent monopolies and to assure ethical trading.

Continuing the PROFIT project, the CLUSA enhanced the idea of a "service provider" through agriculture retailers and cotton industry and also strengthened the "buyer-supplier relationships" via a central payment platform. Apart of the technology side, the CLUSA found that farmers were often unaware of available resources. So, the CLUSA facilitated SMS-based marketing campaign via Celpay and Mobile Transactions Zambia Limited (MTZL) (Snodgrass & Woller, 2006). Thus, for instance, enabled suppliers such as veterinaries and fertilizers' providers to send promotions to cattle farmers. To build the payment platform, The CLUSA had negotiations with the Bank of Zambia to consider the

approval of branchless banking and money transfer services. Later, CLUSA partnered with MTZL and Celpay to complete the buyer-supplier circle and activate the electronic payment that save the farmers travelling costs want to buy their agricultural inputs.

***Sustainability stage.*** At this stage donors and their implementing partner transfer all the required resources and experience to the targeted sector in the poor market, aiming to increase their competitiveness (Lal & Myint, 1998). This requires operational effectiveness in each of its segments, coordination of transactions among actors across the value chain, and supportive business environment (Miller & Da Silva, 2007, p. 97). Participation of local producers proved to be also essential for supportive business environment in the poor market (Mayoux, 2003).

During the design stage, the PIs set the key performance indicators for monitoring project effectiveness and translate them into “*process-related metrics*” and “*outcome-related metrics*”. The process-related metrics assess how much intervention (including resources, efforts, knowledge and experience) required and the later tracks the result of this intervention.

The process-related metrics take different formats, according to the pre-set indicators. In agricultural projects, for instance, the process matrices include the number of farmers trained, number of training, exhibitions, and groups formed (London & Anupindi, 2011). Epstein & Crane (2007, p 22) developed a massive process-related metrics for micro-lending in Ghana which includes four sections:

- 1) *Leadership indicators* (e.g. Average years of experience of MFI senior executives and loan officers);
- 2) *Strategy indicators* such as amount of loan portfolio, loan size (average & range) and credit ratings of clients; *Structure indicators* like number of loan officers, % of decisions made by loan officers, and amount of group vs. individual loans; and
- 3) *System indicators* such as dollars invested in training (client & employee), number of clients per loan officer, % of income clients are required to save, frequency of payments and quality of IT and credit monitoring systems. Simultaneously, these assess the magnitude of the common platforms being developed. The outcome-related metrics must be consistent with the process-related metrics<sup>3</sup>.

The problem with both types of matrices is that they are internally developed and monitored. In order to cover this gap, leaders of PIs need to outsource this task to independent an auditing company to evaluate the results against the pre-set performance indicators. The reason for such practice is to help donors fairly assess the project’s success (Copestake, 2003).

PROFIT project aimed to collect sector-specific market information and to train farmers via SMS. In doing so, CLUSA developed a process-related metric that reflects the number of services available on the system and the number of trainees using each service (London & Anupindi, 2011, p. 4). The outcome-related metrics based on better farmer knowledge of

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<sup>3</sup> There are comprehensive matrices that include both of the process-related metrics and outcome-related metrics such as Balanced Scorecard by Kaplan and Norton (1996), Global Reporting Initiative, Market Efficiency Audit by George (1996), Wealth of Nations Triangle Index by Sullivan (2002) and social reporting by CGAP and MIX (2012).



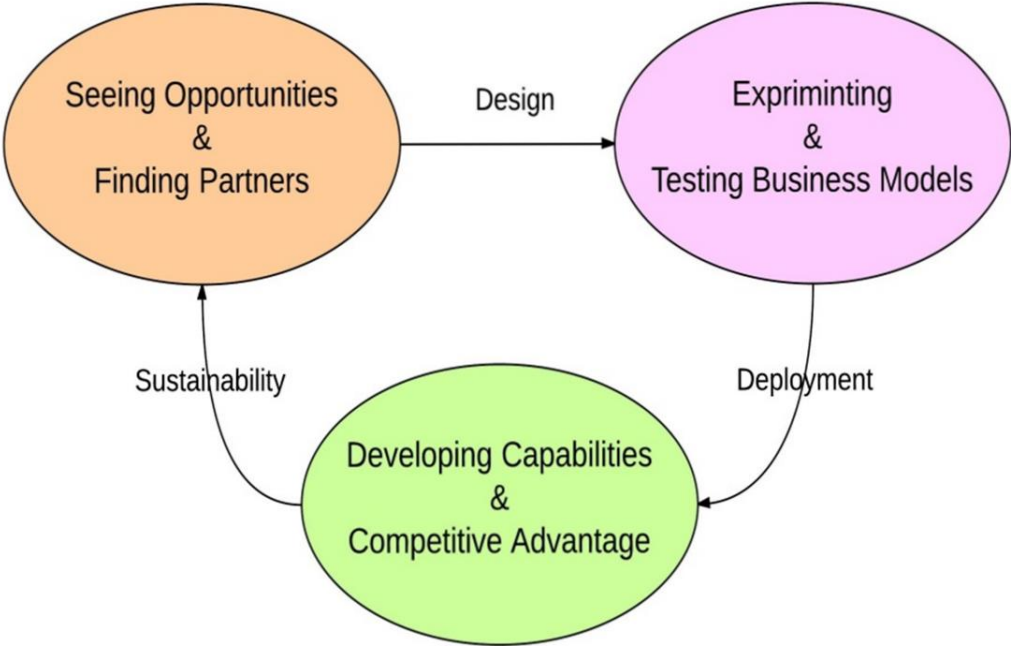
market opportunities and cultivation practices, and increased use of appropriate tillage service (London & Anupindi, 2011, p. 4).

Despite that fact that, PROFIT project aimed at “*scaling-up*” with an extensive network of qualified agents, only 46% of the clients became active and the average sales of agricultural inputs and other related products is 15% less than the expected average (USAID<sub>a</sub>, 2010). This reflects the service lagging and limited demand. In addition, some suppliers such as “Cropservice Zambia limited” who joined CLUSA’s network to provide farmers with chemical inputs failed to expand their agents’ network into important areas such as Mkushi (Sebstad & Krivoshlykova, 2009). This example shows how it was challenging for some partners to scale up and keep the extended supply chain. It also emphasizes that fixing such a problem in Cropservice requires more investment in the ICT, technology infrastructure and the whole components of the value chain (London & Anupindi, 2011, p. 6).

### Commercial Business System

In this section we explain how private institutions develop a commercial business system through three stages of design, deployment, and sustainability as shown in the below Figure 2.

FIGURE 2  
Commercial Business System



Source: the author’s literature review

**Design Stage.** At this stage, private enterprises exercise the role of the implementing partner to explore new market opportunities and seek socially oriented partners that help develop innovative solutions to the poor's critical problems (Yunus, 2004). The CI usually aims to develop nontraditional value chains to create competitive advantages and achieve long-term economic benefits (Porter & Kramer, 2006). These new chains usually require additional investments that are not risk free. For instance, the risks of getting involved in community conflicts where some elites try to control the settings within which other disenfranchised groups act and interact (Arora & Romijn, 2012). Other risks arise from lack of awareness of regulatory rules and government interference in the market. These together make working with the poor, a new venture with uncertain economic benefits (Wilson & Wilson, 2006). To overcome such risks, CI needs support from various non-traditional partners like Multinational Corporations (MNCs), non-profit NGOs, or government.

The challenge is, however, how enterprises work with the poor and these non-traditional partners if they lack partnering skills. In 2000, Grameen DANONE Food Limited (GDFL), a 50-50 joint venture between the Grameen Bank Group and the French Group DANONE, was founded to bring daily healthy nutrition to low income people in Bangladesh. Over the last three decades, DANONE has elaborated many humanitarian initiatives with social missions. DANONE perceived a business prospect in employing local ladies, but they have low level on indigenous knowledge and expertise to craft a suitable strategy. Trying to fill this gap, Grameen Bank offered support to DANONE working directly with Grameen ladies. By agreement, Grameen Bank grants, micro-loans to farmers to raise the cows needed to produce the milk locally. Then local carriers transport this milk to small factory to be sterilized before being distributed door-to-door by Grameen ladies.

Nontraditional partners such as the NGOs and the local communities are often skeptical in working with for-profit enterprises, and therefore put more emphasis on a consensus of the general mission as a condition to their collaboration. So the private enterprises spend long time attracting them.

**Deployment stage.** During this stage, enterprises conduct radical experimentations to their business models and monitor the outcomes to revise inputs (McLaughlin & Jordan, 1999). "A series of small experiments minimizes risk and maximizes learning, [this is] not intuitive, but involves the ability (and intention) to make changes if the first chosen path turns out unsuccessful" (Yunus et al., 2010, p. 8). Enterprises who pilot their business model to gain wider understanding and polish their skills at the lowest cost. Once the pilot shows sufficient economic return, the CIs are able to scale-up their investments. Solution design and deployment have to be conducted iteratively until a robust business model is found or the initiative is abandoned.

Safaricom in Kenya launched its M-Pesa money transfers dealing with retailers who merely sell airtime minutes. Retailers lacked the minimum degree of education and management skills. In turn, they failed to use technology and to appropriately record real-time transactions. So, Safaricom partnered with the "Top Image", training specialists, to training their 17,000 extension officers and lead retailers. Once the pilot succeeded, M-Pesa extended it to other banking services (e.g. Micro-savings and micro-insurance) using their extensive retail outlets.

Grameen Bank's founder, Mohammad Yunus, spent a long time with the villagers together as a community: in the rice fields, in farming projects, in afternoon conversations at roadside tea

stalls, and in late-evening dinners and debates. By working together and learning from one another, Yunus's and the villagers' unique knowledge, insights and perspectives came into creative collision, sowing the seeds for a profitable and scalable village banking model that neither could have conceived of independently (Simanis & Hart, 2009). The huge economic potential encouraged the bank to replicate this pilot in different geographical areas which increased the outreach to seven million women borrowers across some 75,000 villages of Bangladesh, with annual loan disbursement exceeding 800 million dollars.

In contrast to the philanthropic business system, the commercial one emphasizes testing new business models. Since they are directly engaged in the value chain, they need to create skills and capabilities to bridge the gaps identified. Given the inherent risk in working in an unfamiliar context, it treads cautiously, using pilots to learn and test the initial design. An enterprise may choose to work with other partners (private, government, or donor); however, the nature, viability, and usefulness of such partnerships are also tested during the piloting process. In the CIs, corporations work as a network maestro who builds dynamic capabilities, innovates business model, and capture a portion of the playing field, rather than maintain control over partners to achieve their own interests.

***Sustainability stage.*** During this stage, the private businesses evaluate the feasibility of creating a competitive advantage in the existing markets and develop the essential dynamic capabilities for scaling-up. Private business creates dynamic capabilities by integrating new resources from the community and non-traditional partners, by transforming resources to their staff, and by acquiring new technology to deliver a unique value to the community and micro-entrepreneurs (Tashman & Marano, 2010). London (2011) explains three approaches for scaling and sustainability; the first is "*scaling-up*" in which enterprise co-generate competitive advantage with an expanding set of partnerships; the second is "*scaling-deep*" in which the enterprise offers new products and services for the same customers in an existing geographical market; the final is "*scaling-wide*" in which the enterprise try to create new value proposition within the same set of products or services to satisfy new customers in new market.

In the Philippines, "Globe Telecom" partnered with "Smart Communications" to leverage the ICT network that enabled them to create a source of competitive advantage and to scale-up. Globe Telecom offers a service that allows customers to send and receive money via a mobile phone. The service is called G-Cash and facilitates money remittance and many other transactions with just a text message or SMS. Through this innovation, the cost of money transfers decreased substantially and access to transfer services for remittances extended to geographically remote areas (Mendoza & Vick, 2010). On the other hand, Smart Communications introduced an over-the-air payment system for mobile phones, which has many advantages compared to traditional payment systems. It allows a retailer to load a customer's airtime electronically and therefore helps minimize physical product distribution costs. Another advantage is that product distribution becomes faster, more efficient and more secure and enables consumers to reload and purchase airtime even in remote rural areas (Mendoza & Vick, 2010).

Concluding the above discussion, during the design stage the commercial business aims at leverage new market opportunities. Then deployment proceeds cautiously, using pilots to assess the solution design. A successful pilot demonstrates the viability of the business opportunity, helps the enterprise develop skills and capabilities, and generates a competitive

advantage. A deliberate process of business development helps ensure the sustainability of the initiative in its existing market. It also creates an opportunity to gain more capabilities and essential for scaling. As business environments are dynamic, sustainability is at risk.

## **THEORETICAL FRAMEWORK: BASE OF THE PYRAMID BUSINESS SYSTEM**

The Base of the Pyramid (BoP) is a market approach that sheds the light on how cross-sector collaboration and governance could occur to bank the unbanked and alleviate their poverty (Prahalad & Hammond, 2002). In this section, we examine how our system thinking theorization will offer a new insight for the BoP strategy and brave the road for mixing the advantages of the PI and CI business systems.

Advancing the BoP strategy created a crossroad for business strategy and poverty alleviation (Prahalad & Hart, 2002; Prahalad, 2007). The BoP represents four billion people live on less than \$3,000 per capita purchasing power and primarily run their microenterprises in the informal economy (Hammond et al., 2007). The BoP literature provides a convincing argument for bankers to view the unbanked as a missed market opportunity full of consumers, producers, and entrepreneurs (Akula, 2008). It also offers a vision of how microentrepreneurs develop viable business systems through the right mix of mindsets, resources, supply chains and collaborations (London & Hart, 2004; Seelos & Mair, 2007). Other generations of the BoP strategy have been developed such as BoP2.0, 3.0 & 4.0.

The second generation, BoP 2.0, offers a cross-collaboration system where multinational corporations and the local community co-create a fortune than to find a fortune at untapped market segment. This close intimacy helps both parties to co-invent new value propositions and deliver a win-win situation (Simanis & Hart, 2009). The recent political and economic reforms (e.g. Arab Spring) showed a decreasing role of nations-states in the economic and social wellbeing, including poverty alleviation (Al Gore, 2013). Karnani (2009) questioned the role of the governments in creating efficient market conditions that protect the poor from unethical marketing practices. The central bank of Kenya and the minister of finance facilitated the expansion of M-Pesa beyond the strict banking regulations in the country and issued customised security and privacy rules (Hayes & Westrup, 2011). The government interference helps collecting more information about the community's physical and social needs and also motivates building relevant consumer protection agencies (Uppal & Malik, 2009). In response, a third wave, or BoP3.0 started to enhance the trilogy between the multinational corporations, community, and the state (Arora & Romijn, 2009 & 2012; London & Hart, 2011).

The BoP4.0, however, emphasises on the interplay of the NGOs (Including the international aid organizations) in the public-private partnership in which private enterprises (local and multi-national), and the local community work together toward reaching social objectives by product of achieving economic returns (Prahalad, 2009; Simanis & Hart, 2008). These intermediaries interpret the points of view of MNCs, the state, and community and catalyse the deployment of new business systems (Arora & Romijn, 2009 & 2012). This recent version of the BoP, helps performing what is "right" for the stakeholders, co-creates and pilots business models in deep dialogue with the poor (London & Anupindi, 2012). In turn, a socially embedded competitive advantage gets created and a mutual value creation can be

(London, 2009). The BoP4.0 calls for public-private partnership, where the public offers top-down philanthropic business system and the private develop a bottom-up commerce business system. In Figure 3 shown below, we present a systemic comparison between both approaches in terms of inputs (floor) and outputs (ceiling).

FIGURE 3  
Philanthropic Business System Vs Commercial Business System

	Philanthropic Business System	Commercial Business System
<b>Floor</b>	<p><b>High Floor</b></p> <ul style="list-style-type: none"> <li>● Massive Budget for Investment.</li> <li>● Preset policies for financial inclusion.</li> <li>● To-do-list of activities and procedures.</li> <li>● Transferring existing resources to the targeted market.</li> </ul>	<p><b>Low Floor</b></p> <ul style="list-style-type: none"> <li>● Limited Budget for initial investment (London &amp; Anupindi, 2012).</li> <li>● Experimentation of new policies for financial inclusion.</li> <li>● Iterative learning cycle of activities and procedures.</li> <li>● Reduce the risk associated with resource transfer.</li> </ul>
<b>Ceiling</b>	<p><b>Low Ceiling</b></p> <ul style="list-style-type: none"> <li>● Short-term deployment and disbursement of investment (Newman, 2008).</li> <li>● Predefined termination date and procedures.</li> <li>● Wide outreach, but unsustainable impact (Hulme &amp; Arun, 2011).</li> <li>● Wasting the unused resources before the deadline.</li> </ul>	<p><b>High Ceiling</b></p> <ul style="list-style-type: none"> <li>● Escalating and growing investment (London &amp; Anupindi, 2012).</li> <li>● Termination date is tied to economic feasibility.</li> <li>● Indigenous business model and competitive advantage.</li> <li>● Transferring the unused resource and switch to another feasible investment.</li> </ul>

Summarized from the literature review

The philanthropic business system, in one hand, has a solid floor. Donors and/or governments replicate the design of previous financial inclusion projects. They invest a certain amount of resources following preset policies adopted from the best practices in these projects. Its ceiling is usually well established in terms of time, investment amount, and evaluation metrics. The predefined list of resources gets transferred within that time frame to achieve well-known performance measures. However, the sustainability of such a system remains less certain because it aims for wider impact, but in a short period of time. It might also tie the microenterprenures into a closed loop of poverty when s/he relies on aids to run a business (Hulme & Arun, 2011).

The commercial business system, on the other hand, starts with careful steps and minimum risk. In doing so, private businesses invest less money and take small-scale experiments. Despite their lower floor, this system relies on continuous testing of co-created indigenous business models that result in higher ceiling. In many cases, the enterprise’s design doom to fail and its pilots may be deemed unworthy of further investment. However, a substantial long-term impact is usually assured once feasibility is managed and resources are dedicated. Private enterprises usually set a strategic plan for the way they experiment, design and deploy

their business model including sustainability and scalability measures. If the design and piloting go well, then an enduring and widespread impact can result.

The rest of the paper offers a case evidence of how BoP cross-sector collaboration creates an inclusive embedded business system, including new distribution channels, value propositions, and scaling strategies in the poor market. Such collaboration offers a hybrid of both philanthropic and commercial business system and grasps their advantages as shown in the figure above. It also helps overcoming the profitability, infrastructure, and regulation challenges discussed in the first section.

## **RESEARCH APPROACH:**

This research follows an interpretative approach and a case study design of the e-Masary mobile money initiative in which cross-sector collaboration is an organizational goal to improve the financial inclusion as a societal goal. Understanding these objectives requires perceiving human sense and action in context (Avison & Malaurent, 2014). We realize both issues as two pillars of a socially constructed phenomenon and accordingly we based our evidence on the shared meanings, language, documents and reality of its stakeholders (Klein & Myers, 1999), and we applied the grounded theory (Glaser, 1978; Urquhart et al., 2010) to construct key concepts from this reality.

Our understanding of “social construction” reflects “Socially mediated Idealism” where the social world is recreated by the actors with every event, and reality is the accomplishment individual sense-making (Ryan et al., 2002). We are concerned with the procedures through which the individual actors make sense of “what is going on”.

E-Masary is one of the biggest such projects ever attempted – 9 cities and more than 18 million potential users (1.5 million already reached) – the issues related to such a networked project are likely to be relevant to the donors and private enterprise networks at macro, micro, and meso levels. Given its size, scope, complexity, and diversity, the e-Masary initiative is a symbolic exhibition of the issues related to both of cross-sector collaboration and embedded models of financial inclusion and it helps interpret the evolution of their meanings as has been negotiated by the relevant stakeholders. The data collection methods were archival research, semi-structured interviews, focus groups, and electronic samples of Masary’s electronic wallet. Table 1, shown below, explains the key sources of data, sampling, and period during which data been collected.

The total textual materials count to 61,478 words inserted in NVivo 8<sup>4</sup> (Gibbs, 2002). The final data used for the open coding process consisted of a total of 1654 paragraphs of text. The grounded theory approach has been followed to analyse the transcribed data (Glaser, 1978; Charmaz, 2003; Urquhart et al., 2010). The iterative coding was the basic tool to link the key themes and categories and to pinpoint the key institutions, individuals, and technologies that construct the cross-sector collaboration and financial inclusion. At the end, three key themes have been found significant “mobile-based balance metrics and align incentives”, “investment agility”, and “innovation and competitive advantage”. The following section discusses the case of e-Masary and draw examples in relation to the aforementioned themes.

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<sup>4</sup> NVivo is an electronic tool designed to analyze qualitative data.

TABLE 1  
Data Collection Methods

Collection Methods	Data Sources	Number and Period
Desk Research	<p>Two databases have been used to reach to the peer reviewed journal papers covering the core research issues</p> <p><b>1- Business Source Premier (BSP):</b> Financial Inclusion was of real importance, I launched a search with the following criteria:</p> <ul style="list-style-type: none"> <li>• <i>Find all my search terms: Topic "Financial Inclusion*"</i>.</li> <li>• <i>Limiters: Full text, References available and Scholarly (Peer Reviewed) Journals.</i></li> <li>• <i>Source Types: Academic Journals.</i></li> </ul>	<p>Total of 73 articles 4 out of which were deleted because they were either book reviews or editorials.</p> <p><b>Period:</b> 2001 to 2013</p>
	<p><b>2- Web of Science (WoS):</b></p> <ul style="list-style-type: none"> <li>• Search for "Financial Inclusion" and "Cross-sector Collaboration" in ALL Fields.</li> <li>• <b>Limit To:</b> Topics - Limit To Humanities &amp; Social Science</li> </ul>	<p>Total of 34 articles 2 out of which do not address the developing context</p> <p><b>Period:</b> 2001 to 2013</p>
Interviews	<ul style="list-style-type: none"> <li>• Semi-structured individual interviews (Donner &amp; Tellez, 2008; Morawczynski &amp; Miscione, 2008) conducted with top and middle level managers in the three mobile network operators (Vodafone, Mobinil, and Etisalat), Masary Corporation, the Social Fund for Development, and the Financial Supervisory Authority.</li> <li>• The interviews length ranges between 45-90 minutes fully recorded with a signed consent of the respondents.</li> </ul>	<p>37 Interviewees</p> <p><b>Period:</b> March-May 2011</p>
Focus Groups	<ul style="list-style-type: none"> <li>• Focus groups conducted with various stakeholders involving a total of 348 individuals (Bloor et al., 2001; Wilkinson, 2004). The discussions were taped and fully transcribed.</li> <li>• Focus groups' length ranges between 45-90 minutes fully recorded with a signed consent of the respondents.</li> </ul>	<p>39 (48 MFIs top management and officers &amp; 300 mobile money users)</p> <p><b>Period:</b> August-Oct 2011</p>
Electronic samples	<ul style="list-style-type: none"> <li>• Electronic samples (provided by the CCO) from e-Masary mobile and internet based systems reflecting issues of available services, data flow, performance indicators and online loan tracking system.</li> </ul>	<p>41 snapshots</p> <p><b>Period:</b> Sep 2010- Sep 2012</p>

## E-MASARY CASE STUDY

“E” stands for electronic and the word “Masary” stands for money in Arabic language. It is a payment service launched by Applications and Payment Systems Development Corporation (APSD) in 2007. Later the name APSD has been changed to Masary.Co in 2009. Its key product is the mobile wallet, which allows clients to buy credits from general stores and use those to transfer money, buy products and services, or pay bills.

In the cash-based economy of Egypt, only 10 percent of 84 million Egyptians have a bank account (EFSA, 2011). Masary’s main objective is to improve the financial inclusion of those unbanked Egyptians tapping on the 118% penetration of mobile technology (Ministry of information communication and technology, 2014). In the following section we explain the different services and products provided for e-Mary clients who hold Masary’s SIM card.

The first service is “*mobile airtime top-up*” in which Masary’s customers can visit one of Masary’s 2965 outlets to charge their e-wallets and top-up their mobile credit for any of the mobile networks (Vodafone, Mobinil, and Etisalat) operating in Egypt. The second service is “*real-time payment service*” in which Masary’s customers can top-up their e-Wallet to pay their bills (e.g. Travel tickets, groceries and utilities) and online Games. Moreover, it enables customers to charge other electronic payment mediums such as “One Card” and “Cash U”<sup>5</sup>. In addition, customers can use their e-wallet to pay for entertainment websites like [www.Shofha.com](http://www.Shofha.com) and [www.Mazika.com](http://www.Mazika.com). The third service is “*mobile microfinance services*” that enables MFIs to mobilize their data entry and reporting at low operating cost. It also enables active borrowers to upload their loans into e-Masary wallet for three uses:

- 1) Resell airtime and electronic payment services to the rural communities with mark-up in order to achieve a profit margin and secure a stable source of income.
- 2) Direct purchase of production inputs or payment for bills.
- 3) Transfer credit to other family members or business partners to do (a) or (b).
- 4) I-Score service in which e-Masary enables their partner MFIs to trace the credit history of existing and potential borrowers.

The fourth service is the money transfer service that Masary.Co offers to subscribers of Vodafone, Mobinil, and Etisalat. Through Vodafone the service is called “Vodafone Cash”, through mobinil is called “mobicash”, and through Etisalat it is called “Etisalat Floos”. The word “Floos” is another synonym of Masary or money in Arabic. This service operates that same as the mobile microfinance loan tracking services, but open for all mobile users than just microfinance customers. This service is controlled by the Central Bank of Egypt and the Egyptian Financial Regulatory Authority (EFSA) who approved a full regulatory framework identifies the maximum and minimum daily transfers, currency, and security controls.

## Philanthropic Business System in e-MSARY

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<sup>5</sup> “One card” is a magnetic striped card for e-shopping and internet payment ([www.onecard.net](http://www.onecard.net)). “Cash U” is also a prepaid internet payment card (<http://www.cashu-egypt.com>).



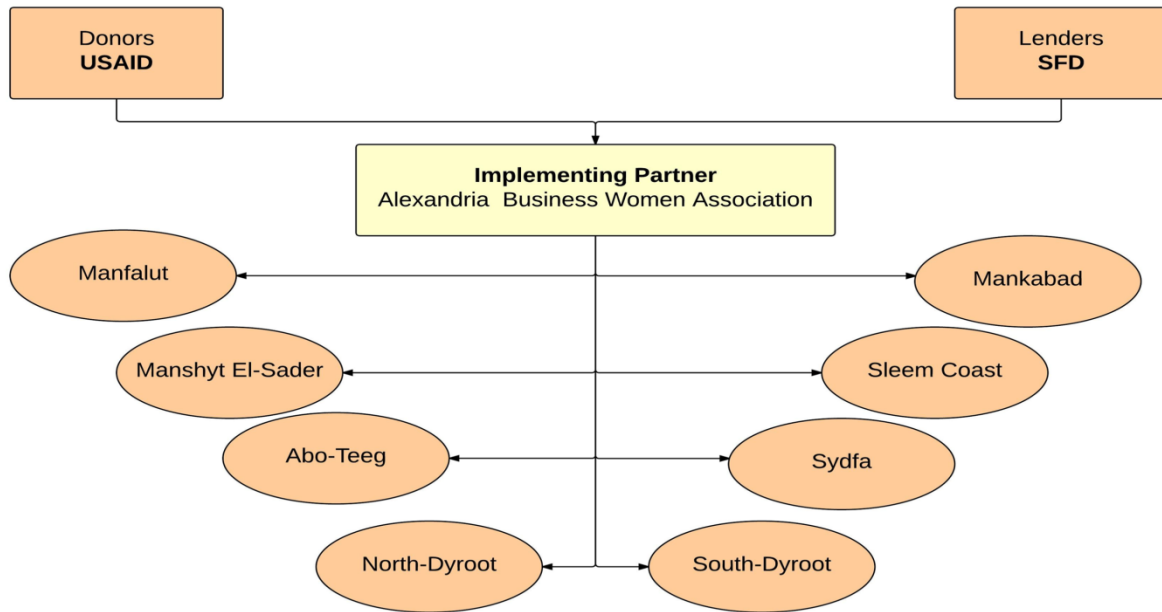
In this section we explain the main actors of the philanthropic network and exemplify one of its successful initiatives, the Poorest of the Poor Entrepreneurs program (PPE), prior the beginning of e-Masary initiative (See Figure 4 that summarises the key actors involved in the PPE). The last three decades witnessed numerous financial inclusion programs funded through a big list of donors that includes, but not limited to: the United States Aid (USAID), the Canadian International Development Agency, UNICEF, Ford Foundation, United Nations Development Programme, the Egyptian Swiss Development Fund, Save the Children, German Agency for Technical Cooperation, Italian Fund of Egypt, and the European Commission MEDA program (PlaNet Finance, 2008). The USAID and the Social Fund for Development are the biggest sponsors for the Non-Governmental Microfinance Institutions (NGO-MFIs) in Egypt with a 1.2 billion L.E loan portfolio (PlaNet Finance, 2008).

*USAID Egypt* finances almost 70% of the MFIs in Egypt. The USAID partners with MFIs who have distinguished records of microcredit services. Since 1989, USAID projects served 10 million Egyptian microenterprises. USAID follows two schemes for microenterprise finance: the *banking scheme* and the *foundation scheme*.

The banking model is implemented through the national bank for development and Banque du Caire to finance rural and urban microenterprises (EFSA, 2011). USAID's largest project in the country, the Agricultural Production and Credit Project has been facilitated through a partnership with the principal bank for development and agricultural credit. To date 775,000 loans worth over 2 billion EGP have been extended to 305,000 microentrepreneurs with less than a 2% default rate. It is estimated that 240,000 job opportunities were created as a result of this program (USAID, 2012).

The foundation model was designed to establish private, non-profit, community-based organizations to act as microenterprises financial intermediaries (EFSA<sub>a</sub>, 2010). Via these foundations the USAID introduced a variety of financial inclusion programs.

FIGURE 4  
Key actors in e-Masary's philanthropic business system



Source: the author's field visits

The USAID's projects under this scheme serve 20 out of 26 cities, including Cairo and Alexandria (USAID, 2012). 98% out of these foundations are Non-Governmental Microfinance Institutions (NGO-MFIs) that operate on a “*self-sufficiency*” basis to cover their costs and extend their outreach to other geographical areas and disenfranchised classes.

The PPE program proved to be the most successful micro-lending program delivering group lending, particularly, for women (EFSA<sub>b</sub>, 2010). The PPE provided a maximum loan size of 6000 L.E per borrower within a group of five. So far the outstanding loan portfolio comprised 72,045 women.

In 2005, the USAID in Egypt called for proposals from interested NGO-MFIs who have the capacity and wide network of alliances with the local businesses and other NGOs in Egypt to join the PPE program. Alexandria Businessmen Association, REDEC, and Assuit Business women Association (ABWA) were the finalists chosen to implement the project for the period between 2005- 2008<sup>6</sup> (SANABEL, 2010).

***The Social Fund for Development (SFD)***, a quasi-governmental entity, was founded in 1991 to mitigate the negative impact of structural adjustment policies and to serve as a safety net (Microfinance Gateway, 2005). Today, SFD continues to help alleviate poverty and combat unemployment.

<sup>6</sup> USAID operates on the basis of grants of the US government, which enables it to directly contract with NGOs without the requirement of a sovereign guarantee. USAID executes its microfinance programs by extending of refinance facilities and technical assistance both at zero costs. The refinance facility is usually placed as a USD guarantee deposit at a local bank and used as collateral for a commercial EGP line of credit to the NGO.

In this capacity, they manage the microfinance Sector, and “acts as an APEX<sup>7</sup> organization that supports the creation and/or development of successful MFIs in cooperation with many of the aforementioned international donor agencies (mostly the USAID)” [explained by the SFD microfinance director in April 2011]. In addition to this role, the SFD, under Law 141 of the year 2004, is mandated to coordinate the SMEs’ sector in Egypt (Microfinance Gateway, 2005).

The SFD offers their partner NGO-MFIs a mixture of grants for building capacity and loans for microenterprises finance. Credit is given to either a start-up microenterprises at an interest rate of 7% or to existing microenterprises at a rate of 9 %. NGO-MFIs are allowed an interest spread of just 1 % to cover both risk and operating costs, which does not allow for cost recovery let alone to allow for growth (SANABEL, 2010).

As an exception to this rule, “the NGO-MFIs operating under the PPE program of UNDP are not bounded by the interest cap and in addition receive professional technical assistance for microfinance best practice” [explained by the SFD microfinance director in April 2011<sup>8</sup>].

SFD and its retail lending structure face the typical sustainability risk of all SFD’s worldwide due to high dependency on external funding (USAID<sub>b</sub>, 2010). Although continuous access to APEX finance may be a double-edged sword in motivating improved MFI financial performance, practitioners seem to agree that the absence of follow-up financing severely weakens an APEX’s ability to promote capacity building at the retail level. In this case, highly subsidized funding is being provided to NGO-MFIs on a first-come, first served basis, and borrowers will receive second loans only after all those applying for first loans are served.

In 2006, the SFD joined the PPE program as a sponsor for the MFIs nominated by the USAID in 2005. By the end of September 2007, the ABWA received 30,086,000 L.E loans and 2,000,000 L.E grants (for operation and fixed costs) to refinance existing microenterprises in Assuit city and its hamlets (ABWA, 2011).

The PPE proposal sets social indicators such as percent of rural members, number of active borrowers, the number of training hours for loan groups, group attendance for monthly meetings, percent income increase for borrowers and No of loan renewals. Financial indicators are average annual loans outstanding, adjusted overdue rate, adjusted profits, subsidy dependence index (The PPE final assessment report, 2008). Nominated NGO-MFIs had to report the aforementioned indicators using periodical financial statements. In addition, they had to report their periodical “due diligence” or “snappy visits” to monitor the performance of micro-entrepreneurs.

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<sup>7</sup> APEX finance is a wholesale finance to MFIs and other financial intermediaries both commercial and non-profit.

<sup>8</sup> The SFD microfinance director and USAID’s former deputy manager have been helpful to get detailed data about the performance of the PPE project applied by ABWA.

In December 2006, the SFD initiated a project for a computerised loan tracking to be adopted by partner NGO-MFIs and to maintain standard high quality reporting. The project was funded by the USAID and the final product<sup>9</sup> was available for sale in early Feb 2007.

*ABWA* started in 2000 as an NGO-MFI founded by a group of businesswomen to serve the poorest microentrepreneurs in Assuit city under the patronage of the Ministry of Social Solidarity and according article 524 of law 141 year 2004. The association is run by an elected board of directors, which represents a mix of microfinance professionals. By the end of 2010 could finance 200,000 microenterprise with 362,129, 700 L.E. *ABWA* implemented nine microfinance projects than the PPE. *ABWA* is “*Not-for-distributing-profit organization*” rather than “*Not-for-profit organization*”, *because they achieve financial surplus (but do not distribute profit and keep it to extend their social quest*” [SFD director in March 2011].

Under the PPE program, *ABWA* (the implementing partner), applied ready-made lending methodologies already pre-designed by the USAID. To win the auction, *ABWA* set a long term plan to provide group lending and develop different methodologies for peer selection, peer monitoring, dynamic incentives, regular repayment schedules and collateral substitutes. These mechanisms are supposed to help *ABWA*, to reach the preset social and financial indicators of the PPE program. Moreover, *ABWA* had to provide a list of potential local partners expected to join the PPE program. The list included commercial banks, consultancy and training companies, and independent auditing companies.

*“Our biggest partners are Alexandria Bank, Sawiris Foundation for Social Development, Construction Germany Bank, Catholic Relief Service and UNICEF who provide us with technical as well as financial support”* [*ABWA*’s deputy manager in August 2011].

For example, *“every February the Catholic Relief Service used to send us a group of financial specialist to train our loan groups on how to self-manage their microenterprises and maintain a good communication between the group members as well as with our loan officers”* [*ABWA*’s HR manager in August 2011].

To form a loan group, 5-10 members voluntarily get-together and choose their group leader. Members have to be rural poor woman and have existing microenterprise each. Moreover, they have to be in between 18 to 60 years old, have a good credit history. And most importantly, each member has to submit an appropriate visibility study<sup>10</sup> of her project. In addition, they have to bring their national IDs and sign a contract of joint responsibility against group loans. By this contract, all group members have to attend a monthly meeting.

Once all of these conditions are fulfilled, the assigned loan officers issue a loan request and send it to the credit committee for approval and eligibility assessment. Within 15 days, the committee issues a bank letter to enable the group members receive their loan. After the committee’s approval, groups receive their “log book” that includes the unit code, repayment dates and the group’s internal bylaw.

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<sup>9</sup> To install this computerized information system, NGO-MFIs spend 12,000 L.E set-up cost and 1,500 maintenance cost.

<sup>10</sup> The study should not only include the business idea and required budget, but also clarify why each member can afford sustaining his existing project. Reasons are usually social (e.g. Having a big number of dependents, partner’s death).

All of these procedures have been set by the USAID and the SFD as standard cycle that should be followed for loan approval under the PPE program.

Ghatak (1999) argues that peer selection can be instrumental in improving repayment rates, allowing for lower interest rates, and raising social welfare. His insight is that a group lending contract provides a way to price discriminate that is impossible with an individual lending contract. The following examples point to the presumed heterogeneity within the borrowers (Arora & Romijn, 2012), which is not true on the ground.

The SFD's director also agrees that *"this peer selection assures that some members invest in safe business whilst other invests in risky ones. In case of success, risky business achieves higher returns than the safe ones and in case of failure some group member will be able to pay the due amount."*

The ABWA deputy manager confirmed and said; *"peer selection results into classified groups who usually invest in similar microenterprises and have the same cultural characteristics. We simply consider each group as one"*.

In contrast, a borrower of ABWA said that; *"The problem is that each one of us is investing in his own microenterprise and in some case we could not gain enough money to pay our instalments; We parley know each other and we do not do business together to jointly guarantee each other; We are just neighbours"* [Focus group conducted in September 2011].

The PPE loan period ranges between 12-18 months. Borrowers pay 18%<sup>11</sup> interest rate, 2% in advance and the rest gets scheduled into monthly instalments. They usually begin with 1000 L.E each and then the loan size increases upon satisfactory repayment. Every month, groups have to attend in the branch to which they are affiliated to update their loan officer and pay their due amount. Then the payment is processed through the documentation cycle. This cycle shows how the accountants and others (e.g. Staff of the Management Information System department) process all payment data into manual as well as electronic record and report them periodically to the loan officers and top management. Two days is the grace period for arrears and if the group failed to repay the two consecutive instalments, their assigned loan officer reports this to the treasurer and cut off any future lending. These different mechanisms followed by the AWBA anticipate a stream of increasingly larger loans or what is called progressive lending (Hulme & Mosley, 1996). One of the loan offices explained the following during one of the focus groups:

*"There is a high mobility rate among women micro-entrepreneurs in Assuit and in turn we found a difficulty catching the defaulters who move across town trading their goats or handcrafts in some other cases. They simply come and go, and then they start borrowing again with a clean slate at a different branch or program"*.

ABWA's deputy manager emphasised that group bylaws and commitment to attend monthly group meetings are really important to avoid the information asymmetry and trace defaulters.

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<sup>11</sup> ABWA pays only 9% interest rate for the SFD and earn 9% to cover the administration fees in addition to mark up.

At the beginning of the PPE program, ABWA circulated a call for participation and vacancies to work in their existing staff. *“Most of the loan officers and treasurers were anxious to join the new program. One year after we called for branch manager and loan officer team manager, but no one accepted to apply for the job”* [Said by AWBA’s HR manager in October 2011]. In the other side, loan officers justified this by *“the expected salary increase is far less than the spending for daily field visits, including travel and communication costs; our salary is poorly enough to and we could not risk taking more responsibilities”*. This example shows that the staff incentives should match the expected task, which is difficult under standardised program with preset job descriptions and fixed incentives.

In September 2008, the mutual agreement between the USAID, the SFD and their partner NGO-MFIs terminated and the PPE reached to its end with so far 72,045 micro-entrepreneurs. 71% of the borrowers had commercial microenterprises that sell FMCGs, while the rest had services and agricultural businesses. This 29% started with commercial projects and when proved successful they ask the MFIs for bigger size loans to build other microenterprises (including financial leasing and mortgage finance).

Our interviewees think that conflicting policies between the USAID and the SFD that have led to an inconsistent approach to the development of the PPE program and have raised concerns regarding the sustainability of these efforts. Moreover, *“ABWA failed to maintain the financial sustainability in the PPE program”* [said by the deputy manager of ABWA in August 2011].

In December 2008, ABWA started its transformation to be a microfinance company (USAID, 2010). To gain two significant benefits in transforming: (a) the ability to provide a variety of microfinance services besides microcredit, and (b) the increased access to funding whether through debt or equity. Other reasons for transforming are related to escaping current constraints of the NGO Law, which gives the same treatment for all NGOs regardless of their types of operations and sets restrictions on governance and management matters. Moreover, it limits the NGOs' ability to best utilize advanced computerized management and financial systems. And overall, to waive the obligatory approval of the MSS before accepting any fund from private enterprise. The first step toward this transformation was to establish its own commercial projects and to acquire more equity via its partnership with private enterprise such as Masary.Co.

### **Commercial Business System in e- Masary:**

In this section we explain the main actors of the CI business system that built by Masary.Co at its early stages before launching e-Masary BoP initiative. We draw our discussion on example from Masary “mobile airtime transfer services” and *“real-time payment service”*. See e5 that summarises the CI key actors.

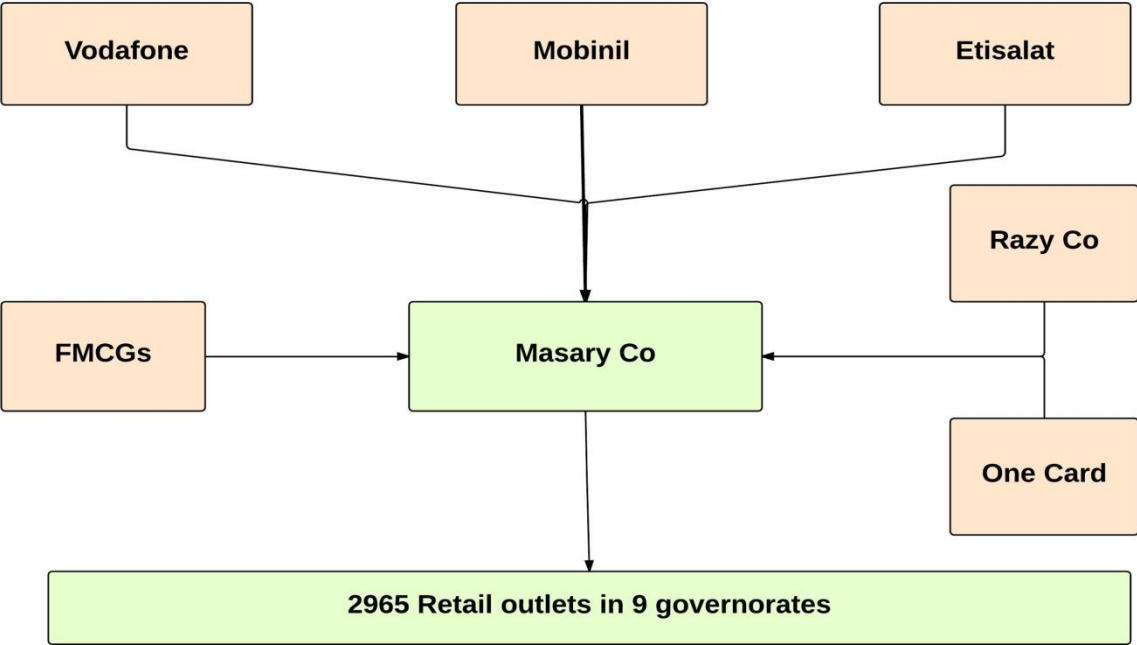
*Masary.Co* aimed to tap the gap of financial inclusion in the Egyptian market using mobile technology as a medium of exchange that carries monetary value. They simply merged banking and mobile markets to transform the way unbanked Egyptians transact and finance their microenterprises.

The low number of banked people motivated the company’s founders to seize the chance. Masary’s early pilots attributed this gap to the limited number of branches, mainstream reliance on cash, high transaction costs and lack of cost-effective banking solutions for the rural poor (Masary’s pilot, 2007). Accordingly, Masary Co saw their market opportunity in building contactless payment tools with affordable prices to different classes of people.

During the first two years of operation, the company built strong alliances with the three mobile telecoms (Vodafone, Mobinil and Etisalat) to assure reliable mobile infrastructure, extensive retail outlet/agent networks, and to make good margins on low Average Revenue per User (ARPU). A potential threat at that stage was that *“any of the mobile telecoms could launch a similar service and count on its huge capacity and reputation to beat Masary”* [said by Masary’s CEO in March 2011]. *“The challenge was to acquire all the three mobile brands under the umbrella of Masary’s airtime services to achieve the maximum utility of all telecoms”* [Said by Masary’s Operation manager in March 2011].

In parallel, Masary’s founders used their personal ties and business relationship to build other alliances with two big IT solution companies “One Card” and “Razy”. These companies helped Masary develop two information platforms. The first is a Web-based system ([www.e-masary.com](http://www.e-masary.com)), and the second is mobile-based system (SIM application Toolkit).

FIGURE 5  
Key actors in e-Masary Commercial Business System



Source: the author’s field visits

Both of these systems facilitated Masary’s airtime as well as electronic payment services. In contrast, Masary’s founder invested 2,000,000 L.E in One Card shares and 1,250,000 in Razy.

Since then, “We outsource all system upgrades and security firewall development to Razy” [said by Masary’s IT manager]. In addition, “One Card batches have been allocated to Masary’s agents to sell them” [said by Masary’s sales manager]. Following this, Masary started acquiring a network of retail agent reached to 2965 outlets by Dec 2011. Each agent (kiosks/ supermarkets/ airtime shops) has gotten Point of Sale (POS) devices costs 800 L.E. This machine enables Masary’s customers to use “One Card”, a magnetic striped card to withdraw and deposit virtual cash. During the first two months of operation Masary acquired 1000 agents. At that point, it was very expensive to provide all agents with POS device. Alternatively, agents were asked to use their own mobile phones to serve Masary’s customers. Once the agent is registered (using his national identification number and trading code), s/he gets Masary software downloaded to his mobile either in Masary headquarter or in the closest Masary agent. Agents who have smart phones receive SMS, including a link that automatically direct the user to software download and installation instructions. So, there was no specific handset required to install Masary’s menu. Masary’s menu is organized in both Arabic and English accompanied with voice commands to guide the illiterate users.

At that stage, Masary could not explore the real challenges that poor customers face and how they make their buying decision. Masary’s marketing manager exemplified this point by saying that “*customers were looking for the cheapest airtime offered by trusted brands; why they buy our airtime while telecoms’ inclusive agents (wholesalers) offer fewer prices*”. In response, Masary had to renegotiate their deals with all mobile telecoms to get cheaper offers than the exclusive agents.

Sooner, Masary’s management decided to scale wide and fill other market gaps. In 2010, Masary unleashed cross selling of products and services in between the MSPs (e.g. Coca Cola, Egypt Air, BNP PARIBAS and Egypt’s utilities) and with retailers. This facilitated different value propositions such as sending remittances home across the country and making electronic payments, branchless banking, and mobile microfinance services.

Both of airtime and real-time payment services had short-term financial objectives than social objectives. Examples of Masary’s performance indicators *are customer acquisition cost, working capital, agent acquisition costs, monthly revenue/customer, monthly revenue/ agent, customer daily cash in & out* (Copy of Masary’s Performance appraisal provided by the HR manager).

**Mobile telecoms:** Egypt witnessed a huge increase in the number of low-income subscribers from 1 million to approximately 20 million during the last five years, which makes it an attractive market for multinational telecoms (Egypt state information service, 2010). The latest estimates of the Egypt’s population 92.3 million that is the largest in the Middle East and North Africa (Ministry of information communication and technology, 2014). 84 million out them are mobile subscribers served by the mobile network operators Vodafone, Mobinil and Etisalat (Ministry of information communication and technology, 2014). The year 2013 witnessed 99.7 million subscribers and 118.19% penetration rate (Mohamad, 2011; Mohamad et al., , 2014).

Mobinil is an Egyptian multinational telecom founded in 1998. Since then, Mobinil has strived to maintain a growing market share. However, Vodafone joined the market in the same year and replicated the worldwide experience of Vodafone group in the Egyptian market. Mobinil still serves 45% of the mobile subscribers in Egypt and provide the highest



quality mobile telecommunication services to the upper and middle classes (NTRA, 2010). Vodafone’s core advantage is providing 3G, ADSL interned broadband services for upper income class. Because of that, Vodafone has the largest services revenue market share 62 % (American chamber in Egypt, 2011).

For a decade, poor users have been neglected as a target market for mobile telecoms in Egypt. Not until, Etisalat, a MNC based on UAE, poor customer have been recognized a latent market. Then the race started among the three telecoms to serve that market. Telecoms offer only prepaid services. Dealing with Masary.Co, receive assigned monthly quota (with 4% discount) from airtime and virtual money. Before lunching e-Masary wallet, Masary.Co used to pay in advance (prepaid) then they manage their own investment portfolio. Asking about the main motive for telecoms to joint Masary.Co; Vodafone marketing manager said “*Why not? Masary agents are everywhere and they have access to uncovered market segments*”. Further, Vodafone’s CFO said “*mobile payment and remittances are the only way to differentiate our brand and scale intro a completely new market*”

Telecoms use these quotas to control Masary’s price escalating that threat their exclusive agents. Telecoms also provide tangible and intangible support to Masary’s staff. For example, Etisalat provided all staff training programs, technical specialists and motorcycles to Masary’s distinguished agents. By the end of each year, Etisalat celebrate Masary’s agents and provide them tangible incentives.

Concluding this section, we argue that Masary.Co as an implementing partner uncovered new market opportunities and experimented inclusive embedded business models to improve the financial inclusion. In doing so, they conducted many partnerships with non-traditional partners (e.g. Mobile telecoms) who usually work outside the banking industry. Finally, Masary is still growing (20 million L.E/12% sales increases by the end of 2010) despite their small investment and endless market challenges (Egypt Finance, 14<sup>th</sup> October 2010).

**BOP PERSPECTIVE AND ESTABLISHING CROSS-SECTOR COLLABORATIONS IN E-MASARY**

Masary.Co launched its first microfinance initiative in partnership with eight MFIs (See table 2 below). They are located in eight different cities where financial inclusion recorded the lowest levels for microentrepreneurs. Through this partnership Masary.Co provide loans for the young micro-entrepreneurs, mobile loan tracking, and e-wallet services.

TABLE 2  
Partner NGO-MFIs in e-Masary initiative

Name of MFIs	Location	Key Sources of fund
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Mawada Organization for Community Development	Kafr El-Shiek	Self-fund & Donations from Masary Co
Dakahlya Businessmen's Association for Community Development	Dakahlya	Ford Foundation & The Egyptian Swiss Development Fund
EL-Basaysa Association	Sharkiya	SFD & The Canadian International Development Agency
REDEC Association	Beni-Suef	SFD & USAID
Assuit Business woman Association	Assuit	SFD& USAID
Sana Association	Sohag	SFD
Feda Association	Qena	SFD
Egyptian Family Development Foundation	Aswan	SFD

Source: the author's field visits

To deliver such services, the company integrated their PI and CI networks and their adhered business systems. This mutual collaboration between donors and their implementing partner on one side, and the private enterprise and its network on the other side mixes the commercial chain with the microfinance chain and links between micro-entrepreneurs and the financial system.

ABWA is the most successful NGO-MFI out of the aforementioned eight. Through this partnership, ABWA was able to take advantage of Masary's mobile payment service to track loan payments, disbursements and repayments in real-time and also expand its client base. In June 2011, the Central Bank of Egypt allowed mobile transfer up to EP 3000 (USD 505) per day via mobile phones (IFC, 2012). As a result of this approval, Masary's e-wallet service is likely to expand in many fields. The rest of our discussion draws examples from the interaction between the above mentioned networks.

### **Balance metrics and align incentives**

E-Masary BoP network creates mutual value for telecoms, SFD, ABWA, and microentrepreneurs. While Masary.Co and telecoms generate economic returns, they create social value for the micro-entrepreneurs and other local stakeholders. This win-win situation maintains the project's sustainability (Prahalad & Hammond, 2002).

In mobile airtime top-up for example, Masary.Co relies more on the performance of their sales representatives and retail agents to expand Masary's brand and increase the company's

sales. So the company develops monthly training programs for both reps and agents to get more sales and marketing skills. Then each of them had to achieve a minimum monthly target. However, Masary management did not realize that their sales reps focus their efforts to sell to one or two big wholesalers than to spend more time and money to get to the poor community in villages and hamlets. Despite that Masary service was intended to link the disenfranchised, in reality it links the more banked people.

To develop a BoP business system, a balanced scorecard is essential to capture relevant information about the economic returns and social impact. Capturing the financial indicators is a routine for private companies, but measuring the local social impact is a challenge. The actors of the PIs and the local community possess knowledge about the local effectiveness, efficiency impacts, and best practices of financial inclusion. This customer-level data represents a source of indigenous knowledge that complements the Anglo-Saxon financial matrices developed by the CI. During the pilot stage, the CIs use this data to create inclusive business models in a way that best meets microentrepreneurs' needs. For instance, Masary.Co allied with the SFD to set valid social indicators for mobile microfinance services, and transform them into a mobile-based questionnaire. In doing so, the customer receives an automatic phone call after conducting each transaction. *"This electronic questionnaire helps the partner NGO-MFIs to get a feedback loop about customers' social indicators such as the assets building capacity, the income increase, the education level, number of dependants and the essential production inputs for their microenterprises"* [Said by the AWBA's deputy manager in August 2011]. However, *"this represents extra training and development cost for Masary.Co to facilitate using the service by staff and customers. Masary.Co had to develop a voice command questionnaire that operates in the local Arabic dialect and also offer routine training programs for their sales operators, loan officers, and borrowers"*[Said by Masary's business development manager in April 2011]. New services have associated risks and failure chances. Nevertheless, Masary learn from these risks and failures to improve their experimented business models during the design and deployment stages.

Once appropriate metrics are developed, a track of lessons and best practices (for both of the financial and social domain) can be accessible for all parties using an authorised password for e-Masary grid. This grid is an "online Balanced Scorecard" that holds real-time data for all direct stakeholders. It has been developed by a team of IT specialist from Masary, ABWA and the SFD. The blueprint of this grid was drawn from "GIRAFE Scorecard"<sup>12</sup>. GIRAFE is an innovative and analytical methodology developed by PlaNet finance to assess the performance and institutional risks of financial inclusion projects. It addresses the project "Governance" including issues of decision making, planning, and HR management. "Information system design and bid data analytics" is the second elements of this methodology. This element covers the human computer interaction, data modelling, minimum system requirements, and programming languages. "Risk management" is the third element, which traces the documentation cycle, internal controls, and auditing reports. The fourth element, or "Activities", covers technical issues of the financial service management such as credit risk, portfolio risk, and credit coverage. The fifth element is "Funding and liquidity

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<sup>12</sup> There are other two commonly used performance scorecards for financial inclusion initiatives in Egypt: the first is the "Camel system" that was originally proposed to manage the performance of the American Federal Bank and then has been adopted by the microfinance regulators; and the second is the "PEARL system" that was developed in Uganda to measure the performance of women-focused microfinance programs.

ratios” that highlights the capital adequacy, liquidity and market risks. The final element concerns with the “Efficiency and profitability ratios”

By the end of the year 2009, the SFD director who is also a senior analyst in PlaNet finance mandated a team of PlaNet finance specialist to train Masary’s staff on how to follow the GIRAFFE system and feed it on the grid. Masary.Co also recruited 30 researchers from the ministry of social solidarity to fulfil the same purpose. The pilot succeeded and resulted in detailed socio-financial scorecard for e-Masary grid. Examples of its social indicators are an efficient use to I-Score and credit bureau, staff incentives, and staff communication. Other indicators are client-related such as prevention of over indebtedness, respectful treatment, No of complaints and privacy. Furthermore, there are governance and regulatory indicators like internal audit and quality of performance reporting. Developing a socially oriented metrics expands beyond technical and financial indicators (e.g. Infrastructure and budget). Rather, it should be tied to the local impacts that the private enterprises and their local partners are encouraged to deliver. The social indicators are usually long-run and concerns with the effectiveness of financing microentrepreneurs toward their wellbeing and poverty alleviation.

After developing this grid, the Central Bank of Egypt could find a potential for controllable and secure mobile money system. In turn, a detailed mobile money regulators framework has been issued in consistent with the socioeconomic indicators on GIRAFFE system (Central Bank of Egypt, 2011). This is a clear example of overcoming the regulatory barriers using the BoP business system.

The employees’ incentives should align with the overall performance measures. For instance, Masary’s operators, retail agents, and loan officers had to be designed in consistent with the performance measures set in the grid to improve their job satisfaction and quality of life (Mumford, 2006). Appropriate incentives include not only promotions, salary increase, or a higher commission, but also social incentives such as training, business advice, and job empowerment to conduct new transactions for new customers. Hughes & Lonie (2007) confirm that the mobile money agents carry more responsibility and credit risks than the normal airtime agents, while take less commission and restricted to work in the slum areas. To enhance these long-term social indicators, a bonus pool could be saved to reimburse (or reallocate) the compensations for those who contribute more towards the long-term socio-financial indicators. At the end of this section, we argue that the balanced performance metrics show how the BoP business system facilitates embedded business models. However, does it help escalating investments even when success is limited during the pilot stage? This is what we discuss in the next section.

### **Create Flexibility:**

Integrating the philanthropic and commercial business system requires building flexible partnership platforms. This BoP business system embraces the need for trial and error as the actors proceed throughout the design and deployment stages. It also requires inclusive work to escalate the dedicated investment and efforts to harvest fruition in the long-run. In our e-Masary case, for instance, the mobile network operators did not fully trust Masary’s capabilities to expand in the unbanked area and pay back the full amount of the airtime. Prepaid airtime is the standard way the telecoms use to sell their service and it was difficult

for them to change to credit unless Masary. Co makes inclusive, sustainable business model to enhance the telecoms diversity and penetration in the Egyptian market. The telecoms consider electronic money as an investment that should start small and scalable-up with the profitability and liquidity performance. Not until late 2013, the mobile operator saw the strong potential for full mobile money services and the worth of the new credit policy. To gain such a trust Masary.Co kept an equal distance with the three network operators to escalate their support and business alliance.

Implementing e-Masary projects required learning rather than execution. Thus, at this stage, Masary.Co negotiated flexible support from the donors (i.e. SFD and USAID) and mobile network operators. Flexibility is usually in the types of resources and the length of that support. Different types of support at different stages of development. Actors in the PI (The SFD, USAID and NGO-MFIs) provided Masary.Co with knowledge and experience as well as access to the poor market. This knowledge includes strategies on how organizational issues such as build trust with the local communities, and technical issues like selecting loan groups and lending cycle. Both the organizational and technical strategies help “*overcoming infrastructure and profitability*” challenges as discussed in the first section of this chapter. The PI network in e-Masary also had strong business relations with banks and training companies, which paved the way in front of the company.

In addition to type, the timing of supporting resources should not be predetermined. The donors and sponsors should not set a certain amount of resources each year. Private enterprises start with a low cost investment to maximize the returns from a learning orientation. Then they need to be capitalized for scaling-up. Once business model is investment ready, donors and sponsors can facilitate a greater investment. The timing and success of these developments, however, are difficult to predict in advance. Masary.Co required access to modest amounts of subsidized capital to facilitate experimentation. But once, their pilot proved economically feasible, the telecoms as well as the donors scaled-up their investments in building infrastructures for the unbanked areas and sponsoring point-of sale machines with Masary’s trade mark.

As such, PIs support during the deployment stage requires a willingness to accept learning outcomes and a long-term orientation as part of their metrics. Not all new business models, for instance, will be worthy of additional investment. Only high-potential ones should be expanded by committing additional resources. The less successful ones should be stopped or redirected. These failures can generate learning, but the PIs investment is non-recoverable. Trying to accurately predict in advance which models will be worthy of investment, the type and amount of investment needed, and timing for these investments is challenging and likely to be inaccurate.

### **Embedded Innovation and competitive advantage**

In the future, competitive advantage will depend more upon the capacity to generate disruptive innovation and creative destruction through competitive imagination and legitimacy, and to integrate stakeholder interests to create value on multiple fronts (i.e., Synergistic value creation) (March, 1991). By doing so, it is argued that firms can improve

customer loyalty, build transformational customer-supplier relationships, lower employee turnover, and improved reputation (Berman et al., 1999).

Based on the case of e-Masary, we found it challenging to manage stakeholder concerns while some of them are more important than the others and have control over critical resources or centrality in a network. Only in cases of threats (e.g. New legal rule or market pressure) stakeholder unite and change the way they collaborate. By then, they achieve emerging or transformational change.

Then Masary.Co experimented new value propositions for mobile payment, microfinance, and transfers throughout stakeholders' involvement in creating new values, designing new services, and presenting a sustainable (long-run) initiative for financial inclusion.

To be competitive the partners need to manage radical uncertainty by exchanging knowledge among each other and with the community. Knowledge from diverse and dispersed heterogeneous stakeholders, many of whom may be adversarial (e.g. Regulators and bankers), prevents the surprise emergence of threats (Hart & Sharma, 2004).

To scale-up, BoP ventures (like all ventures with a goal of long-term self-sufficiency) must create and sustain competitive advantage. But because these ventures must straddle the border between the formal and informal economies, they face unique challenges in generating that competitive advantage. Unlike businesses operating solely in the formal economy, BoP venture leaders cannot rely on establishing competitive advantage based on investments made within and secured by the firm's protective boundaries or by a country's legal system. Businesses operating in the informal economy must accept the possibility of copyright infringement, the presence of counterfeiters, a limited ability to enforce contractual terms, and the prospect of product adulteration (Hernando, 2000).

Unlike businesses operating solely in the informal economy, BoP ventures cannot rely on a strategy that primarily depends on extracting value already present in these markets, such as accessing locally-available expertise or utilizing pre-existing infrastructure. These assets may be limited, and also available to other competing firms. Common availability levels the playing field, and nearly all local businesses that operate in the informal economy remain small (Banerjee & Dufflo, 2007).

A good example of innovating new services and creating a competitive advantage is I-Score services in e-Masary. I-Score is a credit rating service normally available in the "I-Score credit bureau" that costs 30 L.E per borrower. The service is currently available for e-Masary's partner NGO-MFIs to investigate the credibility of borrowers and discover double borrowing. The idea of this service aroused out of the social interaction between NGO-MFIs and their customers that could threat e-Masary's long term sustainability. Due to the mobility nature of e-Masary wallet, many borrowers could escape with their loans and never paid back their loans. In response, Masary Co (with the help of the SFD) invented a central online platform that links all member NGO-MFIs with each other and with the banking system.

In 2011, Masary developed "*the Network of Egyptian MFIs*" in which all member MFIs pays only 5 L.E to investigate the credit history of each new client. This reduced price is more reasonable for microloans. As said by a loan officer, " It is not fair to pay 30 L.E to test the

eligibility of a small amount of loan; adding 30 L.E. to 2% nonreturnable advance payment discouraged many of our clients to join”.

## **CONCLUSION**

Market-based business system contributed towards addressing the challenges of financial inclusion. On one side, the philanthropic business system focuses on the opportunity to better connect local producers to domestic and international markets. On the other side, the commercial business system focuses on the creating new opportunities via embedded (and inclusive) business in which different stakeholder can contribute the most. Both the donor community and private corporations have developed value chains, infrastructure, and value propositions to work more closely with local producers. The philanthropic and commercial business systems have different pros and cons as they move through the design, deployment, and sustainability stages. While these approaches are complementary and may be trying to achieve the same outcome, donors and enterprises have largely preferred to maintain their independence from one another.

Using the BoP business system, we present a governance model for developing inclusiveness and cross-sector collaboration to integrate investments in PIs and CIs. In particular, we propose several strategies that private corporations can use to enhance collaborative interdependence between the two sectors. Variation in context may influence the prioritization and sequencing of these strategies. These strategies build a partnership mechanism that draws the strengths of each sector and provides insight for a business system that can facilitate stronger connections between profits and financial inclusion as a tool for poverty alleviation.

Analysing data from e-Masary case pinpointed to online balanced *scorecard*, investment flexibility, embedded innovation and inclusive competitive advantage as key results. The online grid facilitates collecting relevant and real-time information about economic returns, social benefits and local impact. It also helps to reconcile the staff incentives with the socioeconomic measures of the overall project performance. The latter element sustains the employee engagement with the poor micro-entrepreneurs. Flexibility in fulfilling long term financial commitments and building an innovation value chain was also significant. For financial commitments during the design stage, donors may rely on building business intimacy with a larger set of enterprises and focus on sharing knowledge and resources. Then in later stages (long run) they may select a smaller number of partners who have access to more resources and willingness to provide greater financial support, extended interactions, and detailed technical assistance. The embedded business model needs trial and error, particularly in the design and deployment stages and also needs that long term financial and technical support to reduce the risk. We found that engaging the poor micro-entrepreneurs in the design and deployment stages reduces error and improve the sustainability. Our findings, then show a potential for overcoming the challenges of financing the BoP using mobile financial services.

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