



Women entrepreneurs as agents of change: A comparative analysis of social entrepreneurship processes in emerging markets

Eugenia Rosca^{a,*}, Nivedita Agarwal^b, Alexander Brem^{c,d}

^a Department of Management, Tilburg School of Economics and Management, Tilburg University, Warandelaan 2, 5037 AB Tilburg, Netherlands

^b Chair of Technology Management, Friedrich-Alexander-Universität Erlangen-Nürnberg, Dr.-Mack-Str. 81, 90762 Fürth, Germany

^c Institute of Entrepreneurship & Innovation, University of Stuttgart, Pfaffenwaldring 19, 70569 Stuttgart, Germany

^d Mads Clausen Institute, University of Southern Denmark, Alsion 2, 6400 Sonderborg, Denmark

ARTICLE INFO

Keywords:

Social entrepreneurship
Women entrepreneurship
Inclusive business
BoP
Emerging economies

ABSTRACT

In recent years, social and women entrepreneurship have become two growing fields of entrepreneurship research. In the context of social entrepreneurship, earlier research indicates that women are a better fit for leading social enterprises. However, the relevance of gender in the field of social entrepreneurship is underexplored and calls for further research, framing the mainstay of this study. Through a multiple case study approach employing four firms from two emerging markets – India and Colombia – we analyze how women entrepreneurs engage in social entrepreneurship processes in uncertain Base of the Pyramid environments. We use the effectuation lens to investigate the entrepreneurial journey and decision-making logics employed at various stages of the venture development. Findings show that women social entrepreneurs are highly motivated concerning social issues. Also, women entrepreneurs show a subtle transition between the two approaches of causation and effectuation during the venture creation processes. This study highlights the specific challenges that women entrepreneurs face in the emerging market context and the inclusive strategies they employ to enhance socio-economic development.

Introduction

C. K. Prahalad coined the term “Bottom/Base of the Pyramid” (BoP) and was amongst the first few researchers to realize the economic potential existing in the vast rural and poor population living in emerging markets (Prahalad, 2005). Since then, the growing importance of the emerging markets and the BoP population have attracted the attention of researchers and practitioners globally. Concepts such as social entrepreneurship and inclusive innovation have gained momentum as key drivers for developing and implementing new ideas and opportunities which have the potential to engage disadvantaged and excluded members of society (Bruton et al., 2015; George et al., 2012). Social entrepreneurs who target emerging economies are employing inclusive strategies such as the creation of job opportunities, as well as the enhancement of skills and productivity to enable deprived populations to not only participate as potential customers but also as suppliers and producers (Heeks et al., 2014; Kahle et al., 2013).

Advancing this field further, scholars from gender and diversity fields have argued that in contrast to men, women are better suited to employ inclusive strategies and lead social enterprises due to their

feminine competencies of being more compassionate, empathetic and emotional (Clark Muntean & Ozkazanc-Pan, 2016). Such female entrepreneurs play a significant role in socio-economic development and poverty alleviation (Kimbu & Ngoasong, 2016). However, given that most of the studies on women entrepreneurship are contextualized in developed world setting (Yadav & Unni, 2016), these claims are still to be validated from an emerging economies perspective. In addition, the turbulent and uncertain environment of emerging economies presents vastly different challenges for female entrepreneurs including dealing with existing institutional voids, extreme poverty, scarcity of skills and entrepreneurial education and the low status of women in the socio-cultural set up (Goyal & Yadav, 2014).

Therefore, to advance research on women entrepreneurs in emerging economies context, this study aims to investigate the entrepreneurial journey of women entrepreneurs while navigating through the challenges of emerging economies. In particular, this study addresses the research question, how do women engage in the social entrepreneurship process in uncertain BoP environment?

Drawing on Duke's (2016) argument that the entrepreneurial process in emerging markets is “...a messy process characterized more by the

* Corresponding author.

E-mail addresses: E.Rosca@tilburguniversity.edu (E. Rosca), nivedita.agarwal@fau.de (N. Agarwal), alexander.brem@ets.uni-stuttgart.de (A. Brem).

nonlinear, creative, and entrepreneurial processes used to construct opportunities than by the more conventional and linear opportunity exploitation ones" (p. 510), effectuation theory is used as a lens to understand the development of social ventures by female entrepreneurs. The dominant decision-making logics of causation and effectuation will be compared and contrasted along the way. Also, the concept of inclusiveness is used to map performance criteria, specifically concerning the impact of the selected social ventures on poverty reduction (Nahi, 2016).

The study follows a multiple case study approach and qualitatively analyses four social enterprises initiated by women entrepreneurs from Colombia and India. Both these countries are ranked as promising emerging nations by FTSE (FTSE Country Classification, 2018). Moreover, the healthcare sector is selected for the study given its high interlinkages with socio-economic development and poverty reduction causes (Rosca et al. 2018; Prabhu and Jain, 2015). All selected four cases are at different stages of development and have been founded by local females. The local aspect was considered to be important because it would be most likely to mirror the creation of new opportunities, unlike cases of foreign entrepreneurs, far away from the field, frequently outsourcing the consumer-part to locally embedded organizations (Duke, 2016).

This paper is structured in five sections. Subsequent to this introduction, a review of relevant theoretical concepts is presented. The research design is described in section three. Findings are contained in section four and the last section summarizes the key insights, theoretical implications, limitations and further research avenues.

Theoretical background

Social entrepreneurship in emerging markets

Poverty, lack of infrastructure and a weak regulatory framework in emerging markets deprives the BoP customers of basic benefits and services such as healthcare and education. This dismal picture of existing divide has given rise to a new breed of entrepreneurs called "Social entrepreneurs" who use this divide as a potential opportunity to serve the poor and create social impact. Social entrepreneurs use innovative business models to orchestrate the available resources and offer basic services to the masses in a sustainable way (Mair et al., 2007). Creating social impact is the main goal of such entrepreneurs and generating economic value is often seen as a means for providing social value in a sustainable manner. Thus, social entrepreneurs strive to create economic value through the development of the underprivileged section of societies (Doherty et al., 2014, Mair et al., 2007). Prior research shows that social entrepreneurship has played a significant role in economic development and poverty alleviation, specifically in the emerging economies context (Agarwal et al., 2018; Kimbu & Ngoasong, 2016). These entrepreneurs employ inclusive strategies such as the creation of job opportunities, enhancing skills and productivity, and increasing the participation of deprived populations not only as potential customers but also as suppliers and producers (Heeks et al. 2014; Kahle et al. 2013). These strategies help them address different facets of poverty and deprivation existing at the BoP and enable explicit focus on the processes and dynamics of poverty rise and

persistence (George et al., 2012; Si et al., 2015).

Women as social entrepreneurs

Already since the early 2000s, women entrepreneurship is considered a key source of innovation and growth. In the United States, women entrepreneurship is regularly considered the fastest growing venture section (Becker-Blease and Sohl, 2007). Similarly, in the literature, the topic of women entrepreneurship has garnered much attention (de Bruin et al., 2007; Yadav & Unni, 2016), specifically in exemplifying the role of women entrepreneurship in boosting economic development and alleviating poverty. Recently, scholars from gender and diversity fields have also compared the performances of female and male social entrepreneurs and found that, due to feminine traits of being more compassionate, empathetic and emotional, women are in a better position to lead social enterprises than men (Clark Muntean & Ozkazanc-Pan, 2016). Scholars primarily using cross-sectional approaches have explored women entrepreneurship from different perspectives such as growth strategies, networks, social capital and performances (de Bruin et al., 2007) as well as from different theoretical frameworks like entrepreneurial intention, opportunity recognition and effectuation, among others.

There have been some limited attempts to explore the uniqueness of women entrepreneurship within the entrepreneurial journey. For example, Sullivan and Meek (2012) used the four stages of the entrepreneurship process, namely motivation, opportunity recognition, acquiring resources and entrepreneurial success/performance and highlighted the key influential factors within each of these stages. Their study showed that unfavorable working conditions and work-family conflicts mostly drive women towards entrepreneurship. Social environment and cultural context are highly influential in recognizing the opportunity. However, in some cases they also lead to negative repercussions on 'self-perception' and 'personal ambition' where women develop self-conceived barriers towards entrepreneurship owing to their low social status. Also, during the stages of acquiring resources and evaluating the performance, women are more prone to use personal funding and get less influenced by external factors such as financial outcomes (Sullivan & Meek, 2012).

While the topic of women entrepreneurship has made significant progress in recent years, there are still important issues which need to be understood further in order to provide valuable and insightful managerial guidance to women social entrepreneurs. This becomes evident also from the findings of recent literature reviews as shown in the Table 1. First, current studies tend to focus on developed economy contexts so it remains unclear how women entrepreneurs navigate through the uncertain environment of emerging economies (Moreira et al., 2009; Vita et al., 2013; Bruin et al., 2007; Gundry et al., 2002). Second, there is a need for a deeper understanding of the inclusive strategies that women are likely to adopt in their quest to address ingrained social issues (e.g. poverty, health sanitation, unemployment etc.). This study aims to advance research efforts in this area and explore the entrepreneurial journey of women social entrepreneurs in emerging economies, with a special focus on the inclusive strategies adopted to navigate uncertain and dynamic institutional settings.

Table 1
Recent literature reviews on women entrepreneurship.

Authors (Year)	Identified Research Gaps
Gundry et al. (2002)	Cross-comparison studies in different sectors, industries, cultures are needed, particularly research that explores women entrepreneurship in emerging markets.
Bruin et al. (2007)	There is a need to explore the unfamiliar contexts of transitioning/developing economies.
Vita et al. (2013)	Significant amount of research has been focused on the analysis of characteristics of women entrepreneurs in developed markets.
Yadav and Unni (2016)	Studies are restricted within national boundaries mostly in developed countries. Transnational studies are required for further enrichment of the field.
Moreira et al. (2019)	The current understanding is primarily based on Western settings and might not be true for women entrepreneurship in developing countries and hence this needs further exploration.

Table 2
Studies on women entrepreneurship in different geographical contexts (in emerging economies).

Author (Year)	Region/Context	Key Focus/Findings
Kantor (2002)	South Asia	Examines how culturally specific power relations influence women's opportunities for success in South Asia. Identifies cultural sensitivity as key goal for higher success rates.
Tan (2008)	China	Compares roles of men and women in high tech industries in China.
Amine and Staub (2009)	Sub-Saharan Africa	Study focuses on environmental barriers (socio-cultural, economic, political, legal, technological) and emphasizes the need to change negative social beliefs, attitudes, and behaviors as well as improving systems and environments.
Datta and Gailey (2012)	India	A case study analysis focusing on elements of empowerment and individual perceptions of empowerment.
Bhardwaj, R.B. (2014)	India	Focuses on women entrepreneurship as a social tool for uplifting people living below the poverty line.
Anggadwita et al. (2015)	Indonesia	Study provides concepts and dimensions from an Islamic perspective. Survey of 150 women entrepreneurs to provide a conceptual framework of women entrepreneurship in Indonesia.
Kothari (2017)	India	Analysis of 25 cases of women entrepreneurs to identify influential factors and derive policy implications.
Lindvert et al. (2017)	Pakistan	Women entrepreneurs play an important role in the development of society, especially in developing countries and highlights that the access to social capital is often limited to the family network.
Katre (2018)	India	Explores the socio-cultural constraints experienced by the women entrepreneurs. Provides policies for cooperative women entrepreneurship providing social change.

Several studies have explored the topic of women entrepreneurship in emerging market context, as shown in Table 2. Studies such as Amine and Staub (2009), Katre (2018) and Lindvert et al. (2017) investigate the social and environmental constraints that female entrepreneurs experience, which are specific for emerging markets. This includes a lack of skills and entrepreneurial education, resource scarcity, institutional voids, as well as low self-esteem or low status of women in the socio-cultural set up (Goyal & Yadav, 2014). Moreover, cultural sensitivity and general social beliefs are shown to have a strong effect on women empowerment in general and their entrepreneurship activities in particular (Anggadwita et al., 2015; Amine & Staub, 2009; Kantor, 2002). Moreover, Lindvert et al. (2017) found that family network and ties play an important role in women entrepreneurship processes in emerging markets, for example they facilitate access to capital. In this study, following the argument that women entrepreneurship plays a significant role in socio-economic development and in alleviating poverty, we aim to investigate how women create their social ventures in the uncertain environment of emerging markets. Moreover, many studies have been conducted in the specific context of India. This study explores two enterprises in this context and expands the current focus in the literature through an investigation of the emerging economy context in Colombia. As such, the study can draw on valuable insights from literature that is concerned with the Indian context and compare and contrast them with the context in Colombia.

Effectuation theory

Research on entrepreneurial processes changed since Sarasvathy (2001) introduced the alternative ways of venture creation through the causation-effectuation logics. This reasoning also found its way to more dynamic models of new venture creation (Becker et al., 2015). This new way of thinking also led to very popular approaches like the Lean Startup methodology by Ries (2011), which is highly driven and supported by the effectuation-logic (Frederiksen and Brem, 2017).

Effectuation Theory (ET) is one of the frequently used theories in recent entrepreneurship literature to investigate the approach and logical steps that entrepreneurs undertake in order to create and sustain their ventures. In contrast to the traditional model of causation which assumes that entrepreneurs engage in rational goal-driven behaviors when pursuing entrepreneurial opportunities (Perry et al., 2012), ET emphasizes a processual approach where entrepreneurs focus on using the given sets of means and selecting between possible effects that can be created with those means (Sarasvathy, 2001; Lingelbach et al., 2015). It primarily focuses on individuals who start with a generalized aspiration and take advantage of environmental contingencies while creating a venture.

The theory of effectuation addresses entrepreneurial behavior and distinguishes between two main decision-making logics: causation and

effectuation (Sarasvathy, 2008). On the one hand, causation refers to the goal-oriented environments of decision-making where objectives are set, followed by distributing the means to reach the objectives. On the other hand, effectuation starts with assessing the means and the resources available, then looking further into the potential outcomes that may be realized with the available formulated means. Fischer (2012) offers a detailed comparison of the behaviors underlying the two contrasting logics of causation and effectuation (see Table 3).

The effectual approach to entrepreneurship shows four main characteristics (Sarasvathy 2001, Chandler et al. 2011). The first one is experimentation; this refers to the focus on short-term experiments in which entrepreneurs think about how to best use the means at hand and controlling rather than predicting the future. The second characteristic is affordable loss, where entrepreneurs commit limited resources and investment, to an extent that is affordable to them with the aim of creatively using the existing means. Third is flexibility: in contrast to the causation logic, effectuators aim at exploiting the contingencies that arise unexpectedly rather than relying on pre-existing knowledge. Fourth is pre-commitments and strategic alliances where entrepreneurs strive towards creating a network of partners that includes various stakeholders for reducing uncertainty. This categorization marks the effectuation process as a multidimensional process where each characteristic influences different development stages in various way and to different extents (Lingelbach et al., 2015). It is argued that during the early stages of a venture creation, effectuation logic is more likely to be used while causation strategies are employed as the venture transitions to more predictable situations (Perry et al., 2012). Research has also shown that small entrepreneurial firms, like social ventures rarely use causation logic and effectuation logic is more applicable because of the resource constrain focus (Berends et al. 2014). The effectuation approach can also be observed in established firms. However, this is often due to high uncertainty in the respective field (Henninger et al., 2020).

Therefore, in line with prior research, which emphasizes the applicability of ET in environments characterized by high uncertainty (Sarasvathy, 2001) and considering that the entrepreneurial process in emerging economies is characterized as more creative, non-linear and opportunity based (Duke, 2016), this study employs ET to understand which of these contrasting logics women social entrepreneurs apply when creating their ventures. Following the study of Lingelbach et al. (2015), we employ a process approach to compare and contrast causation and effectuation logics across the different development stages of social enterprise development.

Research design

This study explores the entrepreneurial journey of women entrepreneurs in the highly uncertain institutional environments of emerging economies. In order to present the methodology in a clear and

Table 3
Behaviours underlying effectuation and causation logics.

Decision- making Logic	Behaviors
Effectuation (Fischer, 2012, Chandler et al., 2011; Sarasvathy, 2001)	Experimentation Multiple variations of a product or service are developed to arrive at a commercial offering Creation of multiple different product prototypes/ Delivering different services in the process of finding an offering Experiments with different ways to sell and/or deliver a product or service Use of different distribution channels /Use of different revenue models Changes the product or service substantially as the venture develops Affordable Loss Only limited amounts of resources are committed to the venture at a time Seeks out ways of doing things in inexpensive ways Limits the resources committed to the venture in to what could be lost Develops product or service using only personal resources Flexibility Responds to unplanned opportunities as they arise Rapidly changes the offering or revenue model of the venture as new opportunities arise Adapts what they are doing to the resources on hand Focuses on what is readily available when deciding on a course of action Avoids courses of action that restrict flexibility and adaptability Consciously rejects courses of action that will lock them in (relationships or investments) Precommitments and Strategic Alliances Enters into agreements with customers, suppliers, and other organizations Negotiates with other parties prior to having a fully developed product or service
Causation (Fischer, 2012)	Identifies an opportunity before developing anything Gathers information about customer needs to identify a gap /Analyzes technological trends Identifies and assesses long-run opportunities in developing the firm Identifies and assesses long-run opportunities in developing the firm Calculates the returns of various opportunities Develops a business plan Organizes and implements control processes Establishes an internal reporting structure (management accounts and monthly reporting) Designs and implements a clear organizational structure Gathers and reviews information about market size and growth Interviews potential customers Gathers information about competitors and analyzes their offerings Uses data about competitors as an input into key decisions Expresses a vision and/or goals for the venture Develops a project plan to develop the product and/or services Monitors product and market development in relation to a project plan Writes up a marketing plan for taking the products/services to market Implements and monitors marketing activities in accordance with a marketing plan

systematic manner, this section contains several sub-sections on the research strategy, industry and geographical context, case selection, data collection and analysis, validity and reliability aspects.

Research strategy

In other to address the research objective, a multiple case study design approach is employed. The case study approach is especially suitable for research streams in early stages of development and for research questions involving 'how' and 'why' (Yin, 2003). The unit of analysis is the individual women-led enterprises and the specific steps and activities taken throughout the entrepreneurial journey form the venture inception until the recent stage. The chosen design allows for in-depth, detailed examination of the venture development processes and allows for extensive study of contextual information for each case (Eisenhardt, 1989). The multiple case study design in two different institutional settings in emerging economies is valuable since it enables the comparison of different strategies employed by women entrepreneurs for developing social impact via economically viable enterprises in turbulent institutional settings. We have chosen two ventures from two different emerging economical areas in one industry to fulfill the criteria of choosing "unique cases" (Yin, 2003), which can later be generalized.

Industry context: healthcare sector

The study is focused on the healthcare sector in two key emerging economies, India and Colombia. The focus on healthcare is driven by several important aspects. First, health and poverty are closely inter-linked: "poverty leads to ill health and ill health maintains poverty" (Peters et al., 2008, page 161). On the one hand, poor people are unable to access basic healthcare services due to the high costs of treatments and, on the other hand, poor health is a precursor to poverty (Madi & Hussain, 2007). This is also one of the reasons that most of the population with ill-health in emerging economies is concentrated in the poorer sections of society where accessibility to basic healthcare services is scarce, aggravating the poverty situation. In emerging markets, where social insurance is a luxury, most of the healthcare costs, including the treatment, transportation and medication costs, are all borne by the patients and thus directly impact their disposable income. In case of serious illness of the breadwinner of the family it impacts the whole family and in worse cases leads to financial hardships like loss of wages, selling of personal assets or incurring loans at high interest rates.

Second, current studies also show that several strategies can be more effective in reaching the BoP with healthcare services than many government services or international aid organizations, including community campaigns and BoP engagement (Peters et al. 2008). Many of these services are provided by small-scale entrepreneurial ventures

that offer accessible and affordable healthcare services which have a direct impact on poverty alleviation and economic development of the region and hence frames an appropriate sector for research at hand. Third, social enterprises in healthcare sector address the so-called “last-mile problem” in emerging economies by delivering services to remote areas where government has failed to do so (Prabhu and Jain, 2015). Moreover, healthcare has been regarded as a key sector for inclusive innovations due to its direct and indirect effects on economic development and poverty alleviation (Rosca et al., 2018).

Empirical (Geographical) context: India and Colombia

The focus on both India and Colombia is based on three considerations. First, numerous studies have been conducted to understand the empirical context and behaviors for social entrepreneurs in India (e.g. see George et al., 2015; Prabhu and Jain, 2015; Angeli and Jaiswal, 2016), while much less is known about the context in South America (for exceptions see Duke, 2016; Vazquez-Maguirre et al. 2017). The focus on both Indian and Colombian enterprises enables a comparative analysis of institutional settings and entrepreneurial responses in two different emerging economies. Second, women entrepreneurship is an underexplored field in both these countries. Third, both India and Colombia are major, forthcoming emerging economies and have a large percentage of the population living under the poverty line, without access to basic healthcare. A closer look at poverty, health and gender gap indicators based on World Bank and United Nations data reveals that both countries are developing rapidly, yet, they still face significant challenges associated with high rates of poverty and inequality (see Table 4). While the actual indicators for Colombia are more optimistic, the official strata division¹ reveal that 89% of the population is divided in strata 1, 2 and 3 considered to be poor (Hudson, 2010).

Case selection

The selection of the cases was primarily focused on local women-entrepreneurs. While there are more enterprises founded by women-foreigners in developing countries (e.g. MedX Care – Duth founder), finding social enterprises founded by local women was very challenging. The final sample of four enterprises entails award-winning, women-founded and led social enterprises with clear social impact/poverty elements in their mission. An overview of the four cases can be found in Table 5 and a detailed description in the Appendix A.

Besides focusing on women-led enterprises, the final selection was based on the following four criteria. First, all enterprises address issues of social impact and poverty alleviation and have won awards in different social entrepreneurship contests and recognition events. Both Colombian cases, Fruto Bendito and KitSmile have won social impact awards by ReCon foundation, being recognized in Colombia for their significant potential to provide poverty alleviation. Both enterprises have also been selected for an international mentoring program at University Externado in Bogota, Colombia due to their efforts. In 2013, Banka BioLoo (Indian case) won the Sankalp Award for social enterprises and the founder also received the Cartier's Women's Initiatives. Dr. Johar, the founder of Sughavazhvu (Indian case), has also been recognized for her efforts at various international events. She is a SEAD entrepreneur, ASHOKA fellow and recipient of Chandra Social Scholarship Award (2014). These recognitions show that the four selected enterprises have already achieved some level of success. Second, all cases are at different stages of development which was appropriate to explore different dynamics, interventions and outcomes depending

¹ Colombia is officially divided in six strata which groups population across similar socio-economic characteristics. According to this classification extensively employed locally, only 10% of the population lives in strata 5 and 6, generally in well-developed areas with great access to services (Hudson, 2010).

Table 4

Comparing the two selected emerging economies – India and Colombia.

Poverty, health and gender indicators	India	Colombia
<i>Indicators from the World Bank</i>		
Mortality rate, under-5 (per 1000 live births), for 2015	44 (South Asia – 49)	16 (Latin America and the Caribbean - 18)
Poverty headcount ratio at national poverty lines (% of population)	21.9 in 2011	4.5 in 2016
Hospital beds (per 1000 people)	0.7 in 2011	1.4 in 2011
<i>Indicators from the United Nations Human Development Reports (all from 2018)</i>		
Rank in the Human Development Index	130 (0.640)	90 (0.747)
Life expectancy at birth (in years)	68.8	74.6
Working poor at PPP\$3.10 a day (% of total employment)	42.9	8.4
Gender Development Index (GDI)	0.841	0.997

on the venture development stage (see Fig. 1). As part of this aspect, the four cases also entail different forms of governance structures. While all enterprises consider themselves and are regarded as social enterprises, three of them are officially registered and function as non-profits (NGOs) while the one in the later stages of development (Banka BioLoo) functions as a traditional firm. Third, all enterprises are founded by local women. This is important for our study because local founders are more likely to employ elements of opportunity construction as opposed to foreign entrepreneurs far away from the field, frequently outsourcing the consumer part to locally embedded organizations such as NGOs (Duke, 2016).

Data collection and analysis

A large amount of secondary and primary information was collected in order to understand the process, steps and choices made during the product development process. In order to secure the quality of the results, multiple data collection techniques were employed to ensure triangulation of evidence (Eisenhardt, 1989). The primary data was collected through semi-structured interviews with the key decision makers, while secondary data was collected through media articles, press releases, website of each enterprise and extensive diagnostic reports and presentations for the Colombian cases. Interviews were recorded and transcribed to facilitate data analysis. In order to facilitate the case study replicability (Gibbert et al., 2008), a case study database with all notes, documents, transcripts recorded during the research stages was set up. Data analysis was guided extensively by analytical constructs from the literature. First, four stages of entrepreneurship process based on Sullivan and Meek (2012) and Perrini et al. (2010) were employed: motivation and opportunity identification, opportunity exploitation, acquisition of resources and entrepreneurial success/performance. For each stage, key constructs from effectuation and causation behaviors were mapped (based on constructs from Table 3). Using the analytical constructs, similarities and differences between the cases were identified (Eisenhardt, 1989). An additional focus of the analysis was to understand the enabling and hindering factors for women entrepreneurship in highly uncertain environments. This was done by mapping particular aspects related to being a woman entrepreneur. Moreover, since current studies suggest that inclusion may be needed to drive social impact in low-income communities (Nahi, 2016), the inclusion mechanisms for each enterprise were explored drawing on the typology of inclusion scale developed by Heeks et al. (2014) (inclusion by intention, consumption, impact, process, structure and post-structure).

Validity and reliability aspects

The study employed numerous tactics to comply with reliability and validity aspects (Gibbert et al., 2008). For internal validity, analytical

Table 5
Overview of the selected cases.

Founding Year	Sugha Vaszhu 2009	Banka Bio 2012	Fruto Bendito 2015	KitSmile 2014
Founder	Dr. Zeena Johar	Namita Banka	Camila Cooper	Leidy Cuestas and Lina Maria Camargo
Country	India	India	Colombia	Colombia
Enterprise focus	Network of primary healthcare clinics	Manufactures, installs, maintains and even rents "bioloos" (the toilets)	Provides baby cribs to new mothers, provision of educational services together with the crib.	Provides a rehabilitation kit (with 3 modules for nutrition, rest and exercises) and associated services for children with Cerebral Palsy (CP)
Type of Enterprise	Non-Profit	Small, private enterprise	Foundation, aiming to become social business	Foundation, aims to become social business
Addressed challenge	Lack of accessibility of quality healthcare service in rural areas due to lack of resources	Lack of appropriate sanitation solutions, especially in rural areas, where only 10% of people have access to proper sanitation solutions. We seek to address the malaise of open defecation and counter the ill-effects of that.	Lack of proper conditions for growing infants in rural/urban BoP communities, high infant mortality among BoP households.	Motor and cognitive development of children with CP and also empower parents in disability management. This birth condition is more likely to happen to BoP families.
Target customer	Rural (hard to reach), illiterate population	Different groups of customers including schools, villages, small communities, resorts, construction sites, inlands, Indian railways, defense, and industrial factories markets in India	New mothers, families in BoP communities.	Children/families with CP in Colombia - but they do not buy it, mostly they get it as a donation
Data collected	Interview, press releases, media articles, website.	Interviews (2), press releases, media articles, website.	Interviews, field visit, consulting report and presentation with diagnostic of the company, discussions, website.	Interviews, consulting report and presentation with diagnostic of the company, discussions, website.

constructs were drawn from the literature on effectuation theory and social entrepreneurship. For construct validity, we combined primary with secondary data in order to triangulate different pieces of information. We also contacted the enterprises via email with follow-up questions and checks to avoid misinterpretation and misunderstanding. For external validity purposes, we selected four cases of female entrepreneurship at different stages of development but from two different countries. A replication logic was employed to analyze the cases and a project description/background was provided for each case. To comply with reliability aspects, we developed a case study database with all sources of data.

Findings

In this section the findings are discussed with respect to the four stages of an entrepreneurial process: motivation and opportunity identification, opportunity exploitation, acquisition of resources/partnerships and success/performance (Sullivan and Meek 2012; Perrini et al. 2010). Success/performance is measured based on the attained inclusiveness level as per Heeks et al. (2014).

Phase 1: Motivation and opportunity identification

All cases start with a clear problem or a gap familiar to the founders. Founders have created their respective ventures in order to address a specific social problem existing in BoP communities. In two of the four cases the entrepreneurs have lived through a similar personal experience and this experience enabled them to develop empathy with the beneficiaries and easily communicate and connect with them.

The projects/entrepreneurs start with a clear problem with which they identify strongly. Finding a solution to the identified problem becomes part of their identity and personal mission. For example, in the case of KitSmile, the founder founded the enterprise to address a problem close to her heart – she personally met a little girl from a low-income family, from a remote village in Colombia, she visited. The family did not have any opportunity to offer their daughter a proper treatment. Moreover, the family was not fully aware of her health condition. This inspired the founder to develop a solution to help this little girl and improve her living condition. Similarly, in the case of Fruto Bendito, the founder started the venture as she became a mother. The experience of motherhood developed a strong empathy for the numerous mothers across Colombia who cannot afford proper care for their infants. Moreover, another motivation for her to start the venture was that she wanted a flexible working schedule to devote sufficient time to her growing child. She started by collecting the ideas for venture development, product development and potential revenue sources from other similar success stories internationally during her travel (e.g. the baby cribs in Finland and the mommy's box from Mexico). The founder of BankaBioLoo was well-aware of the sanitation challenge in India and its importance and influence on a woman's well-being, simply because she is a woman herself. She was motivated to find a solution to this challenge while developing her own enterprise. Noteworthy is that, in each of these cases, the problem addressed had significant implications in particular for women (e.g. sanitation in India, infant mortality in Colombia, caretaking of CP children).

In contrast to these three cases, the fourth case of SughaVazhu founded by Dr. Zeen Johar was motivated by her prior professional experience and personal career goals. Before starting her venture, Dr. Johar did a detailed market study on the Indian healthcare sector and identified a lack of primary healthcare services as the main cause of growing healthcare problems like increasing cases of diabetes, cancer and cardiovascular diseases in India.

Family support served as an essential enabling factor for female entrepreneurship. All women in our sample received great support from their families.

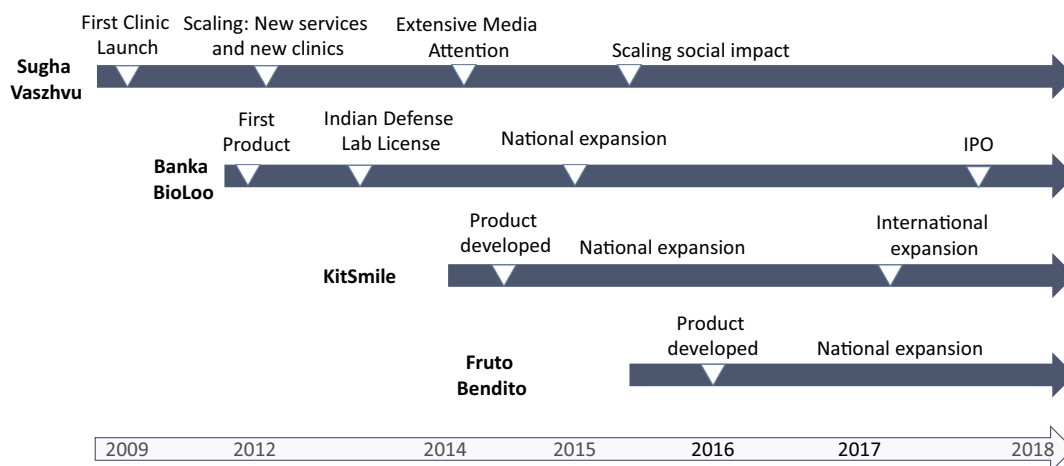


Fig. 1. Development stages of the four enterprises - Milestones.

Phase 2: Opportunity exploitation

All enterprises started as non-profit organizations, with the aim to become self-sustaining social enterprises in the long term. This transition presented numerous challenges to these women entrepreneurs and inspired them to experiment with multiple revenue streams, partnership models and distribution channels. These ventures started with a basic concept with limited functionality; additional features were introduced overtime. KitSmile started with the idea of the kit, but then they realized that families also need support services around the kit – to help the families diagnose CP, give training to the mothers and provision of therapists to treat the kids. In the case of Sugha Vaszhvu, it took several rounds of community visits and trials to understand the needs of the community and develop a suitable revenue and distribution model.

“We tried a primary care package earlier on but that did not work very well and out of that we realized the biggest need in the community for subscription base package is for chronic diseases. Initially when we started charging we offered the services for Rs 50 per visit which did not work out but right now we charge a fee of Rs 15 per visit. Now we see repeat visits, but initially we had to educate them and letting them know the benefits they are getting” - Research & development manager, Sugha Vazhvu.

Sugha Vaszhvu is also experimenting with different distribution channels such as telemedicine, mobile clinics, semi-urban clinics and hub & spoke model. Similar to SughaVazhvu, Banka BioLoo also targets a wide range of customers and is experimenting currently with different customer groups, distribution channels and revenue models in order to reduce risks and uncertainty. They use Corporate Social Responsibility (CSR) initiatives of the firms to finance their eco-friendly toilets for the BoP customers.

Camila from FrutoBendito focuses more on experimenting with social media channels and fairs to promote and sell her product. Rather than following the traditional cross-subsidization model, she is experimenting with relatively new delivery channels (e.g. online sales) and novel strategies such as “buy 1, donate 1” model. While KitSmile also experiments with multiple delivery and sales channels, they entail an original one. KitSmile receives money for kits from companies as a part of their activities. In return, they provide digital marketing offerings to these companies

These cases also illustrate that entrepreneurs commit only limited amounts of resources to the venture during the opportunity exploitation stage. For example, in the case of Sugha Vaszhvu, clinics are not owned but rented, they do not hire trained professionals, but go with AYUSH – local medical practitioners, while Banka BioLoo developed the technology behind the BioLoo by leveraging existing products in the market and buying a license from the Indian Defense Lab for the biodigester

technology. Moreover, when building sanitation facilities for new villages, the entire community and ecosystem of partners is mobilized.

“When we build a toilet with engineers without borders, the students help with labor, the families help, we provide the material. All the parties collaborate.” – Director, Banka BioLoo

These entrepreneurs also seek out ways of doing things using inexpensive ways to limit the resources committed to the venture. For example, in the case of FrutoBendito production is fully outsourced to a company to ensure lower costs, yet, this means that a higher number of cribs needs to be ordered at once so that the order can be bundled. Along similar lines, before Banka BioLoo enters a new market/community, they first develop a connection with local non-profits or community associations. All the four cases show extensive use of existing free services provided by local hubs, platforms, accelerators, social entrepreneurship programs (e.g. Business Call to Action by UNDP, EMI BoP Challenge at Externado University, ReCon social entrepreneurship Awards and support, Banca Bilbao Social Entrepreneurship award). Entrepreneurs extensively leverage their personal networks to develop products or services and mostly use their personal resources. Personal networks composed of family and friends proved to be instrumental for the venture development processes. It is noteworthy to mention that all entrepreneurs are external to the BoP environment but natives in their country. This is illustrated by the example of FrutoBendito where Camila, the main entrepreneur, extensively used her personal/family connections to find the right people at the Ministry of Health. She uses her apartment as a temporary storage. She found the manufacturing firm who produces the cribs through her father's company. She also used the support of the university-accelerator programs to develop her business model. Our findings show that extensive use of personal network of the social entrepreneur can be a strong determinant of success. The best example of how the entrepreneurs still take advantage of the opportunities as they arise, is illustrated by FrutoBendito founder, Camila who met a big celebrity in Colombia while traveling. She asked this celebrity to post on social media about the baby crib in order to reach the mass population.

Phase 3: Acquiring resources/partnerships

As the enterprises enter this stage, they become more formalized, entail a more structured internal organization with clear vision and strategic objectives. Yet, they seem to maintain a certain level of flexibility by responding to unplanned opportunities as and when they arise. Entrepreneurs show willingness to change the offering or revenue model of the venture based on the opportunities and resources at hand. For example, Sugha Vaszvuv overtime realized that the increasing cases

of chronic diseases (diabetes & hypertension) are the ones that require frequent check-ups and can be targeted for financial sustainability. Moreover, all enterprises seem to engage actively in developing new partnerships, alliances and enter into agreements with customers, suppliers, and other organizations. Sugha Vaszhvu have special engagement initiatives. One of them is identifying local leaders within the communities, like school headmasters, postmasters, panchayat. Local leaders are people who are educated and have some say in the community. They partnered with University of Pennsylvania (School of Nursing) and developed primary care protocols, which helped in providing standardized and comprehensive services throughout their clinics. Similarly, FrutoBendito works with government officials who select the people to receive the baby box and the founder herself goes out to the communities with government employees. KitSmile partners with private enterprises by contacting individual firms, the government, individuals. Additionally, scaling up for some enterprises requires opening international markets and due to the sensitive nature of the product, the enterprises need to comply with international standards for healthcare in order to expand. The compliance with such standards requires a more systematic and formalized approach. However, being a woman entrepreneur in social set-up of a developing world can be challenging for acquiring resources and partnerships. As reflected in one of the quotes

"women – and I guess it's common across the developing world – face the unique challenge of making a mark for themselves in the men-dominated business arena. Access to banking channels, credit facilities, dealing with vendors and clients – all these are not easy for a businesswoman. As society and the economy are primarily dominated by men, women don't find the going easy. But times are changing, and the hurdles seem to be reducing. Today, Namita is seen as a strong votary of adequate and improved sanitation within the governmental and corporate arena"– Mr. Sanjay Banka (Husband of the founder), Director Banka BioLoo

Phase 4: Success / performance

Awareness camps play an important role in the success and increasing impact of these enterprises. For example, Banka bioLoo offers educational programs around sanitation issues, Sugha Vazhvu conducts several free healthcare awareness camps, KitSmile and FrutoBendito offer trainings around the quality of life for families suffering with CP and infant development issues, respectively. FrutoBendito even offers educational workshops that are supported by the government. These awareness campaigns act as key enablers to incorporate the local voices, find out about local resources and discover creative ways to bundle and combine existing resources to find solutions to new challenges (Baker and Nelson, 2005). In the case of healthcare, these feedback loops and community bonding are essential to co-create a solution to the patient's needs and generate trust between the parties (Angeli and Jaiswal, 2016).

Drawing on the typology for inclusion (Heeks et al. 2014), the four cases offer evidence of inclusivity in terms of intention, consumption and impact. They tackle serious problems and are inclusive due to the nature of the problem and the impact they create in local communities. Besides addressing sanitation issues, Banka BioLoo has created more than 500 jobs for BoP actors across India, offering pension benefits, health and life insurance, bank accounts and training. More than 940 families have been benefited by Fruto Bendito as they have been provided with the baby cribs and created awareness around infant mortality in BoP communities across Colombia. KitSmile has improved living conditions of more than 220 children of BoP families, suffering with CP. Sugha Vaszhvu, has touched the lives of more than 50,000 people living in rural areas across 57 villages.

Discussion and implications

This study explores four cases of women-led social enterprises set in the dynamic environments of India and Colombia. It uses the effectuation lens to investigate the entrepreneurial journey of female entrepreneurs and the different decision-making logics they apply to create their ventures.

Synthesis of key findings

Findings show that female entrepreneurs apply different approaches at different stages of venture creation. During the initial stage of motivation and opportunity identification they tend to follow more of a causation approach. Cross-case analysis show that women entrepreneurs set-up their ventures in response to a specific gap/problem which they have experienced themselves either personally or professionally, illustrating a causation approach. For example, in both the Colombian cases, personal experience was identified as the prime motivator for venture creation. Before starting the venture, the founder of FrutoBendito, researched similar offerings available internationally during her travel and collected information about their revenue streams. Similarly, in the case of Sughavazhvu, the founder did an extensive market survey to understand the root cause of growing healthcare problems in India and identified the lack of access to primary healthcare centers as one of the causes. Following a causation approach during the initial phase of venture creation is in line with the prior literature (e.g. Hart et al. 2016, Sinkovics et al. 2014) and similar to other social entrepreneurs. However, in context of emerging markets following this approach strictly and conducting a systematic market research could also be challenging due to the lack of reliable sources and statistical data. For example, in Colombia there is limited information on household income and therefore it was difficult for the entrepreneurs to estimate a reliable market size or segment the population.

As compared to the initial stage, in the opportunity evaluation and formalisation stage entrepreneurs adhere more to the effectuation approach. This could be due to the existence of institutional voids, lack of resources/skills and high uncertainties of BoP environment that pushes the entrepreneurs towards experimenting with means at hand and following the affordable loss principle. The analysis of the four cases shows that most of this experimentation happens in determining the revenue stream and distribution channels rather than product development phase. Based on past research, entrepreneurs start with a basic product/ service design but use the experimentation approach to find efficient and effective method to reach the masses in a more sustainable way. This is in line with the lean startup thinking, where a first minimal-viable-product is the goal for the founder in the experimentation process (Ries, 2011). Providing awareness and access to the BoP segment becomes important at this stage - evident from all the four cases that are using combination of various distribution channels in order to reach the end customer. Also, entrepreneurs tend to commit inexpensive resources and depend more on personal resources, contacts and networks. Sughavazhvu use inexpensive resources such as AYUSH workers (instead of certified doctors) who are then re-skilled to perform the tasks. They also use rented places to open their clinics. The founder of FrutoBendito extensively used her personal connections to support her business in various ways. Social platforms and especially support from the families are the main enablers for female entrepreneurs in this stage.

In the later stages of development, including the scaling of the enterprise through partnerships, a mix of both causation and effectuation approaches was observed. Similar to Aldrich and Ruef (2006), the phase of acquiring resources for the entrepreneurial ventures was

opportunistic, unsystematic and informal. For example, partnering with local healthcare workers in the case of Sughavazhvu or collaborating with the government officials in case of FrutoBendito was more of an effectuation approach. However, for scaling and getting international accreditation, a more formalized approach, inspired by causation logic was followed, like partnership with renowned universities for creating standardized protocols (e.g. Sughavazhvu) or partnering with other private firms to scale up (e.g. KitSmile). However, it is not clear if this happens because of lacking knowledge or resources, or because of missing opportunities.

Noteworthy is that across these different stages of entrepreneurial process, irrespective of the applied decision logics, women entrepreneurs in the social sector of emerging economies, do show specific characteristics and also face unique challenges. Women social entrepreneurs tend to be more inspired by the social issues which have a direct impact on the female population (e.g. sanitation in India, infant mortality in Colombia, caretaking of CP children). This could be attributed to their feministic characteristics of being more empathetic. They get motivated by issues which they can directly relate to and feel connected. Family support plays a significant role in the entrepreneurial journey of a female, especially in emerging economies where the social status of women is low, relative to men. They are more prone to use personal resources and rely heavily on their private network. Women entrepreneurs face specific challenges in the scaling-up and partnering stages where they have to overcome the socio-cultural barriers of the BoP environment.

Theoretical contributions

Our study contributes to the entrepreneurship field and the gender research in several ways. We expand effectuation theory by illustrating how female social entrepreneurs' transition between effectuation and causation logics at different stages of venture development and create inclusiveness at consumption and impact levels. Women entrepreneurs start with causation, then for formulation and acquiring resources tend towards effectuation and again for scaling up go back to causation. Women social entrepreneurs are motivated by addressing a highly pressing problem they have frequently experienced themselves. As such, similar to traditional entrepreneurs, they start with a clear motivation to address a specific problem. Yet, in contrast to traditional entrepreneurs, female social entrepreneurs in emerging markets exploit any opportunities by using the effectuation logic. They start with a given set of means, that is often limited by resource constraints, focus on affordable loss, strategic alliances and partnerships in order to develop and commercialize the product, exploit environmental contingencies and seek to control an unpredictable future (Perry et al., 2011). This is in line with Becker et al. (2015) who argue that a linear entrepreneurial process is not the regular case; it is rather a parallel and sequential development process.

Furthermore, adding on to the limited research on female entrepreneurship in BoP context, this research brings specific insights on enablers and inhibitors for women social entrepreneurs. A key result is that women entrepreneurs are primarily motivated by social causes they closely relate to. In comparison with male entrepreneurs, they are less influenced by external factors (like financials) and are more connected to the cause. Similar to the findings of Lindvert et al. (2017), personal networks and family support play a significant role in determining their success. This is specifically interesting in BoP contexts where, due to the low status of women, navigating through the bureaucratic processes and availing financial assistance through standard sources is a challenge. In adding to the research on women's entrepreneurial journey in emerging markets, our findings show that the focus and flexibility was rather laying on defining the revenue streams

and delivery channels than the development of the product itself. In emerging markets, where accessibility is the main challenge for the BoP population, defining an efficient and effective distribution channel is a prime focus of these entrepreneurs. Collaborating with locals or offering products/services through distribution channels has a positive impact. In order to enhance societal development, women entrepreneurs also focus on creating a local ecosystem. Mutual value creation as a core value of the collaboration network is important to achieve effective outcomes at the organizational, industry and societal level. These novel insights contribute to a more nuanced understanding of enabling factors of female entrepreneurship in emerging markets, as called by other studies such as Moreira et al. (2019) and Bruin et al. (2007).

This research also draws linkages between women entrepreneurship and poverty alleviation. The idea of inclusion of locals across value chain stages has been emphasized by scholars as a necessary condition to drive socio-economic development in the poorer sections of the society (Knorrinda et al., 2016; George et al., 2012). On the one hand, this study shows evidence of how women entrepreneurs employ inclusive strategies especially during the opportunity exploitation stage such as organizing education and training camps, creating employment opportunities and building a local ecosystem. On the other hand, it also indicates that inclusion of actual BoP consumers in the product development stage is minimal. Women social entrepreneurs take a top-down approach, with limited co-creation opportunities for BoP customers. Furthermore, the results also reveal that irrespective of the stage of development of the venture, all the four cases could only reach up to a certain level of inclusiveness as per the Heeks et al. (2014) levels. Is there a glass ceiling for women social entrepreneurs too? This is an open question and deserves more scholarly attention.

Limitations and further research

To the best of our knowledge, this is the first study analyzing woman entrepreneurs within a social innovation context in India and Colombia. Naturally, this research has some limitations, which are outlined as follows. First of all, cultural differences were not explicitly considered. This is not only true for an international context, but also for both analyzed countries. For both countries, it was assumed that the chosen firms represent the countries' attitude towards woman entrepreneurship. For example, India is one of the biggest countries worldwide, several regions might have different attitudes and behaviors towards woman entrepreneurs. Future studies might analyze this in more detail, as this was out of scope for our current study. Second, we only used data from one specific point of time. Hence, future researchers could apply longitudinal studies to analyze effects which might occur over time. Another aspect is the lack of quantitative data, or the application of experimental approaches. With such research strategies applied, further insights could be gained into woman entrepreneurship endeavors in these emerging markets. Moreover, the limited sample size and insights from only one sector (healthcare) might not be sufficient for generalization of the results and hence validating the results with samples from different sectors would enhance the research further.

Implications for public policy

Our findings entail valuable implications for public policy in emerging markets. The government can fund specific programs via local hubs, accelerator and incubators targeting female entrepreneurs with customized support services. Such services can include networking for women in order to encourage them to leverage wider partners and networks beyond their personal and family circles, but also balancing social with business objectives. These publicly funded programs

targeting women social entrepreneurs can also support them with evidence-based guidelines on the design of business models, revenue and distribution channels. Because of the aforementioned feminine characteristics of being more empathetic, women entrepreneurs may have a less distinct business focus. Hence, such programs are needed to ensure such a solid business case behind the entrepreneurial ventures. Second, government support can be provided via subsidies or tax incentives to major companies or governmental institutions to incentivize them to work with female-led enterprises with a social purpose. By providing support and/or procuring products and services from these enterprises, social impact can be maximized for BoP communities and women entrepreneurs can be encouraged to expand their businesses. These initiatives have the potential to support female entrepreneurs to navigate turbulent institutional terrains in emerging markets and unlock valuable potentials for social impact in BoP communities. As our results outlined, female entrepreneurs are different, which needs to be considered by governmental actions.

Appendix A. Short Description of Cases Figure 1

Case 1. *SughaVazhvu Healthcare*

SughaVazhvu Healthcare is a not-for-profit healthcare organization founded in India in 2009 by Dr. Zeena Johar. The enterprise aims to address the lack of adequate healthcare services for the rural Indian population. They opened their first clinic in 2009 in Tamil Nadu in cooperation with the IKP center for Technologies in Public Health (ICTPH) and are currently running a network of seven clinics across India. Their objective is to combine technology and evidence-based protocols in order to provide last-mile primary healthcare. The enterprise defines its three building blocks for primary healthcare in India as follows: 1) Protocolized Medicine, 2) Trained Health Workforce and 3) Technology Innovation. The networks of clinics provided and managed to SughaVazhvu contain the local clinics, a central diagnostic hub, a community engagement platform, community-based risk screening and subscription-based disease management. They claim to have touched the lives of more than 50,000 people living in rural areas across 57 villages so far.

More information on SughaVazhvu can be found on the official website: <http://www.sughavazhvu.co.in/>

Case 2. *Banka BioLoo*

Banka BioLoo is a small, private enterprise founded in 2012 by Namita Banka and it is headquartered in Hyderabad, India. Banka BioLoo aims to provide sustainable and eco-friendly solutions for people in India who have limited access to toilets. In India, in city areas, only 70 percent of people have access to toilets, whereas in rural area, only about 10 percent of houses are equipped with toilets. In order to address this problem, Banka BioLoo specializes in managing human waste through the "Biodigest" technology which is licensed by Indian Defense Lab. The toilets use this technology which functions as follows: a bacterial culture converts waste into water, methane and carbon dioxide – and toilets can be located where there is no infrastructure for traditional toilets. Banka BioLoo now manufactures, installs, maintains and even rents "bioloos". The human-waste disposal system provided by Banka BioLoo entails the following characteristics: (1) it provides a basic, easy to install and hygienic sanitation system in remote areas where no infrastructure such as sewerage plants exist; (2) it is cheap and easy to operate compared to traditional waste disposal systems; (3) 100 % eco-friendly, saves energy, conserves water, produces biogas; (4) maintenance free and can be used lifetime long and therefore enable reduction of the total cost of ownership, saving time and costs for its

users; (5) it is eco-friendly and does not require conventional energy sources sewage from the waste is odorless and can be drained or soaked without causing environmental hazards. The company currently serves different groups of customers including schools, villages, small communities, resorts, construction sites, inlands, Indian railways, defense, and industrial factories markets in India. The company has installed over 6000 bio-toilet units across India and currently undertakes 12 operation and maintenance service contracts with Indian Railways. In early 2018, Banka BioLoo has become a company listed on the stock-exchange.

More information on Banka BioLoo can be found on the official website: <http://www.bankabio.com/>

Case 3. *Fruto Bendito*

Fruto Bendito is a foundation, social enterprise founded by Colombian entrepreneur Camila Cooper in 2012. The enterprise delivers eco-friendly, cost-effective baby cribs (including mattress and sheet) to new mothers in Colombia. Together with the baby cribs, the enterprise runs educational workshops for new mothers with the aim to empower them. Through continuous and strong focus on education and empowerment through knowledge, the foundation aims to address high infant mortality rates in vulnerable urban and remote rural communities across Colombia. The foundation's objective is to develop a sense of community around child development issues and to support vulnerable families. The mission of the foundation is to deliver its cribs with a mattress and a protective blanket "ready to receive each little angel to receive the love with which each crib is made and delivered". Until summer 2018, Fruto Bendito has sold 2500 boxes to 940 families across 5 cities in Colombia. Currently, the enterprise is selling the cribs, but also receives charitable donations from patrons. This is the first and only enterprise in Colombia which offers this type of product. The value proposition of Fruto Bendito is two-fold: 1) eco-friendly cribs, made of cardboard as opposed to wood so are cheaper, lighter, and easy to fold, package and ship; 2) knowledge empowerment of new mothers from vulnerable families and the development of a sense of community around various child aspects.

More information on Fruto Bendito can be found on the official website: <http://fundacionfrutobendito.org>

Case 4. *KitSmile*

KitSmile is a foundation/social enterprise founded in 2014 in Bogota, Colombia by local Colombian entrepreneurs Leidy Cuestas and Lina Maria Camargo. KitSmile was founded to address a common condition for children from vulnerable families - Cerebral Palsy. Cerebral Palsy (CP) is a nervous system developmental disease and usually it is referred to as a central movement disorder which is caused by non-progressive cerebral injury. CP is a non-progressive disorder, meaning it will not get worse over time and most cases can be effectively managed with treatment and continued care. There is no known cure for cerebral palsy. Cerebral palsy is the most common childhood physical disability. Recent estimates conclude that nearly 764,000 people in the U.S. have CP. In Colombia there are approx. 300.000 cases. KitSmile was founded with the objective to improve the quality life in cerebral palsy and low-income children, being able to provide innovative solutions to them. The team of KitSmile is composed of experts from disciplines such as psychology, physiotherapy and digital marketing. Currently, 90% of revenue of KitSmile comes from government, company CSR campaigns and donations, and less than 10% comes from sales of the kit paid by the actual families in need. The unique selling point of KitSmile is the provision of an innovative in-home rehabilitation program for both the child and the family at very

low cost. Together with the delivery of the kit, the team of psychologists provide an education program to empower the parents of children with CP. In order to finance the delivery of kits to vulnerable families across Colombia, the team has developed an innovative CSR approach for small firms in which KitSmile is running digital marketing activities for the companies and the companies finance the delivery of kits for families in need. Up to summer 2018, KitSmile has delivered 22 kits and benefited 220 families and currently the team is working hard to expand to other countries in South America.

More information on KitSmile can be found on the official website: <https://www.kitsmile.com/>

References

- Aldrich, H.E., Ruef, M., 2006. *Organizations Evolving*, 2nd ed. Sage, Thousand Oaks, CA. <https://doi.org/10.4135/9781446212509>.
- Amine, L.S., Staub, K.M., 2009. Women entrepreneurs in sub-Saharan Africa: An institutional theory analysis from a social marketing point of view. *Entrepreneurship Reg. Dev.* 21 (2), 183–211. <https://doi.org/10.1080/08985620802182144>.
- Angeli, F., Jaiswal, A.K., 2016. Business model innovation for inclusive health care delivery at the bottom of the pyramid. *Organ. Environ.* 29 (4), 486–507. <https://doi.org/10.1177/1086026616647174>.
- Anggadwita, G., Mulyaningsih, H.D., Ramadani, V., Arwiyah, M.Y., 2015. Women entrepreneurship in Islamic perspective: a driver for social change. *Int. J. Bus. Globalisation* 15 (3), 389. <https://doi.org/10.1504/IJBG.2015.071914>.
- Agarwal, N., Chakrabarti, R., Brem, A., Bocken, N., 2018. Market driving at Bottom of the Pyramid (BoP): an analysis of social enterprises from the healthcare sector. *J. Bus. Res.* 86, 234–244. <https://doi.org/10.1016/j.jbusres.2017.07.001>.
- Baker, T., Nelson, R.E., 2005. Creating something from nothing: Resource construction through entrepreneurial bricolage. *Adm. Sci. Q.* 50 (3), 329–366. <https://doi.org/10.2189/asqu.2005.50.3.329>.
- Becker, A., Knyphausen-Aufseß, D.Z., Brem, A., 2015. Beyond traditional developmental models: a fresh perspective on entrepreneurial new venture creation. *Int. J. Entrepreneurial Venturing* 7 (2), 152–172. <https://doi.org/10.1504/IJEV.2015.068591>.
- Becker-Blease, J.R., Sohl, J.E., 2007. Do women-owned businesses have equal access to angel capital? *J. Bus. Venturing* 22 (4), 503–521. <https://doi.org/10.1016/j.jbusvent.2006.06.003>.
- Berends, H., Jelinek, M., Reymen, I., Stultiens, R., 2014. Product innovation processes in small firms: combining entrepreneurial effectuation and managerial causation. *J. Prod. Innovat. Manag.* 31 (3). <https://doi.org/10.1111/jpim.12117>.
- Brunton, G.D., Ahlstrom, D., Si, S., 2015. Entrepreneurship, poverty, and Asia: moving beyond subsistence entrepreneurship. *Asia Pacific J. Manag.* 32 (1), 1–22. <https://doi.org/10.1007/s10490-014-9404-x>.
- Chandler, G.N., DeTienne, D.R., McKelvie, A., Mumford, T.V., 2011. Causation and effectuation processes: a validation study. *J. Bus. Venturing* 26 (3), 375–390. <https://doi.org/10.1016/j.jbusvent.2009.10.006>.
- Clark Muntean, S., Ozkazanc-Pan, B., 2016. Feminist perspectives on social entrepreneurship: critique and new directions. *Int. J. Gender Entrepreneurship* 8 (3), 221–241. <https://doi.org/10.1108/IJGE-10-2014-0034>.
- Datta, P.B., Gailey, R., 2012. Empowering Women through social entrepreneurship: case study of a women's cooperative in India. *Entrepreneurship Theory Pract.* 36 (3), 569–587. <https://doi.org/10.1111/j.1540-6520.2012.00505.x>.
- de Bruin, A., Brush, C.G., Welter, F., 2007. Advancing a framework for coherent research on women's entrepreneurship. *Entrepreneurship Theory Pract.* 31 (3), 323–339. <https://doi.org/10.1111/j.1540-6520.2007.00176.x>.
- De Vita, L., Mari, M., Poggesi, S., 2013. Women entrepreneurs in and from developing countries: evidences from the literature. *Eur. Manag. J.* 32 (3), 451–460. <https://doi.org/10.1016/j.emj.2013.07.009>.
- Doherty, B., Haugh, H., Lyon, F., 2014. Social enterprises as hybrid organizations: a review and research agenda. *Int. J. Manag. Rev.* <https://doi.org/10.1111/ijmr.12028>.
- Duke, D., 2016. Why don't BOP ventures solve the environmental problems they initially set out to address? *Organ. Environ.* 29 (4), 508–528. <https://doi.org/10.1177/1086026616633271>.
- Eisenhardt, K.M., 1989. Building theories from case study research. *Acad. Manag. Rev.* 14 (4), 532–550. <https://doi.org/10.2307/258557>.
- Fisher, G., 2012. Effectuation, causation, and bricolage: a behavioral comparison of emerging theories in entrepreneurship research. *Entrepreneurship Theory Pract.* 36 (5), 1019–1051. <https://doi.org/10.1111/j.1540-6520.2012.00537.x>.
- Frederiksen, D.L., Brem, A., 2017. How do entrepreneurs think they create value? A scientific reflection of Eric Ries' Lean Startup approach. *Int. Entrepreneurship Manag. J.* 13 (1), 169–189. <https://doi.org/10.1007/s11365-016-0411-x>.
- George, G., McGahan, A.M., Prabhu, J., 2012. Innovation for inclusive growth: towards a theoretical framework and a research agenda. *J. Manag. Stud.* 49 (4), 661–683. <https://doi.org/10.1111/j.1467-6486.2012.01048.x>.
- George, G., Rao-Nicholson, R., Corbhisley, C., Bansal, R., 2015. Institutional entrepreneurship, governance, and poverty: Insights from emergency medical response services in India. *Asia Pacific J. Manag.* 32 (1), 39–65. <https://doi.org/10.1007/s10490-014-9377-9>.
- Gibbert, M., Ruigrok, W., Wicki, B., 2008. What passes as a rigorous case study? *Strat. Manag. J.* 29 (13), 1465–1474. <https://doi.org/10.1002/smj.722>.
- Goyal, P., Yadav, V., 2014. To be or not to be a woman entrepreneur in a developing country? *Psychosocial. Issues Hum. Resource Manag.* 2 (2), 68–78. Retrieved from <https://www.researchgate.net/publication/271520855>.
- Gundry, L.K., Miriam, B.-Y., Posig, M., 2002. Contemporary perspectives on women's entrepreneurship: a review and strategic recommendations. *J. Enterprising Culture* 10 (01), 67–86. <https://doi.org/10.1142/S0218495802000141>.
- Heeks, R., Foster, C., Nugroho, Y., 2014. New models of inclusive innovation for development. *Innovat. Dev.* 4 (2), 175–185. <https://doi.org/10.1080/2157930X.2014.928982>.
- Henninger, P., Brem, A., Giones, F., Bican, P.M., Wimschneider, C., 2020. Effectuation vs. causation: can established firms use start-up decision-making principles to stay innovative? *Int. J. Innovat. Manag.* 24 (01), 2050002.
- Hudson, R.A., 2010. *Colombia: A Country Study*. Government Printing Office.
- Kantor, P., 2002. Gender, microenterprise success and cultural context: the case of South Asia. *Entrepreneurship Theory and Practice* 26 (4), 131–143. <https://doi.org/10.1177/104225870202600408>.
- Katre, A., 2018. Facilitating affective experiences to stimulate women's entrepreneurship in rural India. *Int. J. Gender Entrepreneurship* 10 (3), 270–288. <https://doi.org/10.1108/IJGE-01-2018-0007>.
- Kimbu, A.N., Ngoasong, M.Z., 2016. Women as vectors of social entrepreneurship. *Annals Tourism Res.* 60, 63–79. <https://doi.org/10.1016/j.annals.2016.06.002>.
- Knorrington, P., Peša, I., Leliveld, A., Van Beers, C., 2016. Frugal innovation and development: aides or adversaries? *Eur. J. Dev. Res.* 28 (2), 143–153. <https://doi.org/10.1057/ejdr.2016.3>.
- Kothari, T., 2017. Women entrepreneurs' path to building venture success: lessons from India. *South Asian J. Bus. Stud.* 6 (2), 118–141. <https://doi.org/10.1108/SAJBS-03-2016-0021>.
- Lindvert, M., Patel, P.C., Wincent, J., 2017. Struggling with social capital: Pakistani women micro entrepreneurs' challenges in acquiring resources. *Entrepreneurship Regional Dev.* 29 (7–8), 759–790. <https://doi.org/10.1080/08985626.2017.1349190>.
- Lingelbach, D., Sriram, V., Mersha, T., Saffu, K., 2015. The innovation process in emerging economies: an effectuation perspective. *Entrepreneurship Innov.* 16 (1), 5–17. <https://doi.org/10.5367/ije.2015.0172>.
- Madi, H.H., Hussain, S.J., 2007. The role of health promotion in poverty reduction. *East Mediterr. Health J.* 13 (6), 1249–1255. Retrieved from http://applications.emro.who.int/emhj/1306/13_6_2007_1249_1255.pdf.
- Mair, J., Martí, I., Ganly, K., 2007. Institutional voids as spaces of opportunity. *Eur. Bus. Forum* 31 (1), 34–39. Retrieved from <https://search.proquest.com/docview/224660584?accountid=11379>.
- Moreira, J., Marques, C.S., Braga, A., Ratten, V., 2019. A systematic review of women's entrepreneurship and internationalization literature. *Thunderbird Int. Bus. Review* 61 (4), 635–648. <https://doi.org/10.1002/tie.22045>.
- Nahi, T., 2016. Cocreation at the base of the pyramid: reviewing and organizing the diverse conceptualizations. *Organ. Environ.* 29 (4), 416–437. <https://doi.org/10.1177/1086026616652666>.
- Perry, J.T., Chandler, G.N., Markova, G., 2012. Entrepreneurial effectuation: a review and suggestions for future research. *Entrepreneurship Theory Pract.* 36 (4), 837–861. <https://doi.org/10.1111/j.1540-6520.2010.00435.x>.
- Perrini, F., Vurro, C., Costanzo, L.A., 2010. A process-based view of social entrepreneurship: from opportunity identification to scaling-up social change in the case of San Patrignano. *Entrepreneurship Regional Dev.* 22 (6), 515–534. <https://doi.org/10.1080/08985626.2010.488402>.
- Peters, D.H., Garg, A., Bloom, G., Walker, D.G., Brieger, W.R., Rahman, M.H., 2008. Poverty and access to health care in developing countries. *Ann. N. Y. Acad. Sci.* 1136 (1), 161–171. <https://doi.org/10.1196/annals.1425.011>.
- Prabhu, J., Jain, S., 2015. Innovation and entrepreneurship in India: understanding jagad. *Asia Pacific J. Manag.* 32 (4), 843–868. <https://doi.org/10.1007/s10490-015-9445-9>.
- Prahalad, C.K., 2005. *The Fortune at the Bottom of the Pyramid: Eradicating Poverty Through Profits* (illustrate). Pearson Prentice Hall, Upper Saddle River, NJ. https://doi.org/10.1111/j.1468-0270.2008.864_4.x. 2006.
- Rauth Bhardwaj, B., 2014. Impact of education and training on performance of women entrepreneurs. *J. Entrepreneurship Emerg. Econ.* 6 (1), 38–52. <https://doi.org/10.1108/JEEE-05-2013-0014>.
- Rosca, E., Reedy, J., Bendul, J., 2018. Does frugal innovation enable sustainable development? A systematic literature review. *Eur. J. Dev. Res.* <https://doi.org/10.1057/s41287-017-0106-3>. In Press.
- Ries, E., 2011. *The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses*. Crown Books.
- Si, S., Yu, X., Wu, A., Chen, S., Chen, S., Su, Y., 2015. Entrepreneurship and poverty reduction: a case study of Yiwu. *China. Asia Pacific Journal of Management* 32 (1), 119–143. <https://doi.org/10.1007/s10490-014-9395-7>.
- Sinkovics, N., Sinkovics, R.R., Yamin, M., 2014. The role of social value creation in business model formulation at the bottom of the pyramid—implications for MNEs? *Int. Bus. Rev.* 23 (4), 692–707. <https://doi.org/10.1016/j.ibusrev.2013.12.004>.
- Sullivan, D.M., Meek, W.R., 2012. Gender and entrepreneurship: a review and process model. *J. Manag. Psychol.* 27. <https://doi.org/10.1108/02683941211235373>.
- Tan, J., 2008. Breaking the “Bamboo Curtain” and the “Glass Ceiling”: The Experience of Women Entrepreneurs in High-Tech Industries in an Emerging Market. *J. Bus. Ethics* 80 (3), 547–564. <https://doi.org/10.1007/s10551-007-9454-9>.
- Vázquez Maguirre, M., Portales, L., Velásquez Bellido, I., 2017. Indigenous social enterprises as drivers of sustainable development: insights from Mexico and Peru. *Critical Sociol.* 44 (2), 1–18. <https://doi.org/10.1177/0896920516688757>.
- Yadav, V., Unni, J., 2016. Women entrepreneurship: research review and future directions. *J. Global Entrepreneurship Res.* 6 (1), 12. <https://doi.org/10.1186/s40497-016-0055-x>.

Distribution and Logistics Management, Journal of Cleaner Production, International Business Review and European Journal of Development Research.

Dr. Nivedita Agarwal is an Assistant Professor at the Chair of Technology Management at the Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU), Germany. Her research focuses on new product development, social entrepreneurship and constraint-based innovation especially in the context of emerging markets. Inspired by the existing challenges at the Bottom of the pyramid (BoP), her research highlights the role of innovation and entrepreneurship enabled by disruptive technologies in shaping the complex ecosystem at BoP. She has reviewed and published articles in several peer reviewed academic journals such as the Journal of Business Research, IEEE Transactions on Engineering

Management and International Journal of Technology Management and is an Associate Editor of International Journal of Entrepreneurial Venturing.

Alexander Brem is an Endowed Chaired Professor and Institute Director at the University of Stuttgart, Germany. He is a CCSR international research associate at De Montfort University (UK) and a visiting professor at the EADA Business School in Barcelona (Spain) and HHL Graduate School of Management (Germany). Moreover, he serves as an academic committee member of the centre of Technological Innovation, Tsinghua University, Beijing (China). In addition, he was appointed an honorary professor at the University of Southern Denmark in May 2017. His research is focussed on technological innovation and entrepreneurship.