# New models of inclusive innovation in emerging markets: the Brazilian experience

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Abstract: Innovation is a mantra in contemporary society that has been increasingly called upon, including in Brazil, as a mechanism for the remission of the economic afflictions of companies, regions and nations. Inclusive innovation is a relatively new theme on the international scene and has received increasing amounts of attention in the debate and scope of cooperation among groups and organizations. Inclusive innovation is the means by which new goods and services are developed for and/or by the billions living on the lowest incomes. This project involves the analysis of cases that could be considered exploratory since they seek to increase understanding of the phenomenon studied. This study presents three successful approaches to reach low-income groups: Microcredit, Regional Sustainable Development Strategy, and Banking and Fluvial Correspondents. The study was conducted based on secondary data obtained from documented research and descriptive case study analyses, while observing the recommendations presented by Yin (2005). In the context of the theme of sustainable development, this study contributes to increase understanding of the characteristics of the inclusive innovations and strategies used to offer financial products and services that seek to provide financial inclusion to the population and the sustainable growth of people, organizations and the country.

Keywords: Inclusive innovation; Brazil; Sustainability.

# 1 Introduction

Emerging economies continue to define special policies and programs that focus directly on the needs of the economically excluded. Diagnostic efforts of the Brazilian reality in relation to financial inclusion among the population have resulted in the identification of new challenges to continue promoting inclusive innovations, considered in this study as:

"any innovation that leads to affordable access of quality goods and services which help create livelihood opportunities for excluded populations – primarily at the base of the pyramid (BoP) – on a long term sustainable basis and with significant outreach" (Mashelkar & Goel apud World Bank, 2013).

In simple terms, inclusive innovation is the means by which new goods and services are developed for and/or by those who have been excluded from the development mainstream, particularly the billions living on lowest incomes.

Brazil is a large, complex and diverse country in terms of its geography as well as demographic and economic realities. It includes large sprawling urban conurbations in the Southeast such as São Paulo and Rio de Janeiro, more remote and lightly populated areas such as the Amazon rainforest, and arid rural regions in the central and northern parts of the country. The Brazilian financial system (SFN) represents the continuously evolving universe of regulated institutions in the Brazilian financial sector. Given the diversity of the Brazilian population, the SFN must cater to a variety of needs. This explains the broad range of institutions, from credit cooperatives and savings and loans associations, to large international banks and exchange brokerages. The National Monetary Council is the overarching entity responsible for issuing regulations and guidelines for the proper functioning of the SFN, operationalized through four regulatory and supervisory entities: The Central Bank of Brazil (BCB), The Securities and Exchange Commission (CVM), The Private Insurance Superintendence (SUSEP) and The Complementary Pension Secretariat (SPC).

#### 2 Innovation

Innovation has been highlighted and recognized as a critical factor in the success and competitiveness of organizations. Innovation, in terms of products, processes, and services, is recognized as a critical success factor in most companies and for new products or services, and constitutes a crucial leverage component in the performance of many companies. Thus, innovation should be the result of a conscious and intentional search for opportunities that can be found either in the internal or external environment.

The term "innovation" possesses different definitions, depending on the author and context analyzed. Due to the scope and depth of the term "innovation", it was observed that authors used a guideline to present their definitions: the adoption of procedures, processes or services that were not previously used by the company and that are a novelty either to the company or to the market. In general, innovation is associated with original, never-before-seen products or the use of cutting edge technology (OECD, 2005; Hamel: 2000; Van de Ven, Angle & Poole: 2000).

Many attempts have been made to construct models that shed light on how innovation is generated in companies and how it is influenced by the external environment. The conception of a conceptual model should seek to facilitate the understanding and manipulation of the relations that occur between the different variables that make up a system or process, abstracted from reality. For example, Silva and Ferreira (2005) conducted a study in thirteen Brazilian companies and developed a conceptual model, named the Innovation Antecedents and Consequences Model (IAC Model), shown in Figure 1. It covers three dimensions: internal and external antecedents, processes and consequences, formed by grouping constructs presented in theoretical discussions regarding market orientation, competitive intelligence, innovation, new product development and company performance.

# 3 Inclusive Innovation

The concept of inclusive innovation originates in developing countries where the poverty of many of their inhabitants results in their exclusion, not only from the benefits of scientific and technological advancement, but also from access to the satisfaction of their

basic needs (Mohnen & Stare, 2013). Several other terms, such as innovation for the bottom of the pyramid, pro-poor innovation and frugal innovation, are also associated with efforts to address the needs of low-income people. Three recent definitions of inclusive innovation are as follows:

- The World Bank (2013) defines inclusive innovation as any innovation that helps expand affordable access to quality products and services that create and increase livelihood opportunities for excluded populations. It identifies five features that characterize inclusive innovation: affordable access; sustainable production; goods and services that help create livelihood opportunities; orientation towards the excluded population, primarily those at the base of the pyramid; and significant outreach.
- 2. According to Foster and Heeks (2013), inclusive innovation refers to the inclusion groups that are currently marginalized into some aspect of innovation. The group most often identified is that with the lowest income, but the focus of concern may also include women, youth, persons with disabilities and ethnic minorities.
- 3. The Global Research Alliance (2013) defines inclusive innovation as the knowledge creation, acquisition, absorption and distribution efforts targeted directly at meeting the needs of the low-income or base-of-the-pyramid (BoP) population. The focus of inclusive innovation is on delivering high performance products and services, or high experience at ultra-low cost to the people whose needs are generally not addressed.

Based on the definition proposed by Professor Raghunath Anant Mashelkar, chairman of the National Innovation Foundation of India and president of the Global Research Alliance (GRA, 2015) there are five key characteristics of inclusive innovation. The first characteristic is that of affordable access. The affordability will depend upon, where exactly the individuals are placed in the economic pyramid. The second characteristic is about the inclusive innovation working on a sustainable basis. Affordable long-term access should rely on market mechanisms, without continued government support. The third characteristic has to do with quality goods and services and livelihood opportunities. Inclusive innovation is not about developing lower-quality products for those who cannot afford quality, but rather about providing better quality to improve their quality of life. The fourth characteristic is the access to the excluded population, primarily depending on specific national and social contexts, as well as the policy objectives, inclusive innovation should primarily benefit the poor, the disabled, migrants, women, the elderly, certain ethnic groups, etc. The fifth characteristic is significant outreach. Inclusion can only be realised if the benefits of inclusive innovation reach a large scale, i.e. a significant portion of the population.

According to Heeks, R., Amalia, M., Kintu, R. & Shah, N. (2013), it seems most helpful to understand the different views as a "ladder of inclusive innovation", or a set of steps, with each succeeding step representing a greater notion of inclusivity in relation to innovation:

• Level 1 - Intention: an innovation is inclusive if the intent of that innovation is to address the needs, desires or problems of the excluded group. This does not relate to any concrete activity but merely to the abstract motivation behind the innovation.

- Level 2 Consumption: an innovation is inclusive if it is adopted and used by the excluded group. This requires that innovation be developed into concrete goods or services; that these can be accessed and afforded by the excluded group; and that the group has the motivation and capability to absorb the innovation.
- Level 3 Impact: an innovation is inclusive if it has a positive impact on the livelihoods of the excluded group.
- Level 4 Process: an innovation is inclusive if the excluded group is involved in the development of the innovation. It is highly unlikely that the entire group could be involved so as noted above this immediately is reduced to "members of the excluded group".
- Level 5 Structure: an innovation is inclusive if it is created within a structure that is in itself inclusive. The argument here is that inclusive processes may be temporary or shallow in what they achieve. Deep inclusion requires that the underlying institutions, organizations and relations that form an innovation system are inclusive.
- Level 6 Post-Structure: an innovation is inclusive if it is created within a framework of knowledge and discourse that is in itself inclusive.

Inclusive innovations demonstrate that innovation can effectively improve the welfare of lower-income and excluded groups. Inclusive innovation is focused on facilitating access to essential goods and services and enhancing economic empowerment through knowledge creation, acquisition, adaptation, absorption, and deployment efforts targeted directly at the needs of excluded populations, primarily at the bottom of the pyramid (World Bank, 2013).

#### **4 Financial Inclusion**

Defined, financial inclusion is the "process of effective access and use of financial services by the population that fits its needs and contributes to its quality of life" (BCB, 2011). It is a relatively new term on the international agenda and has attracted more attention in the debate and scope of cooperation.

In the sphere of the G-20, the *Financial Inclusion Experts Group* as well as the *Access Through Innovation Subgroup* (ATISG) and *Small and Medium Enterprise Finance* were created. At the G-20 Summit held in Pittsburgh (USA) in September 2009, the leaders pledged to increase the world level of financial inclusion based on successful financing models for small and mid-sized businesses, as well as to studies to identify the lessons learned around the world regarding innovative approaches to providing financial services to the less fortunate (Itamaraty, 2013).

In 2010, the Central Bank of Brazil, together with the Australian Department of Treasury, led the ATISG subgroup activities that defined the G-20 Principles for Innovative Financial Inclusion (see Table 1), which were endorsed by the Summit leaders in Toronto in June 2010 (GPFI, 2010).

According to the Brazil Central Bank (BCB, 2012), the effort to increase and improve access of the population to financial services in Brazil, along with the debate promoted in recent times and efforts to diagnose the Brazilian reality in regards to the situation, has

culminated in the identification of the new challenges to continue promoting financial inclusion.

An analysis of microfinance characteristics in Latin America and Caribbean countries performed by The Economist Intelligence Unit (2012) showed that among the 55 countries considered, Peru, with a score of 79.8, and Bolivia, with 71.8, have the most developed microfinance markets. A recent Microfinance Information Exchange survey shows that 43 percent of microfinance clients in Latin America are people whose incomes are below the poverty line. (MIF, 2013).

Table 1: G-20 Principles for Innovative Financial Inclusion

	Principles			
1. Leadership	Cultivate a broad-based government commitment to financial inclusion to help alleviate poverty.			
2. Diversity	Implement policy approaches that promote competition and provide market-based incentives for delivery of sustainable financial access and usage of a broad range of affordable services (savings, credit, payments and transfers, insurance) as well as a diversity of service providers.			
3. Innovation	Promote technological and institutional innovation as a means to expand financial system access and usage, including addressing infrastructure weaknesses.			
4. Protection	Encourage a comprehensive approach to consumer protection that recognizes the roles of government, providers, and consumers.			
5. Empowerment	Develop financial literacy and financial capability.			
6. Cooperation	Create an institutional environment with clear lines of accountability and coordination within government; and also encourage partnerships and direct consultation across government, business, and other stakeholders.			
7. Knowledge	Utilize improved data to make evidence-based policy, measure progress, and consider an incremental "test and learn" approach by both regulators and service providers.			
8. Proportionality	Build a policy and regulatory framework that is proportionate with the risks involved in such innovative products and services, and is based on an understanding of the gaps and barriers in existing regulation.			
9. Framework	Consider the following in the regulatory framework, reflecting international standards, national circumstances and support for a competitive landscape:  a) An appropriate, flexible, risk-based AML/CFT regime;			
	b) Conditions for the use of agents as a customer interface;			
	<ul> <li>c) A clear regulatory regime for electronically stored value;</li> </ul>			
	d) Market based incentives to achieve the long-term			
	goal of broad interoperability and interconnection.			

Source: GPFI (2010).

# 5 Methodology

The present study is based on exploratory research that seeks to gather information regarding a determined object and is limited, therefore, to a field of work that serves as subsidy for explanatory research to come later. The exploratory method is recommended for situations where knowledge on a topic under analysis is limited or that demands new studies (Selltiz *et al.*, 1974).

The case study method was used to understand the group of innovations implemented in the Brazilian financial sector.

"The case study is an empirical investigation that investigates a contemporary phenomenon within its real-life context, especially when the limits between the phenomenon and the context are not clearly defined" (Yin, 2005).

Specifically, the present project involves an analysis of cases that can be classified as exploratory since they seek to increase understanding of the phenomenon studied. The study was construed from secondary data obtained from document research and descriptive analyses of case studies available in literature, obeying the recommendations presented by Yin (2005) for multiple case studies. In this project, "approach by object" was used, which focuses on the characteristics of the innovation in an individualized way (OECD, 2005).

Research using "approach by object" involves the collection of data on specific innovations, generally some type of "significant innovation", or the main innovation of an organization. Research begins with the identification of the report of successful innovations, frequently based on evaluations by specialists or advertisements for new products in specialized publications. The approach consists of collecting quantitative and qualitative data on the specific innovation under investigation and the organizations being studied. The cases, object of the study, were selected based on representative criteria within the context of the theme under consideration as well as the consideration of convenience to the researcher, who is employed in the financial sector.

# 6 Models of Inclusive Innovation within the Brazilian Context

In the last years, Brazilian banks have adopted several incentives to promote financial inclusion among the low-income population: Microcredit, Regional Sustainable Development Strategy and Banking Correspondents.

#### 6.1 Microcredit

The Brazilian microfinance experience, as in most Latin American cases, has some features that are distinct from those in other parts of the world. Contrary to most places, where most initiatives in the sector have come from the private sphere, those in Brazil are primarily from public initiatives or the result of government incentives programs, which have stimulated credit to the low-income population.

Brazil can be considered a world pioneer in experimenting with microcredit in the informal, urban sector, using instant credit and real interest, conditions that are today considered fundamental to operate in this sector. The experience has achieved a reasonable client portfolio and has rapidly reached self-sustainability.

In the context of this study, microcredit is considered "the concession of small loans to small, informal businesses and microbusinesses that do not have access to the traditional financial system, mainly for not possessing a means of offering real guarantees". It is

credit destined toward production (working capital and investment), conceded by means of a specific methodology (Barone, Lima, Dantas & Rezende, 2002).

# 6.1.1 The National Production Oriented Microcredit Program - PNMPO

In April 2005, the *National Production Oriented Microcredit Program* (PNMPO) was instituted under the authority of the Ministry of Employment and Labor (MTE). This program benefits all private and small production businesses, but with the differential of demanding a methodology based on the direct relationship between the credit agent and the micro-entrepreneur at the business location. Service is personalized and performed by people trained to advise the borrower regarding business management, credit needs, defining loan amounts and credit conditions after evaluating the activity and the ability to incur indebtedness.

The main objectives of the PNMPO are to stimulate the generation of employment and income among informal micro-entrepreneurs, make resources available for production oriented microcredit, and offer technical support to production oriented microcredit institutions, with a view to strengthening these institutions to provide lending services to informal entrepreneurs (MTE, 2013).

The PNMPO is funded by resources from the *Labor Relief Fund* through the following institutions: the Bank of Brazil, the Caixa Econômica Federal (Brazil's largest mortgage lender), the Bank of the Northeast of Brazil, the Bank of Amazonia and the Brazilian Development Bank, and by resources from deposits made via commercial banks and multiple banks with a commercial portfolio.

According the Ministry of Employment and Labor - MTE (2015), in the period from January 2008 to March 2015, more than 23.9 million microcredit operations were performed for a total of R\$ 51.7 billion.

During the period of January 2015 to March 2015, there were 1.2 million Production Oriented Microcredit operations were performed by active clients, representing a total of R\$ 2.6 billion. Among active production oriented microcredit clients, women have shown a strong presence as the principal group attended (64.7%). It is also worth noting that, considering the legal status of clients, informal laborers predominate (97%). In relation to area of activity, a large concentration of clients is involved in commerce (76.7%). About 91% of Production Oriented Microcredit resources are applied toward working capital (MTE, 2015).

#### 6.1.2 The CrediAmigo Program

The CrediAmigo program of the Bank of the Northeast of Brazil (BNB) is the most successful example of production oriented microcredit programs among the 58 institutions tied to the PNMPO. Officially created in 1998 in partnership with the World Bank, CrediAmigo operates in the Northeast region, the states of Minas Gerais and Espírito Santo and the cities of Brasília and Rio de Janeiro. It is a production oriented microcredit program with the objective of providing easier access to credit for thousands of enterprises. Program establishment and client training occurs through a partnership created between Civil Society Organizations of Public Interest member *Northeast Citizenship Institute* (Instituto Nordeste Cidadania) and VivaCred. According to the terms of partnership, the OSCIP is responsible for procuring businesses, from the first contact with the client through the post-sales follow-up.

Through CrediAmigo, the Bank of the Northeast of Brazil became the first public bank to have an operating model directed exclusively toward microcredit. Considered an important tool for social inclusion and strengthening citizenship in its operational area, CrediAmigo uses a method based on a direct relationship with businesses and offers life insurance, loan insurance, business and environmental guidance, and financial education to its checking clients (standard and simple).

The positive CrediAmigo performance has become a point of reference for the sector, being chosen by the Federal Government as a model for the national microcredit program, named the *Grow Program* (Programa Crescer). In 2011, CrediAmigo was responsible for 93% of the *Grow Program* contracts. Of the 606 thousand operations, 565 thousand belong to the Bank productive microcredit, which lent R\$ 565 million in the sphere of the program launched by the Federal Government (BNB, 2012). CrediAmigo, as with a large portion of microcredit programs, have women as their main clients, and 78% of the clients with a family income of less than R\$ 1,500, showing its efficacy in attending those families with the lowest income.

The program is present in over 1900 municipalities and, in May 2015, reached about 1.9 million active clients, corresponding to the beneficiaries of resources conceded for informal production activities in the areas of industry, commerce and services. CrediAmigo has released resources above R\$ 31.4 billion since its creation in 1998, having contracted more than 1.6 million in operations in the period between January and May 2015 alone (BNB, 2015).

# 6.2 Regional Sustainable Development Strategy

The Regional Sustainable Development Strategy (DRS) is a Bank of Brazil (BB) business strategy that seeks to stimulate the sustainable development of regions where the bank is present. This is done by mobilizing social and political economic agents to support economically, socially equitable, and environmentally productive activities, all the while observing and respecting cultural diversity. The DRS business strategy contributes to the generation of employment and income and the adoption of practices that permit increases in social and environmental indicators with sustainable, inclusive solutions, always done along with partners in a process called "concertação" or "concertation" (BB, 2013).

Concertation, in the meaning of orchestration, is an integrated, harmonic action shared by several partners: economic agents, social agents, political agents and beneficiaries, that promotes the articulation between persons and groups so as to act in synergy in favor of the sustainable development of the territory, involving all parts interested in the development of existing productive activities within their jurisdiction. Concertation is based on the participative principle and contributes to the mitigation of risks and reaches of positive results. It stimulates those involved to create solutions and conduct regional development under the perspective of sustainability, aggregating technical assistance, new technologies, training and consulting in all links of the value chain.

The desired results are the sustainable development of the regions involved, the reduction of illiteracy, the elimination of child and forced labor, professional training, access to information, and computerization, among others. The DRS business strategy proposes to promote social inclusion by means of the generation of work and income, the democratization of access to credit, the stimulation of associations and cooperation, the contribution to the improvement of quality of life indicators, and consolidation of business between rural and urban, micro and small businesses, whether formal or

informal.

Currently, the DRS business strategy pursues productive activities such as agroforestry, tourism, hand crafts, ceramics from the Island of Marajoara, aquaculture, fruit cultivation, shoes, cotton cultivation, clothing, goat and sheep farming, bee keeping, horticulture, dairy and beef farming, manioc farming, mining, poultry farming and solid residue recycling.

The main success factor in the DRS business strategy is the participative and constructive principle in its methodology. Private initiatives, cooperatives, governments, universities, religious entities, and non-governmental organizations are partners in the planning, coordination, and accompaniment in the process of sustainable regional development (BB, 2013a).

In 2011, the volume of business done with beneficiaries of the DRS strategy, after implementation of the Regional Sustainable Development Strategy Business Plan, reached a total of R\$ 24,052 million. Seeking to improve the credit portfolio performance and contribute to the profitability of the DRS business strategy beneficiary clients, studies were developed to identify the agencies, products, activities, and beneficiaries with high exposure to credit loss and to develop plans to mitigate the identified risks. Efficient activity in DRS business portfolio repayment management resulted in a default rate of 0.6% in December 2011 (BB, 2012).

Table 2 DRS Business Results 2008-2011

Business				
Results	2008	2009	2010	2011
DRS Business Volume (in R\$ millions)	4,676	7,803	13,299	24,052
Default (in %)	1,9	1,9	1,4	0,6

Source: BB (2012).

By May 2013, the DRS strategy resulted in 4,098 Business Plans implemented in the 4,111 municipalities attended, serving about 1,470 thousand beneficiaries (BB, 2013b).

# **6.3 Banking Correspondents**

The offer of financial services by companies, whose main activity is not financial, has grown at an accelerated rate in the last years. New channels, such as banking, real-estate, and fluvial correspondents, have significantly expanded their presentation in many ways by offering services through retail outlets, commercial establishments, lottery houses, post-offices, notary offices and on water craft. Using partner infrastructures, banks amplify their presence in the many geographic areas in order to offer financial services.

Banking correspondents offers the population convenient access to banking services. Correspondents have become an alternate way for retail banks to offer services and to expand through new sales points, reaching a part of the population that as of yet does not have access to banking services and permitting geographic growth at a smaller installation cost. The growth of alternative channel use by clients makes readapting the agency work force, increasing focus on business, and enlarging the fluidity of banks possible since it permits attending the client by means of channels scattered to the most diverse points of the country.

Partnerships between banks and lottery houses, post-offices, supermarkets, and drugstores are examples of banking correspondents that have low cost as an advantage over the traditional bank branch. According to the *Brazilian Banking Federation* - FEBRABAN (2013), in 2000-2012 the number of correspondents in the country increased from 19,000 to 161,000 service points. Banking correspondents attend a population that does not require all the services of the traditional bank branch and that does not need a permanent relationship with a bank, such as in the maintenance of a checking account.

#### 6.3.1 Fluvial Correspondents

In November 2009, Bradesco Bank, Brazil's largest private bank, began to operate the first fluvial banking agency installed on the watercraft, *Voyager III*, which sails the Solimões River in the Amazon region on a 1,600 km trajectory. It attends 50 communities and 11 municipalities with a total population of about 250 thousand people. It is possible to open accounts, check balances, make withdrawals, deposits, transfers, and account payments, apply for loans, buy pre-pay cell phone credit, and receive credit cards. The watercraft makes the seven-day roundtrip up the Solimões River twice a month.

Analogously, in 2010, Caixa Econômica Federal, Brazil's largest mortgage lender, inaugurated the bank's first boat-branch. Its objective is to service the river populations that live in communities on the banks of the Amazon Basin, thereby increasing its service options and banking inclusion. The boat-branch attends eight communities on the Solimões River between Manaus and Coari, covering an area larger than the states of Pernambuco and Sergipe together, and a population of 253 thousand residents. Caixa Econômica Federal offers services such as opening accounts, providing social financial services, such as PIS payment and transactions, Time of Service Guarantee Fund transactions, Unemployment Insurance, and others, home financing, and production oriented microcredit and products such as Construcard (credit card for construction purposes) and consigned credit with payment deducted from the employee's payroll.

The Bank of Brazil, South America's largest retail bank, initiative to install correspondents on boats began in the State of Amazonas where three craft have been in service since May 2011. In June 2012, the Bank of Brazil inaugurated the first fluvial correspondent in the State of Pará. The structure, which will make banking transactions possible, was set up on the *Rodrigues Alves IV* in partnership with Rede Ponto Certo. The craft, which serves as public transport for the local population, sails 574 km on rivers in the Amazon Basin between the cities of Belém and Santarém. Using satellite communication technology, cash and debit card transactions can be performed, even with the boat under way, with the same convenience and security offered by conventional branches.

# 7 Conclusions

This paper seeks to identify and characterize financial products and services offered by Brazilian banks that support the inclusion of population segments that are not served by the financial sector. The cases described in this paper demonstrate that the use of innovative approaches can lower transaction costs for the banks and clients and enhance the efficiency and reliability in which the delivery of products and services is made. In

the context of financial inclusion, this study contributes to amplify understanding of the characteristics of inclusive innovations implemented in the Brazilian financial sector in order to set apart the offer of financial products and services.

Brazilian banking correspondents are internationally known as excellent examples of branchless banking. The non-banking correspondent model has grown rapidly, with Brazil's 165,000 correspondents now making it the world's largest network of its kind. Brazil is considered a world pioneer in experimenting with microcredit in the informal, urban sector, using instant credit and real interest, conditions that are today considered fundamental to operate in this sector. The DRS business strategy contributes to the generation of employment and income as well as the adoption of practices that permit an increase in social and environmental indicators with sustainable, inclusive solutions, always done together with partners in a process called "concertation".

The concept of financial inclusion remains under constant perfection regarding the variables used to define it as well as the incorporation of other pertinent factors. It is necessary to recognize that financial inclusion does not necessarily require the effective use of financial services by the public, but the real possibility of using such services if adapted to their needs. The decision to use them or not belongs to each individual. Another consideration relates to the idea that the use of financial services should be sustainable in the sense that they guarantee balance to society, the environment, the financial system and, individually, the users while considering the concept of sustainability in its three dimensions: social, economic, and environmental.

The concept of inclusive innovation is relatively new, and the traditional mechanisms to promote sustainable development should be adapted to the characteristics of the poor and of the excluded in order to increase the potential of these initiatives. Inclusive innovation does not necessarily consider highly technological innovation – it also considers low technology; business models, process efficiency, and delivery models – and technologies that can potentially be used in developed and developing nations, not only low-income countries (UNCTAD, 2013).

The aggregated purchasing power of low-income people represents an opportunity for organizations to participate in this market segment. However, to serve the poor population, organizations need to understand the socioeconomic conditions in which low-income people live and work.

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