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# ICT: An Empowering Tool for Social **Enterprises**

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Abstract: In recent years new models for organizations working on poverty alleviation have emerged. One of them, the social enterprise, has attracted the attention of both academics and practitioners all over the world. Even if defined in different ways depending on the context, this model has an enormous potential to generate social benefits and to promote local agency and private initiative in poverty alleviation. A powerful complement for this model in the 21st century is Information and Communication Technologies. These tools allow users to find new ways of collaboration, new sustainable business models and a cost-effective way of scalingup initiatives. In this paper we share conclusions from three examples of successful organizations where the role of ICT for their social purpose is analysed.

## 1. Introduction

The world has evolved very quickly in the last decades, changing the paradigms of human relations, social organizations and business. Problems of specific societies have become those of the whole mankind, as the world is more intensely globalized than ever. Among the main challenges of the 21st century are the eradication of poverty and the alleviation of social exclusion in countries of all development levels.

Two of the emerging trends over the last three decades that can help to find new solutions to these problems are the introduction of new socially-oriented business models into the market and the significant integration of Information and Communication Technologies (ICT) into not-for profit organizations. This combination can open a new array of solutions to eradicate poverty and exclusion.

In this paper the authors share some conclusions from our on-going research about how ICT can improve the performance of social enterprises.

#### *Interest of socially-oriented business models for development*

New models for organizations working on poverty alleviation have emerged in recent years, mostly in developing countries. These models adopt a business approach in order to generate opportunities for development. Using the generic term of 'social enterprises', their common main goal is the improvement of living conditions of people subject to social and economic exclusion [1]. Muhammad Yunus, founder of the microfinance-oriented Grameen Bank and Nobel Peace Prize, proposes a type of company focused on social benefits, economic sustainability and re-investment of profits [2] that has been analysed in Bangladesh by the research team.

A literature review reveals various strategies to solve the main problem of sociallyoriented business: how to build a economic sustainable organization that has a relevant impact in society. All of them share a common vision but differ on how the problem is tackled: hybrid value chains [3], inclusive businesses [4], markets for the 'bottom of the pyramid' [5], European social economy [6]. and, from a wider perspective, those integrating strategic corporate social responsibility [7].

As part of our research, a model for organizational analysis of social enterprises has been designed [8]. Based on the study of different organizations characterised as social enterprises in Bangladesh, Senegal and Spain, the model reveals that the analysis of social enterprises should look at different components: traditional elements common to business forms and some specific elements inherent to socially-oriented ventures. Additionally, there are two other factors than are inherent to organisations: their legal form and their social values and culture. The model is shown in Figure 1 below.

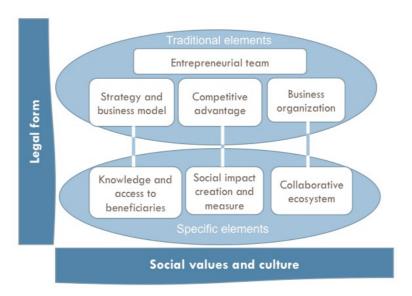


Figure 1: Model for organizational analysis of social enterprise

## 1.2 Information and Communication Technologies: tools for empowerment

According to academic and practitioner analysis of social enterprises, Information and Communication Technologies (ICT) have a great potential for empowering and strengthening social-oriented organizations. Yunus points out that "... the new ICT can allow poor economies to abandon past economic development trends and integrate instead into the world economy much faster than anyone could have supposed." [9]. Duncombe underlines the need for ICTs for inclusive or pro-poor markets, particularly for the small and micro-enterprises in the value chains, as they are important tools for improving market coordination, efficiency and equity [10].

There has been a special effort to integrate ICT as performance-improving tools in organizations from the following sectors, which are relevant in the context of business and poverty alleviation. We focused on their organizational contexts because their experience of ICT implementation is valuable in two ways: first, there are nuclear elements in these organizations that are similar to core aspects in social enterprises; and second, there are problems, challenges and lessons learned that have direct application to social enterprises.

• Small and Medium Enterprises (SMEs): ICT are used to increase the productivity and competitiveness of SMEs. For instance, there is a long-standing tradition in programmes of the European Union to promote technology use among them [11]. The experiences carried out to help SMEs to take advantage of ICT show that awareness about the potential for innovation fostered by ICT is generally lacking in smaller enterprises [12]. There are results from SME initiatives that can be transferred to social enterprises on how to integrate a 'friendlier' vision for ICTs as powerful tools for competitiveness and innovation.

- Charities and social NGOs: They use ICT as a mechanism to incorporate excluded collectives (the beneficiaries of their work) through new intervention channels [13,14]. The experience of these organizations applying ICTs to reach out to supporters, volunteers, public administrations and beneficiaries is valuable to social enterprises. For example, the incorporation of suitable ICT platforms that can help social enterprises source clients and suppliers at the 'bottom of the pyramid'.
- International aid agencies: Traditionally acting in compartmentalized and isolated fashion, ICT has helped these agencies bring about a renewed approach of collaborative work institutionally as well as on the ground [15,16]. Both the challenges in effectively mainstreaming ICT as well as incorporating networked models of development aid cooperation for these organizations are likely valuable for social enterprises.
- Citizen organizations in Web 2.0 environments: There is profound innovation in how Web 2.0 tools are allowing organizations and individuals to join up for productive purposes, sometimes at significant scales that can involve thousands of people from around the planet for a given activity. An earlier and well-established example was provided by groups of programmers (hackers) producing free and open source software (Linux, Moodle, OpenOffice, etc.). More recently we can point to 'crowdsourcing' projects or access to Open Data sets provided by governments for public use [17,18]. The principles of collaboration, openness, sharing, integrity and interdependence [19] that underline these web 2.0 approaches, together with some specific ICT skills required, will be a useful reference for social enterprises as they innovate in their goods and services, as well as business models in the web 2.0 or 'social web' era.

# 2. Objectives

The main objective of this paper is to identify and share ways on how the integration of ICTs can improve the impact and scaling-up of social enterprise initiatives, through:

- Analysis of social enterprises in different contexts where ICT-based business models have improved the impact and scale of the ventures.
- Identification of technological characteristics that make ICT effective tools in the design, management and performance of social enterprises.

# 3. Methodology

This paper draws from research focused in the analysis of key organizational elements of the social enterprise and in the evaluation of the role of ICT in the improvement of outreach, impact and scalability.

The study has an action-research approach that combines a theoretical characterization with case study approach. The research has been divided into four phases:

- Analysis of social enterprises from a technology-mediated perspective. It will lead to a set of organizational and process elements where ICTs could potentially introduce productive changes.
- Exploration of organizational challenges related with ICT according with other sector experiences (SMEs, NGOs, ICT in development, web 2.0). These organizations work in areas similar to those of social enterprises but have different operational models. The purpose is to hone in specific ICT elements that can be useful in managing social enterprises. This then leads to the identification of institutional challenges that other type of entities have faced for the integration of ICT in their operations.
- Design of a model for organizational analysis of social enterprise based on the study of different organizations characterised as social enterprises in Bangladesh, Senegal and Spain (see Figure 1). In this phase key organizational aspects to characterise the social enterprise have been identified: Knowledge and access to beneficiaries, creation and

measure of social impact, collaborative ecosystem, legal form and social values and culture.

• Analysis of case studies and formulation of a set of guidelines for the incorporation of ICTs in social enterprise models in order to increase their sustainability and impact. The study of the cases, which can be defined as social enterprises, have been done according to the previous model.

In this paper we highlight some key ideas of the phases 1 to 3 and then focus on phase 4, the review of case studies and the lessons learned from them.

# 4. Business Case Description

Three rather different initiatives are analysed as examples of different uses that ICT can have in the business model of a socially-oriented organization. The cultural, geographic and economic contexts of the described cases are different but they share a social enterprise structure and innovative uses of ICT.

## 4.1 Manobi

Manobi is a Senegalese SME based in Dakar that provides value-added services through the use of mobile phones in order to improve the management and productivity of small farmers' businesses. Specifically, it has developed mobile phone applications for local farmers to strengthen their negotiating position with intermediaries.

In Senegal local supply chains for distribution of vegetables are structured in ways that lead to an unfair value distribution among agents. Farmers and small growers are the weakest part of the supply chain. They generate low incomes in part because of their limited productivity as well as their reduced power of negotiation: i) lack of reliable information about market prices in a volatile market (low level of transparency and the high speed of expiration of usable information), ii) difficulties with their cash flow due to poor access to credit and irregularities with the payments from intermediaries, and iii) poor organization of the markets due to isolation between producers and consumers, informality and the lack of regulation.

In 2003 Manobi developed a platform oriented to provide a solution to some of these problems using mobile phones. The MAgri platform allowed growers access to reliable real-time information about prices in the main marketplaces in the country via SMS messages. The service was based on a database updated twice a day in the main retailer markets across the country. Using a friendly-user interface, the farmers found daily prices of their products in different locations and of reliable quality. This information empowered them to better negotiate with intermediaries.

The expansion of mobile phones in the African continent in the past years led to improved access to first-hand information: a simple telephone call to a friend at a given market made Manobi's compilation of information unnecessary. This fact had a great impact on Manobi's competitive advantage because the information provided by the organization was no longer unique.

In this context Manobi created three new services to respond to other challenges:

- 1. Traceability service: the coordination of actors and a system based on ICT can help to improve logistics in different ways: promotion of cooperatives, verification of the details of the sale (where and how the goods are sold, with the final price of the sale being 'certified' by a Manobi agent).
- 2. Financial service: in collaboration with one of the main banks in Senegal, this allows farmers to manage their payments and to ask for loans via their mobile phone. This service helps with the purchase of inputs and the management of payments of transactions that occur far away from their place of residence.

3. Training services: about agriculture and land productivity, also provided through ICT.

Manobi is an example of how a private initiative can help to articulate a sector and improve peoples' lives through technology:

- ICT helped the farmers to access high quality information in an effective way and at a low cost when there were spatial and time gaps that made the access to this information impossible.
- The platform and ICT help to create new ecosystems of collaboration between actors. Manobi promotes the creation of cooperatives and other collaborative bodies (like collective purchase groups) to give greater power to individuals in regards to the purchase of inputs, the sale of goods, transportation, etc.
- Technology also helps to increase the visibility and transparency of the supply chain, preventing bad practices and value misappropriation.
- The platform facilitates the financing activities and the payments in a context where the farmers are normally physically isolated in rural areas.
- ICT helps making more efficient the whole value chain: better co-ordination of actors, reduction of the number if intermediates, improvement of planning and reduction of lead time.

In the end, an ICT-based service lead to the creation of a value proposition for the beneficiaries, with services developed bottom-up and shaped according to the preferences of beneficiaries, leading to reduction of uncertainty and better cash flow.

#### 4.2 Kiva

Kiva is a non-profit organisation that connects individuals in developing countries with others around the globe who lend them small amounts of money (typically from 25 to 50 USD). The combination of several of these small amounts provides the funding for one so called 'microcredit', typically ranging in the hundreds of dollars, which is received by the borrower and provides her/him with opportunities for income generation. Kiva has revolutionised the micro finance industry by creating a community of more than 700.000 lenders that have disbursed more than 300 millions dollars since its founding in 2005.

Lack of access to credit is one of the main causes of exclusion in the developing world as credit is often necessary to start a business or to invest in better living conditions. Traditional channels to credit are not available for people living in poverty, because bank offices are located in urban locations, collaterals are required that poor people do not usually have, etc. The alternative to traditional commercial banks is the local moneylender that charges high fees and interest rates. Muhammad Yunus realized this fact some 35 years ago and started building and spreading the concept of microcredits and microfinance. Small amounts of money (as little as 15-20 US\$) can be a significant help to poor people to start (or strengthen) income-generating businesses.

Kiva started in 2005 to promote person-to-person microfinance. The concept is based on a web platform that allows individuals (or micro-investors) in the developed world (or anywhere, for that matter) to loan to small business people in more than 30 countries. The micro investors visit kiva.org and choose entrepreneurs to loan money to, as opposed to the more established online donations to various causes.. At the end of the project, lenders can receive their money back or re-lend to another project – the latter is the choice of 90% of borrowers registered.

Over the course of the loan, investors receive updated information on the business and the impact they are financing. Kiva has created an emotional commitment between people through the power of stories. According to Jessica Jackley, one of the founders: "Kiva is fundamentally about stories. These stories are what connect lenders to entrepreneurs, and

they have the power to create an interaction based on dignity and respect and partnership, not one focused on suffering or pity or the need for a wealthy donor to swoop in and singlehandedly save the day" [20].

The organization has built a network of micro finance institutions (MFIs) located in the field, which makes the entire system work: they post the profiles of the entrepreneurs, manage the paperwork and disburse money to the beneficiaries [21]. The role of MFI is crucial to help build that link between borrowers and lenders that generates trust and increases visibility to know where the money is spent.

This case study shows the importance of ICT technologies to build sturdy social organization models in different aspects:

- Creating collaborative ecosystems, for instance, facilitating and coordinating a network of sustainable relationships located in different spatial and time zones: lenders, MFIs and borrowers. The access to beneficiaries is sometimes the most difficult and expensive task for this kind of initiatives.
- Including lenders in the process of lending (they decide who to lend to) and sharing information through a user-friendly and intuitive platform. This factor generates trust and emotional commitment from investors.
- Managing a huge amount of small transactions and exchanges around the world: investments, re-payments, information about projects, etc. Without ICT this task would simply be impossible. This also contributes to transparency: Kiva's databases offer reliable information about where the money is invested.
- Reaching scale and sustainability through the collaboration of a group of individuals: this model reaches a big scale based on resources from small sources (crowdsourcing).

## 4.3 Telecentre.org

Telecentre.org is a foundation that supports the establishment and operations of community telecentres in places experiencing significant levels of digital exclusion around the world. The telecentres are public spaces where visitors have access to computers, Internet and other ICTs, and they are set up to contribute to local human development processes and the generation of opportunities for individuals. Most telecentres are established by initiatives from governments or development aid agencies to promote digital inclusion. In some cases they have also been set up as for-profit private businesses. Telecentres offer a more supportive and nurturing environment for their users than cyber cafes or phone/computer parlours.

Telecentre.org was launched as a programme in November 2005 at the World Summit on the Information Society in Tunis. By that time there were telecentres in many countries, and some national telecentre networks had emerged, but they were loosely organised and had no effective means to learn from each other. And yet, they were providing valuable services to hundreds of millions of people around the world.

Telecentre.org was designed as a worldwide network of people and organisations committed to increasing the social and economic impact of the hundreds of thousands of grassroots telecentres all over the world. It helped fuel a global telecentre movement, and provided channels for knowledge sharing, collaborative projects (such as a Telecentre.org Academy to train telecentres managers), and to provide a voice in the ICT policy arena. There are six regional networks (Latin America and the Caribbean, Africa, Europe, Asia/Pacific, Eurasia, and Middle East/North Africa). In each regional network, the members are either national telecentres networks or organisations that support telecentres at national/regional levels.

Telecentre.org is an example of a highly networked organisation which reaches all the way from a small village in the Colombian isolated Chocó marshlands to international

policy makers at global events (like the World Summit for the Information Society), always aiming at digital inclusion and expanding socio-economic opportunities for local telecentres users. In order to ensure telecentres' economic sustainability (i.e., lowering dependence on dwindling public funds) and to better respond to growing demands of their users (e.g. elearning courses, e-government services, etc.), Telecentre.org is increasingly promoting the introduction of social enterprise models/attributes.

ICTs are central to the work of Telecentre.org, and individual telecentres offer ICT-based products and services:

- A global network like telecentres.org is based on an extensive communications network and various operational digital spaces [22] such as:
  - i) the main global platform (www.telecentre.org);
  - ii) community learning sites (in English, Spanish, French, Russian and Arabic);
  - iii) specific project sites, like "Telecentre Women", a project to decrease local gender digital divides women.telecentre.org/; or
  - iv) the Academy system, with a global curriculum and national associated academies, (http://www.telecentre.org/academy/).
- The social enterprise models being slowly but increasingly adopted by telecentres are based on ICT-based services for small businesses, education, health, agriculture or government services.
  - These products and services are facilitated through ICT mechanisms provided mostly by national telecentre networks which have the required technological and institutional capacities for sourcing/distribution of e-courses offered by a university, discounted software from organizations like Techsoup.org, e-government services, etc.)

#### 5. Conclusions

The social enterprise approach presents varied attributes and strategies to attain the objective of building economic sustainable and high social impact. The organisational diversity in different countries or geographic areas, far from being a drawback, presents a great potential for innovation and is one of the key aspects to characterise the social enterprise. At the organizational level, ICTs have a great potential as strengthening tools for social initiatives.

Anchored in the organizational analysis model (in Figure 1), the case studies and lessons learnt in other sectors helped to identify key areas where ICTs improve facilitation, institutional strengthening and social impact, namely:

- (i) New products/services with better financial sustainability
- (ii) New access channels to beneficiaries, by simplifying the creation and distribution of social value, and allowing for the generation of social capital.
- (iii) Operationalisation of organisational networks and collaborative ecosystems that enables access to new resources (human, knowledge). These networks make participation easier for individuals in institutional initiatives via web 2.0 tools, while enabling flexible (networked) growth paths.
- (iv) Improvement of the visibility of social enterprise initiatives and knowledge spreading. ICT help to tear spatial and time barriers apart, helping to generate vision and awareness.

At the same time, we have uncovered gaps that need to be covered with further cases and research, which include fostering internal network cultures, re-examining human resources policies, determining governance guidelines for transparency or characterizing and incorporating network leadership styles.

## References

- [1] D. Bornstein, How to change the world. Social entrepreneurs and the power of ideas. Oxford University Press, New York, 2004.
- [2] M. Yunus, Building Social Business. The new kind of capitalism that serves humanity's most pressing needs. PublicAffairs, New York, 2010.
- [3] W. Drayton, Everyone a changemaker. Social entrepreneurship's ultimate goal. Innovations Winter 2006. MIT Press, Boston, 2006.
- [4] Social Enteprise Knowledge Network, Socially inclusive business. Engaging the poor through market initiatives in Iberoamerica. Harvard University Publishing, Cambridge (MA), 2010.
- [5] C.K. Prahalad, The Fortune at the bottom of the pyramid: Erradicating poverty through profits. Wharton School Publishing, Philadelphia, 2005.
- [6] Confederación de Entidades de Economía Social (CEPES), La economía social en España 2009-2010. Madrid, 2010.
- [7] A. Moreno, L.M. Uriarte, G. Topa et als, La Responsabilidad Social Empresarial. Oportunidades estratégicas, organizativas y de recursos humanos. Editorial Pirámide, Madrid, 2010.
- [8] R. Fisac, A. Moreno, C. Mataix, M. Palacios, La empresa social: revisión de conceptos y modelo para el análisis organzativo. Revista española del Tercer Sector 17, 2011, pp. 41-66.
- [9] M. Yunus, Creating a world without poverty. Social business and the future of capitalism. PublicAffairs, New York, 2007.
- [10] R. Duncombe, ICT, Markets and Development. In 'Building Communications Opportunities, Impact Assessment Study'. Report to the Building Communications Opportunities consortium. ict Development Associates, Ltd. p. 53-74. 2008
- [11] Secretaría de Telecomunicaciones y para la Sociedad de la Información (ed.), La sociedad de la Información un requisito para el desarrollo en el siglo XXI, Parte 2. Editorial MCyT, Madrid, 2005.
- [12] Eurostat, Use of the Internet Among Individuals and Enterprises. Eurostat 'Statistics In Focus' series, European Communities. ISSN 1561-4840. 8 p. December 2006
- [13] Fundación Bip Bip, Estudio de Diagnóstico sobre el Nivel de Utilización de las TIC en las Entidades No Lucrativas de Acción Social Que Trabajan en Pro de la Inserción Laboral en España. Madrid, 2005.
- [14] P. Cabrera, Nuevas Tecnologías y exclusión social. Un estudio sobre las posibilidades de las TIC en la lucha por la inclusión social en España. Fundación Telefónica, Madrid, 2005.
- [15] R. Heeks, Development 2.0: the IT-enabled transformation of international development. Communications of the ACM 53 (4), 2010, pp. 22-24.
- [16] S. Fukuda-Parr, R. Hill, The Network Age: creating new models of technical cooperation. In: Fukuda-Parr S, Lopes C, Malik K (eds.), Capacity for development: new solutions to old problems. Earthscan Publications, New York, 2002, pp. 185-201.
- [17] D. Tapscott, A.D., MacroWikinomics: Rebooting Business and the World. Penguin Group, New York, 2010.
- [18] M. Smith, L. Elder, Open ICT Ecosystems Transforming the Developing World. Information Technologies and International Development 6 (1), 2010, pp. 65-71.
- [19] D. Tapscott, A.D., MacroWikinomics: Rebooting Business and the World. Penguin Group, New York, 2010. pp. 22-36.
- [20] V. Chang, J. Jackley, Kiva and the Power of a Story. Stanford Graduate school of Business Case: M-325. Stanford (CA), 2010.
- [21] M. Flannery, Kiva and the Birth of Person-to-Person Microfinance. Innovations, Winter and Spring. Boston (MA), 2007, pp. 31-56.
- [22] M. Acevedo, M. Myanja, C. Bure, S. Caicedo (eds.), A Guidebook for Managing Telecentre Network: Engineering a New Phase of the Telecentre Movement. International Development Research Centre (IDRC), Ottawa. 2010.