Doing more with less, systematically? Bricolage and ingenieurieing in successful social ventures

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A B S T R A C T

This study investigates whether and how bricolage- and ingenieurieing-type of approaches are used in successful social ventures in the learning/education sector across three different contexts (Brazil, South Africa and the US). We employ a partially grounded theory approach to examine the profiles of Ashoka fellows and find that despite the vast differences in their local environments, successful social entrepreneurs engage in similar bricolage processes in three domains of value creation: they tend to refuse limitations imposed by the environment, utilize resources in new and innovative ways, and engage a wide range of stakeholders as partners. Additionally, successful social entrepreneurs avoid just “making do”; instead, they rely on ingenieur-type of approach in their operational process to create and establish replicable systems to fulfill their social vision. We discuss the remarkable consistency in the approaches utilized by successful social entrepreneurs across the three countries from the perspective of theory and practice.

1. Introduction

Social entrepreneurship (SE), conceptualized as the creation of social value through innovative and entrepreneurial means (Dees, 2007; Peredo & McLean, 2006) has gained considerable attention over the past decade across multiple disciplines (Chell, Nicolo-poulou, & Karatas-Ozkan, 2010; Mort, Weerawardena, & Carnegie, 2003; Short, Moss, & Lumpkin, 2009; Steyaert & Katz, 2004). It has increasingly become a topic of interest for international business scholars as it addresses problems (e.g. illiteracy, poverty, disease) that are often global in nature and offers innovative solutions for affected populations, local governments, and multinational corporations (Boddewyn & Doh, 2011; Weerawardena & Mort, 2006; Zahra, Rawhouser, Bha, Neubaum, & Hayton, 2008).

Driven by social goals, social entrepreneurs (SEs) start organizations and pursue new opportunities to benefit society (Dees, 2007; Peredo & McLean, 2006). While a social entrepreneur could accommodate profit-making or commercial exchange activities, those are often subordinate to the social goals. In this way, SE is different from commercial entrepreneurship where profit-making is the primary goal. For instance, in the education sector, a social enterprise that refurbishes and sells second-hand computers for home use in low-income families may generate economic value and see it as a necessary condition to ensure the financial viability of the venture. In contrast, a commercial entrepreneurial organization that sells refurbished computers, because of its primary goal of generating profit and distributing it to members, owners and stakeholders, may deem low-income families as an unworthy market for its limited commercial potential. Even if it serves that market, profits will be the primary emphasis and the social value creation is likely to be less salient and may even be sacrificed.

SE exists in a variety of contexts, across emerging, rapidly emerging, and developed economies. Nonetheless, it is most closely associated with penurious environments characterized by resource limitations (Di Domenico, Haugh, & Tracey, 2010), where the market demands may be insufficient to attract commercial entrepreneurs (Mair & Marti, 2006). Hence, the concept of bricolage, “making do by applying combinations of the resources at hand to new problems and opportunities” (Levi-Strauss, 1967), is uniquely suited to advance understanding of SE (Anderson, 2000; Baker & Nelson, 2005; Di Domenico et al., 2010; Prahalad, 2005). Research has utilized the bricolage concept to explain the behaviors of social entrepreneurs in the UK and urged researchers to explore bricolage in diverse national contexts, such as in the US where there is “less intervention” by federal government as well as

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in developing countries “where resource constraints are much more acute” (Di Domenico et al., 2010: 700). Additional key issues remain unaddressed as well. In his original conceptualization, Levi-Strauss considered bricolage not as a stand-alone concept, but as a contrast to ingenieur, a scientific mode of action based mostly on systematic use of known resources and planning. Entrepreneurs who rely on ingenieur often focus on designing a system according to prior specifications and seeking appropriate resources, compared to bricoleurs who operate by infusing accessible resources with new purposes and/or combining them in novel ways (Duymedjian & Rüling, 2010). Even though bricoleur and ingenieur are opposite ideal-types (Weber, 1997) and “all ‘real world’ actions are situated somewhere in between the two” (Duymedjian & Rüling, 2010: 139), we do not know whether and how they blend in the SE context. Are successful social entrepreneurs predominantly characterized by bricolage or ingenieur? Or, do both types of processes play a role in fostering success? If both modes play a role, what is the interplay between the two? Do they vary or are they consistent across countries with varying economic, institutional, and cultural contexts? Exploring the value of such dualities of bricolage and ingenieur from a global perspective can provide more nuanced understanding of the SE phenomenon.

In this study we explore how bricolage and ingenieur, if present, inform the various dimensions of successful value creation in the learning/education sector, a critical sector for the prosperity and development of global economies (Chevalier, Harmon, Walker, & Zhu 2004; Dinda, 2014). More importantly, we investigate whether the dimensions of successful social value creation differ across the emerging, rapidly emerging, and developed economies of South Africa, Brazil and US and explore the process of bricolage and/or ingenieur across these countries. We study these three countries due to the significant variation in their cultural, economic and educational contexts. Guest (2012) suggests that the US is considerably resource-rich and provides more social and educational opportunities, and while Brazil is much poorer, it has generally been on a positive trend economically and educationally. Alternatively, South Africa is on a downward trajectory regarding opportunities for upward mobility for its people.

Using qualitative analysis, we explore several theoretically derived dimensions of value creation, examining if successful SEs vary or are similar across the three countries in their usage of bricolage and ingenieur techniques. To study this issue, we utilize profiles of successful SEs from the Ashoka website (corroborated with information from additional sources). Enhancing extant theory (Zahra, Gedajlovic, Neubaum, & Shulman, 2009), which emphasizes either the bricoleur or ingenieur aspect of social entrepreneurs, our findings suggest that successful SEs consistently combine both bricolage and ingenieur processes, in that they rely on bricolage when conceptualizing their environment, utilizing resources and mobilizing agencies and on ingenieur-type of approach in their operating process. Thus, our study shows how successful SEs adopt ingenieur approaches in conjunction with bricolage, and this extends the SE literature. Our study also contributes to the general bricolage literature (Baker & Nelson, 2005; Duymedjian & Rüling, 2010; Garud & Karnae, 2003). Extant research has emphasized that bricolage generally requires “stakeholder participation” (Di Domenico et al., 2010) or “embedded agency” (Garud & Karnae, 2003) in that social actors become embedded in contexts and gradually accumulate tools and assemble support (Duymedjian & Rüling, 2010). We make a further distinction in that bricoleurs tend to engage in distributed agency while ingenieurs employ concentrated agency. Compared to ingenieurs who involve a limited and predefined set of actors, bricoleurs tend to involve a wide range of actors whose connections to their mission are not immediately obvious. Second, we advance the original position of Levi-Strauss that the bricoleur and ingenieur are ideal-types (Duymedjian & Rüling, 2010; Levi-Strauss, 1967) by showing that even though the actions of successful SEs entail both approaches, one approach often dominates certain dimensions of the value-creating process.

Lastly, we make a contribution to the emerging stream of international business literature that seeks to uncover variations and similarities among business logics of organizations from advanced vs. emerging economies (Cappelli, Singh, Singh, & Useem, 2010; Madhok & Keyhani, 2012). In this literature, organizations from emerging economies are portrayed as having different mindsets and using different strategies to create value and overcome the inherent disadvantages of their local environments including resource scarcity. Our study shows that, at least in the context of successful organizations with a strong social mission, the processes of value creation are remarkably similar across country contexts.

The next section elaborates our theoretical orientation, establishing the central propositions in the extant literature. We then explain our qualitative procedures—a partially grounded approach, discuss our data sampling and country selection process, and describe the analytical procedure. In a subsequent section we present our case studies, discuss the finding with respect to the four dimensions that we investigated about the social entrepreneurs, and develop five propositions. The concluding section discusses the contributions, limitations of the study, and outlines future research directions.

2. Theoretical perspective and research questions

Bricolage, a concept that originated from anthropology, designates a type of relationship with time and space and an approach to knowledge and reasoning (Levi-Strauss, 1967). It describes a particular manner in which individuals interact with their environment that is practice-centered. The work of Duymedjian and Rüling (2010), which pushed Levi-Strauss’s original theorization and developed the concepts of the bricoleur and ingenieur as opposing ideal-types; hence is particularly influential to us. In bricolage-type of approach, a bricoleur makes do with what is at hand, rather than seeking resources that are specific for a particular project (Duymedjian & Rüling, 2010). S/he accumulates resources without a clear vision of its specific application or use, thereby allowing flexibility later on for an unplanned result. A bricoleur’s resources tend to be heterogeneous by nature and yet, have actual and potential interconnections due to the individual’s lack of “functional fixdness” (Duymedjian & Rüling, 2010: 141). The end purpose itself is shaped, crafted, and created based on the accumulated resources. Knowledge is accumulated through experience, observation, mental inventorying and categorization. In bricolage, the creator and the created cannot be dissociated as s/he always puts something of oneself into it (Levi-Strauss, 1967).

Similarly, ingenieur also designates a type of approach, albeit firmly based on the superiority of rationality and scientific reasoning. As Levi-Strauss describes, “the ingenieur is always trying to make his way out of and go beyond the constraints imposed by a particular state of civilization while the ‘bricoleur’ by inclination or necessity always remains within them” (Levi-Strauss, 1967: 19). The ingenieur therefore, starts addressing a problem with abstract concepts, rather than concrete experience and available objects; that is from an initial plan. S/he searches for resources that correspond to exact design requirements to produce an end-result that fulfills the initial plan. As compared to bricoleurs, who develop knowledge from first-hand interaction with resources, ingenieurs derive their knowledge from “general and institutionally legitimized laws” (Duymedjian & Rüling, 2010;
An ingeniueur uses an abstract body of knowledge, relies on the rules and knowledge acquired previously to solve similar problems, and has predetermined ways to use the resources. The outcome is separated from the designer and the creator, and hence can be used by others.

The concept of bricolage has been used to understand a wide range of organizational phenomena including innovation (Ciborra, 1996; Garud & Karnøe, 2003), sensemaking (Weick, 1993) and entrepreneurship (Baker & Nelson, 2005). According to Baker and Nelson’s (2005) review of the fragmented literature on bricolage in commercial entrepreneurship, three elements are central: resources at hand; recombining resources for new purposes; and making do. Resources encompass physical artifacts, skills, knowledge and ideas. Borrowing from the lexicon of the resource-based view (Barney, 1991), an enterprise’s resources include tangible assets such as financial, physical, human capital and intangible resources such as reputation, knowledge, culture, and social networks. Another core element of bricolage is recombining current assets for new purposes, which could potentially give rise to innovative solutions to problems that have not been adequately addressed due to resource constraints. Here bricoleurs combine and reuse resources for applications for which they were not originally intended or used. Finally, the making-do aspect of bricolage creates a bias for action with the available resources rather than pondering over whether these resources are adequate or not, and this broad range of outcomes some of which may be truly innovative. Thus, the ability to recombine current resources and having a mindset for action and experimentation are essential to bricoleurs.

In the SE area, Di Domenico et al. (2010) identified six processes characteristic of bricolage in their study of UK social enterprises. They found that bricoleurs engage in making do (i.e., using resources at hand for new purposes), refuse to enact limitations in the environment, and engage in improvisation—a process of trial and error (Di Domenico et al., 2010). In addition, social bricolage also involves three added elements: social value creation, stakeholder participation and persuasion. The aim of creating social value is often incorporated in their articles of association, policies, and procedures. Social enterprises also use stakeholders to extend their governance structure and generate new contacts and links with various resource holders that might benefit the enterprise. Lastly, social entrepreneurs use persuasion tactics to convince stakeholders of the potential usefulness of resources and assets and argue for the business case of social value creation (Di Domenico et al., 2010). Given that their study is based on UK organizations, these researchers underscore the value of researching social bricolage in other countries. They note that studying “bricolage in other national contexts would help develop and refine the concept of social bricolage in places where social enterprises have different histories, and must negotiate different operational constraints, funding sources, and legislative frameworks” (Di Domenico et al., 2010: 700). In particular, they stress the need for examining social bricolage in the “United States where there has been traditionally less intervention in enterprises” and in “environments where resource constraints are much more acute, such as in developing countries” (Di Domenico et al., 2010: 700). In addition to a lack of studies on social bricolage in a variety of countries, the current SE literature is notably silent on whether and how ingeniueuring, the contrasting mode, works in this context. Given the general trend of rationalization and professionalization of social sectors (Hwang & Powell, 2009) and the emphasis on sustainability of social enterprises (Bornstein, 2007), this is striking. In fact, Zahra and his colleagues posited that social ingeniueuring could introduce dramatic, sustainable, and system- atic changes in society (Zahra et al., 2009). Yet, we do not have empirical evidence or theoretical reasoning of the role of ingeniueuring in social value creation. Nor do we know whether successful social entrepreneurs rely on bricolage in addition to, or as opposed to, ingeniueuring to create social value. Finally, if the two approaches interact with each other, the nature of the interplay between them has yet to be studied. Our study seeks to generate propositions specific to these research issues. It is one of the first ones to evaluate the bricolage process in juxtaposition with ingeniueuring across country contexts.

In the next section, we describe the country selection process, the source of data and provide a description of the case data. In addition, we describe the theoretically derived dimensions of bricolage and ingeniueuring and outline the data coding and analysis process.

3. Method

International social entrepreneurship is an emerging field and there is limited conceptual and empirical work on successful innovations in various countries. However, there is a substantial and complex body of work on bricolage that orients our research. We therefore follow a partially grounded approach; that is, our empirical research is “informed by prior theoretical understanding” (the bricolage vs. ingeniueuring perspective), “but is not so determined or constrained by this understanding that the potential for making novel insights is foregone” (Finch, 2002: 61–62). Such a top-down inductive, partially grounded approach begins with defining the research question, the type of organizations and data that could inform the cases, and perhaps an a priori specification of constructs before approaching the data (Shepherd & Sutcliffe, 2011). These pre-conceived constructs aid in the process of developing nuanced understandings and guide the selection of appropriate cases. Scholars such as Eisenhardt (1989) and Suddaby (2006) argue that theorists who wish to build theory from case studies will be more effective if they begin with a preconceived question, sampling strategy, and even ideas of main constructs (Shepherd & Sutcliffe, 2011: 369). This partially grounded approach is appropriate ‘when it may enhance the discovery or creation of a paradox (within or across paradigms) and is especially appropriate when the body of previous research is vast, dynamic, complex, and/or from disparate sources’ while a purely grounded theory approach is more appropriate “if the focal body of work is too narrow (or nonexistent)” (Shepherd & Sutcliffe, 2011: 374). Theoretically focused, partially grounded approaches have been used to provide significant insight into topics such as work-family balance (Kreiner, Hollensbe, & Sheep, 2006), and non- spread of innovation (Ferlie, Fitzgerald, Wood, & Hawkins, 2005).

3.1. Country-context

As our research focuses on international social entrepreneurial activities, we chose three countries with vastly different political, cultural, opportunity and resource contexts—the emerging, rapidly emerging, and developed economies of South Africa, Brazil and US, respectively. We expect that these contexts could potentially impact approaches to entrepreneurship including social value creation.

First, building on a strong Anglo-Saxon cultural and adminis- trative heritage, the US has consistently ranked as one of the most individualist national cultures (Hofstede, 1983; House, Hanges, Javidan, Dorfman, & Vipin, 2004), with a stable political system and a long tradition of democracy. A former Portuguese colony and subject to an authoritarian military rule until 1985, Brazil is the largest of the Latin American countries characterized by cultural practices reflecting collectivism with respect to a family group and, to a lesser degree, to collective distribution of resources and action (Brewer & Venaik, 2011; House et al., 2004). Falling in the middle of the three countries on the individualist–collectivist spectrum with
respect to institutional practices and work attitudes (Brewer & Venaik, 2011; Hofstede, 1983; House et al., 2004), South Africa's political and cultural history is perhaps the most complex combining the political systems of Western and Northern Europe with African traditions rooted in the communal and tribal culture (Mufune, 2003). Depending on race, for example, the cultural practices of South Africans can vary with the black population being more collectivist in terms of family orientation than the white (House et al., 2004). The three countries differ significantly ranging from market-oriented economies found in the US and Brazil to a mixed socialist/capitalist economy found in South Africa. While the US economy is generally service and technologically oriented, Brazil’s economy is characterized as having well-developed agriculture, mining, manufacturing and service sectors, with South Africa’s key economic sectors including mining and agriculture. Most importantly, even though these three economies are generally classified as industrialized or newly industrialized, there is a wide disparity of income inequality and educational opportunity across them. In 2013, the US GDP of $16.8 trillion dwarfed Brazil’s GDP of $2.25 trillion and South Africa’s $350.6 billion, as does the US GDP per capita of $53,000 versus Brazil’s $15,000 and South Africa’s $12,500 (all numbers reflect purchasing power parity).

Per the World Bank, each country’s GINI coefficient, a commonly used measure of inequality in distribution of income, reveals distinctive trends. As expected, the US’s developed economy scores (411) lower than either Brazil (527) or South Africa (650), indicating overall less income inequality. However, trends show that Brazil’s income inequality has fallen from 60.4 in 1993 to 52.7 in 2012. In contrast, South Africa’s income inequality has actually grown over the last few years. South African GINI coefficients increased from 59.3 in 1993 (a year prior to apartheid ending) to approximately 70 in 2008 (Patel, 2014).

According to the latest available data from UNESCO and World Bank, all three countries spend between 5.1 to 5.5 percentages of GDP on education. However, the education sectors are quite different, when taking into account spending per pupil. In 2008, the US spent approximately eight to nine times more per pupil than South Africa and Brazil. Specifically, the expenditure per primary student was 8853 in PPPs in the US in contrast to PPP$1034 and 994 in Brazil and South Africa, respectively. Similarly, the pupil-teacher ratio in primary education was 14 pupils per teacher in the US which is substantially lower than that of South Africa (34 pupils per teacher) and that of Brazil (21 pupils per teacher). The US educational context also differs significantly from the other two countries, in terms of educational outcomes. According to the 2008 UNESCO and World Bank data, less than 1% of population over 15 years of age is classified as illiterate in the US as opposed to 9.6% in Brazil and 7% in South Africa. Likewise, mean years of schooling for the adult population in the US (12.9 years) was significantly higher than in the other two countries, almost double that of Brazil (6.9 years) and 30% higher than of South Africa (9.2 years). Finally, the World Bank’s “Human Opportunity Index—H0I” (available for selected developing countries) illustrates the different trajectories of Brazil and South Africa. The index rates the opportunity that individual countries provide their citizens to change their unequal situations through education and living conditions. South Africa (58) scores significantly lower than Brazil (77) (Brunori, Ferreira, & Peragine, 2013) indicating that South African children have less access to the services necessary to succeed in life (e.g., timely education, basic health, or access to electricity). In sum, the economic and educational contexts differ significantly between the US and the two developing countries, with Brazil emerging more rapidly than South Africa. Given that bricolage has been identified as particularly suited to penurious environments in which entrepreneurs confront severe lack of resources (Desa, 2012), the educational sectors of US, Brazil and South Africa provide for an interesting comparative research setting for our study.

3.2. Sample selection

Given our goal to understand the association between bricolage, ingenieurand successful social entrepreneurial ventures, we sought exemplar social entrepreneurs. Studying exemplars and their ventures highlight qualities that we are interested in and enable us to effectively draw conceptual generalizations.

We utilized the Ashoka website to build our database (http://ashoka.org/fellows). Ashoka is an organization dedicated to supporting social entrepreneurs across the globe and practitioners have lauded it as “a very significant force” in the field of SE (Bornstein, 2007; Meyskens, Robb-Post, Stamp, Casrud, & Reynolds, 2010). Each year the organization nominates fellows based on various criteria including idea; creativity; entrepreneurial quality; and social impact of the idea. There are over 2000 fellows from 72 countries located in Africa, Asia, Europe, Middle East/ North Africa, North America and South America and operating across a wide variety of fields, including civic engagement, economic development; environment, health, human rights; and learning/education, who we view as successful social entrepreuneurs for the purposes of our study. We selected social entrepreneurs active in the learning/education sector from South Africa, Brazil and the US. At the time of our study, there were a total of 89 fellows from these countries in this sector. Examining social innovations in a diverse group of countries improves the generalizability of our propositions while selecting one field (learning/education) allows us to control for sector influences. Social entrepreneurs in the Learning and Education sector in all three countries aim to offer children and students chances to improve their lives through improved educational opportunities. Social entrepreneurial organizations in this sector can take different shapes and forms. They range from organizations that work with the formal schooling system, such as after school programs (After-School Corporation started by Herb Sturz or Girls on the Run started by Molly Barker) to programs that target a specific minority group (Program OGUINTEC started by Lazaro Cunha that seeks to encourage young black men and women to develop an interest and a professional training in the sciences, or Projecto Quixote started by Auro Lescher that provides learning for dislocated, street children). Appendix A provides the entire list of organizations in our sample.

Our final database consists of a group of randomly selected thirty fellows, ten from each country; this was a point at which we reached theoretical saturation, where significant insights were not gained by adding more cases (Locke, 2001). As seen in Appendix A, both genders were represented in the sample, including 17 males and 13 Females. The social entrepreneurs in our sample launched their organizations between 1982 and 2006 and they were selected as Ashoka fellows between 1998 and 2010. The entrepreneurs have launched and run their organizations for an average of 10 years before they were selected as Ashoka fellows.

3.3. Description of case data

The data for our research comprised of the case profiles and narratives compiled by Ashoka as part of its multi-step nomination and selection process (see https://www.ashoka.org/files/SSStage-Screening%20Process_0.pdf). The initial nomination is made by a network of selected nominators, after which an Ashoka staff representative researches the nominee, his/her field and identifies the central innovation. Field visits and interviews of the nominee
are part of the screening process. In the next stage, an appointed reviewer from outside the Fellow’s country is requested to provide a second opinion by conducting interviews and making a recommendation to a National Panel consisting of social entrepreneurs, business entrepreneurs, and creative leaders in the field. This panel applies Ashoka’s selection criteria (such as power of the new idea and entrepreneurial leadership quality) to the nominees. At the following stage, based on the data gathered, the Ashoka representative, the second opinion reviewer, and staff members in Ashoka collaborate to write the candidate’s profile with the aim of demonstrating his or her candidacy. Profiles are crafted using data on the new idea, strategy, personal background, values, motivations and aspirations.

While these narratives are based on data gathered as part of the selection process, and for the purpose of demonstrating the justification for selecting the Fellow, they serve as a rich and reliable source of textual material for our research. Ashoka, as a leading global organization for SEs, has been in existence for over 25 years and uses a consistent system to gather and compile materials. Furthermore, to verify the authenticity of the Ashoka descriptions, we corroborated the profiles with additional, publically available internet data (see Appendix A). We conducted research online for the 30 fellows and were able to confirm that all the entrepreneurs from our sample were engaged in the activities described in the Ashoka database. This attests to the quality of the Ashoka data. Our secondary research revealed that the Fellows included in our sample were receiving grants, awards, or recognitions from organizations other than Ashoka, including UNICEF, Kellogg Foundation, Stanford Social Innovation Review, and Skoll Foundation, among others. This is a strong indication that SEs in our sample indeed represent successful entrepreneurs.

There is a long history of using secondary analysis where documents crafted for alternate purposes are used in research as “field-notes” (Turner, 1983: 342) and are analyzed using various qualitative approaches (Strauss & Corbin, 1998). For instance, news and public inquiry reports have been used exclusively to study responses to organizational disasters (Turner, 1976) and scholars have relied on annual letters to shareholders to examine strategic change associated with environmental shifts (Barr, Stimpert, & Huff, 1992). In light of the high costs of collecting original data across countries, the use of secondary cases is particularly valuable in proposition-generating qualitative research that span multiple countries (Alvord, Brown, & Letts, 2004). While reliance on secondary data may limit the ability to gain “precisely comparable data” and introduces “the biases of multiple observers” (Alvord et al., 2004), we mitigate these limitations by using data gathered by a reputable organization that uses consistent, systematic methods and verifying the authenticity of the work of these entrepreneurs using alternate sources.

3.4. Data analysis

We employed a five-step coding and data analysis process. The first step involved the first two authors developing initial codes from evaluating and discussing five Ashoka cases that are not included in the final sample. These researchers specifically looked for evidence of bricolage and ingenieuring processes in the cases. They conducted a “manifest analysis” (Berg, 2004) of the case descriptions, identifying the phrases commonly used in the text. For example, references to the environmental and societal stereotypes, resources that entrepreneurs used, different parties involved, and the ways that the venture was built were noted.

At the second stage, these researchers, using their knowledge of the SE and bricolage literatures, compared the facts surrounding the cases, the similarities and differences across cases and generated properties of categories that can be generalized. This is a well-accepted qualitative data analysis method (Glaser & Strauss, 1967; Jack, Drakopoulou-Dodd, & Anderson, 2008; Miles & Huberman, 1994; Strauss & Corbin, 1998). Through several iterations between the raw data, emergent themes, and the theory, four core dimensions of bricolage and ingenieuring behavior were generated. The first, which we termed conceptualization of the environment, demonstrated how social entrepreneurs view environmental and societal constraints. We noticed that entrepreneurs exhibit contrasting attitudes towards the environment; where bricoleurs, with a bias for action, are willing to test and counteract existing limitations imposed by institutional, political, and societal settings. In contrast, other entrepreneurs view the constraints of the environment as legitimate and work within or in congruence with existing social orders and systems, which is consistent with an ingenieuring-type outlook. The second dimension, which we referred to as approach to resources, connotes the two attitudes toward resources: bricoleurs often search for new uses for existing resources and/or engage in recombining resources whereas, ingenieurs use resource “as-is” or for its commonly designated purpose. The third, which we entitled nature of agency, refers to how various societal actors, other than the focal entrepreneur, are involved in shaping the emerging enterprise. In a “distributed agency” approach, bricoleurs generally involve a multiplicity of actors, some of them taking on several different roles simultaneously. In contrast, ingenieurs involve a limited number of actors and stakeholders and interact with them in a few limited ways (we label this as the “concentrated agency” approach). The fourth dimension, which we termed the process mode, refers to how entrepreneurs manage the venture. Bricoleurs are marked by their bias for action and mentality of making do; they have a bias towards active engagement with problems and opportunities without questioning whether a workable solution could be created from the available resources. In contrast, ingenieurs are driven by a strong vision and are consistent in their approaches to creating, establishing methodologies and systems, and diffusing them to other locations. Through this process, we gained some conceptual clarity regarding the main domains of bricolage/ingenieuring activities. A summary of the four main constructs and their characteristics can be found in Table 1.

In the third step, all five researchers analyzed the case data independently using the coding structure developed in the previous steps, each coding a set of fifteen cases. Here researchers took care to identify evidence of bricolage/ingenieuring approach in the above four domains: conceptualization of environment, approach to resources, nature of agency, and process mode. The fourth step in the data analysis involved researchers discussing and reconciling differences in their coding. At the end of this process, we came up with a comprehensive record of whether and how each entrepreneur uses bricolage or ingenieuring approaches in his/her social ventures. In bricolage-type approach, the entrepreneurs are marked by refusing to enact limitations; innovating new uses for existing resources/or recombining the resources; involving a wide range of stakeholders in their ventures in a distributed fashion; and making do/having a bias for action. In ingenieuring-type approach, the entrepreneurs are more accepting of environmental stereotypes; tend to use resources according to their commonly specified usage; involve only a limited group of stakeholders in the ventures; and fulfill a predetermined plan for the social venture. A set of master codes across cases and the text associated with those codes were maintained in Nvivo, a software package that is widely used by qualitative researchers. For Table 2 provides examples from our study of the bricolage vs. ingenieuring type of approach.

The final step involved sorting and systematically assessing the final codes across cases from which patterns were detected and
discussed. The emergent themes were then used to generate propositions regarding successful social ventures.

4. Results of the case analyses

In the following section, we describe the results of our analysis, elaborating on each of the four dimensions of value creating behavior. Then, we generate propositions regarding the role of bricolage and ingenieur in successful social innovations.

4.1. Conceptualization of environment: refusal to enact limitations

One of the main insights that emerged from our analysis is that successful social entrepreneurs refuse to enact limitations in the environment. They often challenge the key norms in the environment that stifle social value creation (e.g. norms related to the beneficiaries and the specific domains where learning can occur).

Across all three countries, it is evident that society traditionally has a set view of the roles of students, teachers, educational organizations and other constituents. In addition each country has existing educational systems that societal members take for granted. Some successful social entrepreneurs adopt an ingenieur-type approach as they work in conjunction with or in supplement to the existing educational system. For instance, Herb Sturz of the After-School Corporation in the US, works within the framework of a traditional “after school” program. Recognizing that high-quality programs could not be sustained through private contributions alone, he re-engineered after-school programs with a funding model that uses public resources and private finances. His innovation centers on supplementing the existing after-school program with a diversified funding stream (refer to Table 2 quote on conceptualization of environment).

Predominantly, however, successful social entrepreneurs refused to enact the limitations imposed by the environment, adopting a bricoleur-type approach. Our sample of social entrepreneurs challenged negative stereotypes of students they seek to educate and serve. An example is Auro Lescher, a social entrepreneur in Brazil who created Projeto Quixote to help street children in Sao Paulo and in a few other cities. He confronted society's common depiction of urban street children as primarily “drug addicts”, resulting in the government's typical response of “institutionaliz[ing] the children, treating the problem in only criminal and medical terms.” Social organizations offer charity in terms of food and clothing without addressing the social and educational needs of these children. In contrast, Auro Lescher defies these assumptions, viewing these street children as “urban refugees”, and recognizes that their state is a by-product of the huge influx of people into urban areas who have lost their traditional neighborhood and familial support. This distinct perspective enables him to design solutions that effectively educate the street youth and integrate them into mainstream society, thereby “break[ing] the cycle that drives children to live and return to the streets.” (Profile of Auro Lescher from Ashoka).

In several other cases, successful social entrepreneurs challenged the view of students as passive recipients of education services, structuring more effective learning programs by recognizing the different roles of students as providers of services or as change makers. Abdalaziz Moura who started a program “SERTA”, Service for Alternative Technology, in rural Brazil built on bridging classroom work with rural development needs. Students help their community through agricultural research while simultaneously honing skills in grammar, mathematics, geography, history, and other traditional classroom subjects. Jaison de Souza e Silva in Brazil was convinced that the universities in Brazil could play a critical role in public policy by leveraging university students from the favelas. Through his organization, Observatório de Favelas (Slum Observatory), he involves these students in research activities and integrates them with their regular studies, enhancing learning. At the same time, “these students generate knowledge that can inform policy debates about problems in favelas” and help “forming networks within the favelas to spread awareness of university opportunities and of the value of knowledge and research in understanding and addressing social problems” (Profile of Jaison de Souza e Silva from Ashoka).

Secondly, our analysis suggests that successful social entrepreneurs also confront the norm that learning is conducted exclusively within the formal educational system and consequently have created learning opportunities by leveraging under-utilized, non-traditional domains. For example, Earl Phalen in the US, challenged the common paradigm that summer and after school programs are a “kind of second-class educational opportunity”, not serious, rigorous programming (Profile of Earl Phalen from Ashoka). His program—Building Educated Leaders for Life (BELL), based on a rigorous curriculum, assessment and trained staff, utilized the summer and after-school time as a primary avenue for improving student proficiency in reading, writing and math. Similarly, Elizabeth Stock, of Computers for Youth in the U.S. expanded venues for learning to the home environment, challenging the common assumption that parents in low-income households cannot be effective partners in their child’s learning.

The picture, then, is of successful social entrepreneurs defying the explicit and implicit norms in their environment, refusing to accept “negative stereotypes” or to view problems from a single-dimensional lens, opening up opportunities for creating social value. This observation raises an aspect of bricolage that is insufficiently embraced within the existing literature of social bricolage. Previous researchers have discussed refusal to enact limitation as one of the key processes of bricolage, but have not investigated what types of limitations most concern social entrepreneurs. Our research suggests that their actions target

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<table>
<thead>
<tr>
<th>Conceptualization of the Environment</th>
<th>Refusal to enact limitations imposed by institutional, political and societal settings; Willingness to counteract conventional wisdom</th>
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<tbody>
<tr>
<td>Approach to Resources</td>
<td>New uses for existing resources; Recombining existing resources for unexpected new use</td>
</tr>
<tr>
<td>Nature of Agency</td>
<td>Multiplicity of diverse actors, actors involved through several roles and in a consistent fashion Distributed agency</td>
</tr>
<tr>
<td>Process Mode</td>
<td>Bias for action/making do; A bias toward action and active engagement with problems or opportunities rather than lingering over questions of whether a workable outcome can be created</td>
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<td></td>
<td>Taking constraints as granted; view constraints as legitimate Using resources for commonly intended purposes</td>
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<td></td>
<td>Actors involved could be the same category Concentrated agency Planning; Driven by vision Consistent use of methodology and systems that could be replicated elsewhere</td>
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Table 1

Key dimensions of contrast between social bricoleurs and ingenieurs.
Table 2
Illustrative Codes of Bricolage and Ingenieur-type of Approaches.

<table>
<thead>
<tr>
<th>Conceptualization of Environment</th>
<th>Bricolage: refusal to enact limitations</th>
<th>Ingenieur: working with limitations</th>
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<tbody>
<tr>
<td><em>“Summer and after school enrichment programs are not new, but they have long been seen as a kind of second-class educational opportunity— a place for children to play sports and do crafts, rather than to be challenged academically through serious, rigorous programming.”</em> (Profile of Earl Phalen, USA from Ashoka)</td>
<td><em>“After realizing that high-quality programs could not be sustained largely through private contributions, Herb managed to financially re-engineer after-school programs using a funding model that uses public resources to further leverage private finances.”</em> (Profile of Herb Sturz, USA from Ashoka)</td>
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<tr>
<td><em>“One reason why programs to address poverty, crime, and violence in Brazil’s favelas so often fail is the fog of misconception and prejudice surrounding these urban spaces . . .”</em> Research centers and media outlets therefore continue to perpetuate a distorted view of the dynamics and culture of these communities. (Profile of Jaislon de Souza e Silva, Brazil from Ashoka)</td>
<td><em>“Kim’s work is to achieve deep and sustainable impact, the foundation is focusing on offering these tools (a variety of practical life-skills modules contained in a series of workbooks, lecture series, and classroom activities to help children understand historical instances of oppression) first to youth within schools and then progressively rolling out interventions to school administrators.”</em> (Profile of Kim Feinberg, South Africa from Ashoka)</td>
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<td><em>“Rather than being seen as lost and lonely, street children are perceived as delinquents and criminals.Márcia believes that the system must be reformed.” (Márcia Ventura Dias, Brazil from Ashoka)</em></td>
<td><em>“Because the Department of Education has not developed a system to effectively implement the rights, Margie developed a program that makes teaching African languages, in addition to English, simple and effective. Margaret is also lobbying teacher training departments and curriculum designers to better place the model within the education system from the top down.”</em> (Profile of Margaret Owen, South Africa from Ashoka)</td>
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<tr>
<th>Approaches to Resources</th>
<th>Bricolage: new uses for existing resources and/or recombining resources</th>
<th>Ingenieur: using resources more intensely for commonly intended purposes</th>
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<tbody>
<tr>
<td><em>“Ana capitalizes on her well-known image as a popular national athlete and mobilizes the support of other professional athletes.”</em> (Profile of Ana Moser, Brazil from Ashoka)</td>
<td><em>“TASC’s strategy uses large amounts of public funding to leverage further funds, predominately private in nature, and has proven to be successful.”</em> (Profile of Herb Sturz, USA from Ashoka)</td>
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<td><em>“Márcia’s Mobile School for street children, Escola Ambulante, uses public spaces to offer educational and extra-curricular activities to street children during a 30-day program.”</em> (Profile of Márcia Ventura Dias, Brazil from Ashoka)</td>
<td><em>“He saw that by adjusting the traditional school day and staffing structure, he could achieve an overall higher-performing and scalable school network.”</em> (Profile of John Danner, USA from Ashoka)</td>
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<td><em>“She has engaged witnesses and survivors of various atrocities such as the Jewish Holocaust, the Rwandan Genocide, and apartheid as facilitators in oral history lessons.”</em> (Profile of Kim Feinberg, South Africa from Ashoka)</td>
<td><em>“On the teaching/counseling side William uses a variety of resources. Some of his trainers are themselves former guidance counselors, some are employed or unemployed teachers, some are former students.”</em> (Profile of William Solomon, South Africa from Ashoka)</td>
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<tr>
<th>Nature of Agency</th>
<th>Bricolage: distributed agency</th>
<th>Ingenieur: concentrated agency</th>
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<tbody>
<tr>
<td><em>“The centers bring together many different stakeholders, such as physical education professionals, community organizations, city halls, private companies, the public sector, and the ‘S System’ (public, nongovernmental organizations funded by payroll taxes, which focus on vocational training and capacity-building).”</em> (Profile of Ana Moser, Brazil from Ashoka)</td>
<td><em>“To assist in policy formulation, Allan has formed relationships with various government Ministries and as such the Youth Ministers can receive direct advice and suggestions on how to fulfill the responsibilities of office.”</em> (Profile of Allen Williams, South Africa from Ashoka)</td>
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<td><em>“Auro sought to draw on a variety of competencies and to embed this recognition across multiple fields. His team of twelve ‘therapeutic educators’ thus includes teachers, health workers, social workers, and others with a commitment to providing children with the emotional support they lack on the streets. These figures remain central throughout every phase of the program, providing kids with a blend of education, social, and clinical support, and offering for many their first truly supportive relationship.”</em> (Profile of Auro Lescher, Brazil from Ashoka)</td>
<td><em>“She trains community educators in physical education and is currently lobbying the government to certify instructors who have gone through her training.”</em> (Profile of Ana Moser, Brazil from Ashoka)</td>
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<td><em>“Beulah’s most ambitious program is an advocacy and lobbying campaign to convince government and other stakeholders to become involved in a national literacy and reading strategy. She organized a national conference of key stakeholders, including writers, illustrators, booksellers, publishers, library services, language specialists, government departments, and other key reading organizations in order to harness support to declare 2001 to 2010 the National Decade of Reading in South Africa.”</em> (Profile of Beulah Thumbadodo, South Africa from Ashoka)</td>
<td><em>“A leader in the OST field for evaluation and assessment, Earl is often a panelist at conferences and has published in research journals and news publications.”</em> (Profile of Earl Phalen, USA from Ashoka)</td>
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<tr>
<th>Process Mode</th>
<th>Bricolage: bias for action/making do</th>
<th>Ingenieur: planning focus</th>
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<tr>
<td><em>“His first response was to start a soup kitchen for destitute children in a township in his hometown of East London. The kitchen began very humbly with him handing out sandwiches after church services to homeless children from the ages of 3 to 15.”</em> (Profile of Allan Williams, South Africa from Ashoka)</td>
<td><em>“He has created a formal methodology to train a growing cohort of educators who share a strong sense of empathy rather than a particular background.”</em> (Auro Lescher, Brazil)</td>
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<td><em>“The origins of the NAS project may be traced to a website that Gilberto created in the mid 1990s, where public and private school students, and eventually teachers and journalists, shared experiences, observations, and material related to education.”</em> (Profile of Gilberto Dimenstein, Brazil from Ashoka)</td>
<td><em>“She has developed a complex plan to engage all the stakeholders in continuous activities that will involve everybody reading in South Africa.”</em> (Profile of Beulah Thumbadodo, South Africa from Ashoka)</td>
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<td><em>“Making mistakes and learning along the way, he brought the business from just himself to 250 staff, and $40M (and slightly profitable) in four years before selling it.”</em> (Profile of John Danner, USA from Ashoka)</td>
<td><em>“Her five-year vision for the AACY includes building a national board of directors, developing a system for identifying and training affiliates, producing how-to informational materials and on-site training programs for affiliates, enrolling affiliates in ten states, instituting a fee-for-service capability to diversify and expand her revenue base, partnering with universities to study and publish on caregiving youth and CYP outcomes, and continuing to create and pursue public education opportunities through the media.”</em> (Profile of Connie Siskowski, USA from Ashoka)</td>
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the negative stereotypes of their students and the notion that learning can only happen within a predefined domain, i.e., the formal school environment in the education setting.

4.2. Approach to resources: new use for existing resources and combinations of resources

Some SEs use resources in their intended ways by engaging and retraining current educators, utilizing the existing funding system, or using internationally accepted and legitimate education theories in their own programs—adoopting an ingenieur type of approach. However, our findings suggest that in a vast majority of the instances and regardless of the relative degree of resource scarcity associated with their specific country context, successful SEs show an approach towards resources that is typical of bricoleurs—using or recombining in new ways that resources are discarded, thereby creating value (Baker & Nelson, 2005). For example, one SE, Shadrack Tshivhase, found new uses for discarded resources by setting up an educational toy library using a ship container in an empty section of a cemetery near one of the large informal settlements in South Africa. Over time he expanded services to these settlements by helping them provide care and educational aids to children.

Similarly, Marcia Ventura in Brazil used public spaces to offer educational and extra-curricular activities to street children. In São Paulo, many children live on the streets and typically have no adult to trust or confide in. She transformed the principal public square in downtown São Paulo to a clean space offering reading classes, music, theater and dance (see quote on approaches to resources in Table 2). She then worked to create group houses that could be used as shelters for the children. Her venture has expanded to other cities and regions, utilizing public squares as the space for her programs.

We also found several instances of successful SEs relying on the existing skills of people and using them for new purposes. For instance they created opportunities where students could co-create value for society while learning. Students were developed as mentors, tutors, and service providers, instead of being perceived as mere recipients of services. One example of this is found in South Africa where the formal education system struggles to meet the needs of students. Here Flick Asvat of the organization Bugaro Edutrade, developed a concept where she puts students in control of their after-school educational programs. Assisted by unemployed graduates and tertiary students, Flick identifies young leaders and trains them as mentors. Her idea was to “encourage students to take their own unique abilities – whether in dancing, mathematics, soccer, drawing, or anything else – find other students who want to learn from them, and form small mentorship groups” (Profile of Flick Asvat from Ashoka). The concept spreads as children develop from students to mentors themselves, share their skills with their “buddies”, and serve as role models.

These examples thus exemplify the result of bricolage processes through resource re-combinations, where value is created from non-applied or uncommon resources, akin to one aspect of effectuation, wherein an individual uses “a particular set of means” to create various possible outcomes (Sarasvathy, 2001: 245). These redeployments range from small incremental re-combinations to more drastic resource makeovers. From our sample, the impact of these resource re-combinations not only resulted in educational facilities or programs, but also in students becoming tutors, mentors, and change makers, aiding policy makers and other societal members. Our research confirms the notion that successful social entrepreneurs rely on bricolage rather than ingenieur regarding resources. It is also consistent with the notion that entrepreneurs create opportunities through continuous interaction with the environment and in that process, may find uses for resources that are not typically expected. Interestingly, we find evidence of this across the three vastly different cultural, institutional and resource contexts.

4.3. Nature of agency: distributed agency

The third main characteristic of successful social ventures appears to center on the role that individual actors play in social enterprises. In bricolage, knowledge is dispersed through networks and the design and development of social enterprises rely on a variety of social actors. Since the bricoleur gains knowledge through close exposure to material and troves of resources, different social actors may have vastly different types of knowledge generated from their environment. Distributed agency is necessary to marshal such dispersed knowledge base (Garud & Karnoe, 2003). In contrast, in ingenieur-driven approaches, the number of social actors involved is limited and the collaboration between the different types of actors is narrow.

While some social entrepreneurs are consistent with the ingenieur ideal-type in that they only involved a group of limited types of stakeholders in their enterprises, electing to work closely with schools, funding agencies, or other parties, successful social entrepreneurs tend to be more bricoleur-oriented in their use of extended networks. Allan Williams, founder of the South Africa Youth Ministerial Project (SAYMP) employed an ingenieur type of agency approach. His venture enables young students to understand governance in South Africa through a program that models government ministries in high schools (see quote on nature of agency from Table 2). He selectively targeted the key players in the field, such as Department of Education, school governing bodies and the Electoral Institute of South Africa, a statutory body that runs and monitors the general elections in South Africa. Though he only involved a number of relevant actors and stakeholders, he was able to foster strong relations with them and promote the legitimacy and success of his program.

In contrast, many successful social innovators tend to be social bricoleurs in that they are primarily focused on engaging a wide range of stakeholders. First, social entrepreneurs are conscientious in marshalling inputs from different and diverse types of actors in their social ventures, not only actors in the traditional education sectors (i.e., educators, administrators, parents and students), but also actors in other sectors such as government regulatory agencies, corporations, other non-profit organizations, and society at large.

Second, it appears that whether operating in a relatively resource-rich environment and individualistic culture of the US or in severely resource constrained context of South Africa or a more collectivistic culture of Brazil, successful social entrepreneurs have been able to formalize and stabilize the vast, diverse, distributed network either by creating permanent network linking mechanisms or by generating artifacts and tools that are available to the public. Here the issue is not only limited to getting diverse actors together on a one-time basis, but also to create artifacts, tools, and practices to formalize and shape their future interactions. For instance, staff positions are created within the social enterprises with the goal to mobilize resources from diverse actors. Gilberto Dimenstein from Brazil, who pioneered the Neighborhood as School (Bairro Escola) initiative that expands communities’ learning spaces beyond public and private schools, provides a good example. Recognizing that the sustainability and long-term success of the overall NAS initiative depends on continuing collaboration among a diverse set of actors, Gilberto gained the approval from public officials in São Paulo to create new “community educator” positions that link schools with their surrounding communities. Through formalizing the positions, he
was able to access distributed agencies including public officials, school administrators and teachers, community leaders, citizen organizations, businesses, children and youth on a continuous basis.

A third way for successful social entrepreneurs to mobilize distributed agency is through regulatory changes, which potentially allows the innovation they developed to be adopted across a larger geographical area. There is evidence from our sample to show that, across various country contexts, social entrepreneurs are aware and are actively using regulatory and governmental agencies to endorse and advance their causes. For example, Margaret Owen-Smith from South Africa has developed the Home Language Project to increase the number of students learning African languages and the efficiency of their learning. Recognizing that language rights are guaranteed by the Constitution of the Republic of South Africa (1996) but are not properly administered or protected, she lobbies the education department for the implementation of constitutional rights, which then requires schools to offer the option for students to learn African languages during the first three years of school. Regulatory policies can facilitate the promotion of a social cause, shaping the dynamic of different actors in the field.

Our findings add to the theory by highlighting the distributed nature of human agency associated with successful social entrepreneurship. As our discussion illustrates, regardless of the gender of the entrepreneur or whether the social venture is located in a collectivistic or individualistic culture, social entrepreneurship entails not just the identification of social opportunities by alert and socially minded individuals, but also the creation of a venture by a community or a collective. This creative synthesis was apparent when diverse actors from government and society interacted with one another to create the future. Yet, the key issues are related to how successful social entrepreneurs bring together the resources, inputs, knowledge and learning processes by such a large group of diverse actors to sustain the venture development. Our study goes beyond previous studies (Di Domenico et al., 2010; Garud & Karnøe, 2003) to highlight that successful social entrepreneurs do so by creating network-linking positions in their ventures to facilitate interaction and intersection of diverse actors. In addition, they skillfully use the regulatory influences to support their causes, in an effort to promote their social ventures to a broader audience.

4.4. Process mode: strong planning focus

A somewhat counter-intuitive finding suggested by our study is that successful entrepreneurs exhibited a strong ingenieur-ing type approach (rather than bricolage) to social value creation. While entrepreneurs often experiment with resources on hand, they also deployed a planning focus that contributed to the sustained success of their ventures. This finding was in contrast to the environment, resource, and agency dimensions in which bricolage type activities dominated.

The exemplars in our study were not just interested in short term success, but often were driven by a strong sense of vision, and built their programs over time to achieve the maximum sustained impact. For instance, Connie Siskowski of American Association of Caregiving Youth (AACY), USA had a strong vision from the early days of creating her venture. She developed a “five-year vision for the AACY [that] includes building a national board of directors, developing a system for identifying and training affiliates, producing how-to informational materials and on-site training programs for affiliates, enrolling affiliates in ten states, instituting a fee-for-service capability to diversify and expand her revenue base, partnering with universities to study and publish on caregiving youth outcomes, and continuing to create and pursue public education opportunities through the media” (Profile of Connie Siskowski from Ashoka). Thus, unlike bricolleurs, these entrepreneurs are not just making do from their existing resource base, but are systematically setting goals and reaching them.

The individuals in our study also created pilot programs which were then revised based on feedback and results. Once successful practices had been identified, these were codified to spread the knowledge to a wider audience. Ana Moser of Institute of Sports and Education (IIE) of Brazil developed the concept of a sports center to enrich students’ lives, which was then expanded to include a wider range of teachers and locations. In her program, “teachers-in-training” receive education and complement their professional development with their involvement in the centers’ activities. One of the results of this effort is The Handbook of Educational Games, a practical manual for teachers and community educators (Profile of Ana Moser from Ashoka). By formalizing the methodology, building pilot programs, and setting clear targets in phased programs, entrepreneurs were able to showcase achievement, mobilize future resources, and attract potential future involvements.

Many of successful SEs used the notion of franchise to spread their model to other organizations. Earl Phalen of Building Educated Leaders for Life in U.S. is a case in point. His “programs provide a proven, scalable solution that policymakers can confidently point to as an effective way to improve education” (Profile of Earl Phalen from Ashoka). Earl was able to replicate his “franchise-type” partnership with other organizations such as the East Palo Afro Boys & Girls Club. In this model, BELL provides training, program materials (for after school and summer programs), and technical assistance for a fee. By 2011, BELL has worked with partner organizations at 50–100 sites nationwide. Similarly, Yvonne Bezerra de Mayo in Brazil developed a program and teaching methodology to heal trauma for children growing up in slums, or favelas, and place them back into the education system. After piloting a successful demonstration center in Mare, the largest slum in Rio de Janeiro, Brazil, Yvonne is partnering with two public schools in Rio to teach them to replicate her model. This methodological innovation allows her to get the model adopted by public school systems across Brazil. The “franchise” models are quickly replicated and facilitate the rapid expansion of the original innovation to different cities and states.

While our findings suggest that in successful ventures, SEs rely primarily on ingenieur-oriented planning processes, it may be those who have a strong planning focus, as opposed to those who rely on making do alone, are more likely to reach the stage of success and scale of those included our study. However, successful SEs, both young and mature, are driven by vision and consistent in creating methodologies and establishing systems to institutionalize value creation processes that could be separated from the founding social entrepreneur. Our study goes beyond previous research and notes that successful SEs are often driven by strong planning focus in their processes, often scale up their programs by establishing pilot programs that could be franchised and spread to different locations. While franchise models, as a case of cooperative entrepreneurship, have been widely researched in commercial entrepreneurship (Baucus, Baucus, & Human, 1996; Davies, Lassar, Manolis, Prince, & Winsor, 2011; Shane & Hoy, 1996), their importance in the SE area has yet to attract attention.

4.5. Bricolage and ingenieur-ing in successful social ventures: propositions

Our study aimed to discern the role of bricolage and ingenieur-ing in successful social entrepreneurial activity in three
very different country contexts – emerging, rapidly emerging, and developed economies of South Africa, Brazil, and the US. The results indicate bricolage and ingenieurie are approaches both used in enacting social value in a variety of environments, albeit each plays a different role in creating value.

Regardless of the country context, bricolage appears to play a more dominant role in the way successful social entrepreneurs conceptualize their environments. They seem to have a deeper, richer and multi-faceted understanding of the beneficiary community, one that diverges from negative stereotypes or simplistic views that society at large normally holds. For instance, the disadvantaged stray street children of Sao Paulo are no longer “drug addicts”, but “urban refugees” in Auro Lescher’s perspective; students are no longer just students, but “community service providers” from Abdalaziz Moura’s standpoint; and are “policy researchers” in Jaiison de Souza e Silva’s view.茎enninng from such novel conceptualizations is a willingness to treat beneficiaries as useful members of society, as equals, and to test new solutions that establish them as such. In this process, successful social entrepreneurs look to under-utilized and non-traditional domains to foster opportunities for their constituencies, such as home environments, after-school programs, or even sports programs. This view well may be the foundation of successful SE as innovative solutions are often associated with challenging the traditional frameworks, stereotypes, or simplistic views of participants generally adopted by society. This factor also distinguishes SEs from commercial entrepreneurs who serve their customers, rather than battling the negative stereotypes associated with their customers.

Our analysis indicates that across emerging, rapidly emerging and developed countries with very different cultural and institutional practices, successful SEs tend to adopt a flexible view of domains and boundaries as they often bring together distinct domains, such as education vs. play or classroom vs. home space. This refusal to uphold traditional domain boundaries helps them to weave key elements from varying domains and expand the space and scope for creating social value. This blending of domains implies that successful SE may involve the ability to juxtapose dual “frames of reference”, “types of logic”, “code of behaviors” to unleash creative energy (Koestler, 1964: 38). Thus, regardless of the country context, successful SEs tend to move across domains, linking unconnected ideas and expanding the space for novel solutions.

**Proposition 1.** Successful social entrepreneurs adopt a bricolure-type approach in that they challenge negative stereotypes and simplistic views of their beneficiary community and create solutions that bridges different problem domains.

Second, successful social entrepreneurs are skillful in bringing resources from different domains to fulfill their goals. Bridging multiple domains expands not only where, but also how social value can be enacted. It engenders an innovative attitude towards resources—that of finding new uses for existing resources and recombining resources. Whether in the relatively developed educational sector in the US or in the resource-constrained environments of Brazil or South Africa, resources that are discarded or deemed insignificant in one domain are frequently viewed as valuable or indispensable in another. In our study, ship containers become libraries, public squares become classrooms and students become mentors to other students. Such inventive uses of resources can only result from entrepreneurs’ refusal to view social issues through traditional lenses, and is the product of their intimate knowledge of resources gained from close observation, familiarity, and repeated encounters. This approach to resources is similar to bricoleurs in commercial entrepreneurship as it allows them the freedom to create because they see uses for almost everything. Hence,

**Proposition 2.** Successful social entrepreneurs adopt a bricolure-type of approach to resources in that they identify new uses for existing resources that are discarded by others and/or recombining existing resources in novel ways.

Whether in a country with cultural practices oriented toward collective actions and distribution of resources or more individualist cultural values (Hofstede, 1983; House et al., 2004), distributed agency, an approach typical of bricoleurs, appears to enable SEs to create social value with partners and relevant stakeholders in the process. The social change advocated by SEs often represents deviations from the norm (Garud & Karnoe, 2001) given their refusal to enact environmental limitations or view problems as bounded to a single domain. Consequently, it is unlikely that the novel outcomes and processes championed by the SE will be readily embraced by actors embedded in the existing ways of doing things. Resisting prior stereotypes and societal assumptions of who can add value allows entrepreneurs to identify, evaluate, and effectively use diverse resources, often from both traditional education sectors (such as educators, administrators, or students), and from non-educational sectors such as government regulatory agencies, corporations, non-for-profits and larger civil society. A the same time, the presents challenges to the entrepreneurs as they must advocate a new way of doing things, persuade diverse social actors with heterogeneous motives to change and provide necessary resources, and do so in several domains simultaneously. This challenge has not been adequately addressed in the previous literature (Di Domenico et al., 2010; Garud & Karnoe, 2003). We theorize that successful social entrepreneurs can mobilize, stabilize and expand their network through sustainable mechanisms, such as establishing formal positions to connect varied actors, or to effect regulatory changes through government advocacy. These mechanisms allow social entrepreneurs to overcome the lack of legitimacy and acceptance from external constituents. Past research on commercial and social entrepreneurship suggests that in uncertain environments, resource providers rely on symbolic signals of competence to judge organizations’ credibility (Meyer & Rowan, 1977; Sine, Mitsuhashi, & Kirsch 2006). Establishing formal positions such as “therapeutic educators”, “certified trainer” or “community educators” signals domain experience, know-how, and intent to uphold the relationship with different stakeholders. Given that access to a diverse set of resources is critical for the social enterprise’s survival, the increased legitimacy associated with the formalization is likely to enhance their chance of success. Similarly, the advocacy efforts and the regulatory change effected by SEs increase the legitimacy and credibility of the social enterprise in the eyes of the public, which in turn will encourage broad involvement in the novel cause. Thus we propose,

**Proposition 3.** Successful social entrepreneurs utilize a bricolure-type approach in that they mobilize distributed agency through establishing legitimacy by formalizing network-linking positions and/or affecting regulatory changes.

While successful social entrepreneurs adopt a bricolage-type of approach in resisting norms, using resources creatively, and leveraging partnerships, they also manifest ingenieur-type of attributes with regard to a strong planning focus. Long-term vision, consistent action and an emphasis on sustainable, replicable systems join with flexible use of resources and partnerships to create social value. This is suggestive of the blending of emergent and intended approaches to strategic action that Mintzberg and Waters (1985) propose. The former is flexible and learning-centric, whereas the latter is more planned and focuses on direction and
control. In our study, even though SEs are flexible in identifying opportunities and mobilizing resources across country contexts, successful SEs are clearly systematic in planning, execution, and fulfilling their visions of the venture. The process of establishing and refining systems is driven by a strong vision and often involves implementation of pilot programs, incorporation of feedback, and/or expanding through franchise-type arrangements. The emphasis on such processes is similar to conscious experimentation to test and refine a local solution and then to focus on replication of that solution to other locations (Levitt & March, 1988). Previous research on bricolage has indicated that in order to achieve growth, firms often need to limit or restrict bricolage processes once the business is established and the entrepreneur was able to marshal a level of resources to sustain it (Baker & Nelson, 2005).

They propose that the key to generating growth is adhering to processes and leveraging existing operating experiences to generate efficient business routines in select, strategic areas. While most of the commercial entrepreneurs in Baker and Nelson’s (2005) study focused more on establishing internal routines to free up the lead entrepreneur’s attention to devote to growth opportunities, we notice that the SEs in our sample tend to focus on having external partners adopt their routines and systems. Social entrepreneurs seem to be more concerned with benefiting broader constituencies (including those who cannot be directly served by the social enterprises themselves due to geographical distance) with their programs and systems. Focusing on routinization, formalization, and replication of a set of proven programs, successful SEs leveraged other organizations’ capabilities to fulfill their vision. This appears to occur consistently in countries with very different resource endowments, cultural practices and institutional traditions. Hence,

**Proposition 4.** Successful social entrepreneurs employ an ingenieur-type approach in their operational process to enact a vision through consistent emphasis on replicable methodology and systems.

Overall, our results suggest that viewing successful SEs as solely bricoleurs or ingenieurs may be inaccurate. Despite the vast differences in the country settings with respect to available resources, cultural traditions and the quality of educational sector, bricolage plays a dominant role in the way successful SEs conceptualize their environments, in their attitude toward resources and in their view towards partnerships, but the ingenieur-type approach such as vision, methodology and system play a key role in the processes of building those ventures. It seems that while the bricoleur type of approach is used to view the environment and marshal necessary building blocks for SEs, ingeniering is needed for making it sustainable and scaling the enterprise. This generalization is similar to Baker and Nelson’s (2005) realization that in commercial entrepreneurship bricolage by itself would most likely lead to limited growth. Their investigation of commercial entrepreneurial ventures leads to the supposition that ventures using parallel bricolage, “marked by multiple ongoing projects relying on bricolage” (Baker & Nelson, 2005: 344), are more likely to develop firm identities and community of practices that stifle growth. In contrast, selective bricolage, bricolage behaviors that are limited in scale and scope, is most likely to be associated with growth in new ventures. We advance their conceptualization of selective bricolage to SE and extend further by identifying the specific domains in which bricolage is valuable. Bricolage in terms of conceptualizing the environment and accessing resources and agencies is valuable, whereas, rejecting bricolage modes and adopting ingeniering mode in the areas of operational processes is most likely to be associated with successful SEs. Driven by a strong vision, successful SEs seem to be rigorously methodological at searching and refining routines that are effective in a local social environment, and were able to replicate such routines in other environments so as to facilitate expansion. It is important to note here that we are not speculating on the sequencing of the bricolage and ingeniering process. It may well be that ingeniering generally follows bricolage processes, but our data do not permit us to make conclusive inferences of such ordering. Nevertheless, we observe a strong predisposition towards ingeniering type of process in our sample of successful SEs, an observation that has not been identified in previous literature on bricolage.

It is noteworthy that bricolage and ingeniering approaches co-exist in successful social ventures and are present in similar dimensions of value creation across emerging, rapidly emerging, and developed economies with varying levels of economic development, institutional development and cultural practices. Furthermore, successful social entrepreneurs are bricoleurs with regard to the environment, resources, and agency, but are ingenieurs in enacting their visions and ways of sustaining enterprises.

**Proposition 5.** Successful social entrepreneurs utilize a bricolage-type approach when they conceptualize their environment, access resources and agencies, but employ an ingenieur-type of approach in their operational process and methodology.

5. Conclusions and implications

Our study explores the issue of social value creation in the US, a developed, market-based economy with a long tradition of political stability and democracy, Brazil, a rapidly emerging Latin American economy, and South Africa, an emerging economy with complex cultural heritage, and makes three significant contributions to the SE literature. First, while existing literature (Di Domenico et al., 2010) highlights that entrepreneurs engage in social bricolage, we show that successful social entrepreneurs, engage in both bricolage and ingeniering-type practices. Whereas SEs engage in bricolage type of approaches in enacting their environment and mobilizing resources, they clearly engage in ingeniering type of approaches regarding vision, methodologies and systems to achieve growth on a large scale. Our study suggests that successful SEs indeed do more with less, but they do so in a systematic manner. Thus, we unpack the inter-play between bricolage and ingeniering by highlighting that certain dimensions of the value-creating process are better served by bricolage whereas, a sense of vision and planning play an integral part in institutionalizing and sustaining innovations.

A second contribution relates to the importance of distributed agency, creating value with a wide range of stakeholders. In this regard, the ability to engage and build connections across diverse groups is critical (Alvord et al., 2004). In commercial entrepreneurship “networks actually create the environment, as it is understood and operated by the entrepreneur” (Jack et al., 2008: 125); this phenomenon appears to be valid for SE as well. However, SEs can face added difficulties in their network environment as the social change they champion often lack legitimacy. Consequently, integrating the competence of multiple players is central to gaining credibility and enacting successful social innovations. We have identified specific measures that SEs could engage in that integration—establishing permanent network-linking positions and advocating regulatory changes.

Our third contribution lies in the identification of a consistent pattern of bricolage and ingeniering across the varying country contexts of South Africa, Brazil and US. In other words, our findings suggest that reliance on bricolage and ingeniering is stable among social ventures despite the stage of economic development, cultural and institutional practices and
the overall quality of the educational system. While the US is more developed than South Africa and Brazil, based on several economic and educational indicators, it is counter-intuitive and hence significant that we find similar patterns of bricolage and ingenieuring interplay across all three countries. Successful SEs in all three countries tend to refuse environmental limitations, are creative in their use of resources, rely on a wide range of distributed agencies for partnership, and tend to have a planning focus. We suggest that the nature of the work these entrepreneurs are engaged in has some influence on our findings. SE is characterized by an environment presenting many problems and challenges and with limited resources to overcome these problems (Mair & Marti, 2006). As our findings suggest, this is so, both in the context of emerging economies that have been typically associated with the “bottom of the pyramid” (Prahalad, 2005) and in advanced economies such as the US. Although some SEs may want to seek resources at the start of their venture effort to address those challenges, it appears that successful social entrepreneurs manage to address the resource scarcity issue through bricoleur-type of approaches while simultaneously keeping their visions alive regardless of where they operate. This is interesting given recent literature that has suggested that organizations in emerging economies are driven by different strategies and mindsets than those from developed economies (Cappelli et al., 2010; Madhok & Keyhani, 2012).

Finally, our study adds to the bricolage literature by substantiating the idea that bricoleur and ingenieur are ideal-types (Weber, 1997). Duymedjian and Rüling stated that “in fact, all ‘real world’ actions are situated somewhere in between the two [ideal-types]—in concrete, empirical terms, there is no such thing as ‘pure’ bricolage” (2011: 139). However, they did not discuss how bricolage might be blended with ingenieuring. We not only corroborate their statement, but also add to it, that in successful SEs in South Africa, Brazil, and the US tend to utilize ingenieur-type approach in one particular aspect of their operation—they emphasize a planning focus in their processes. On the other hand, they adopt bricolage processes in regard to the environment, resources or partnerships.

While our study was designed to investigate the bricolage and ingenieur processes in the context of SE, some of the insights we gained may be applicable to commercial entrepreneurs. As Fisher (2012) documented, commercial ventures also tend to display certain aspects of bricolage, particularly with respect to resource constraints and mobilization. However, since SEs are driven primarily by social value creation and intentionally locate their ventures in penurious environments (Di Domenico et al., 2010) extending our propositions to the realm of commercial entrepreneurship should be done with caution. For example, while commercial entrepreneurs may rely on bricolage approach to distributed agency in growing their ventures, their focus is likely to be growing customer community to launch a product or service (Fisher, 2012). In the case of SEs, however, it is not only the student-learner community but also a broader range of stakeholders (e.g., advocacy groups, government and non-government institutions, businesses) who are mobilized in order to gain legitimacy. The emphasis on the bricolage vs. ingenieuring processes may also be different in the context of commercial ventures; hence gaining more nuanced insights on this issue is a fruitful area for future research.

Our findings also have implications for policy and practice. They indicate that successful SEs appear to benefit from various knowledge domains and types of networks given their mentality regarding resources and distributed agency. At the same time, a majority of SEs who created successful ventures with a significant societal impact appear to have leveraged knowledge of business planning and development including pilot projects and franchising like processes. It appears that policy makers seeking to stimulate innovative entrepreneurship should provide prospective social entrepreneurs with tools that would allow them to creatively use resources in their surroundings and link various stakeholders in the process of value creation and, at the same time, equip them with basic business and project management skills. This could be manifested by offering educational programs designed to support both the bricolage and ingenieuring mentality.

While providing key insights, our exploratory study has limitations in that it is based on secondary data that was not specifically gathered to address the research questions of the study. First, it is unclear whether the findings we identified are also characteristic of ventures that are less successful given that our data focuses exclusively on successful ventures. Second, even though we were able to corroborate the main aspects of the Ashoka data with additional secondary data, we are unable to glean insights into a range of questions on the micro bricolage processes, the decisions, and thinking behind social venture creation. For example, what individual and family experiences, if any, influence a successful SE’s approach to not enacting constraints in the environment? What is the process they employ for identifying value creating opportunities across distinct environmental domains? How and what process do SEs use to take stock and recognize the resources that could be repurposed and leveraged? What additional network linking mechanisms are used to bridge and harness distributed agency, and what dynamics underlie these mechanisms? More importantly, how and what enables them to use both “making do” processes while planning and systematizing their ventures? Furthermore, our data provides preliminary evidence suggestive of co-existence of bricolage and ingenieuring in successful social ventures from a very early stage given that the ventures in our study spanned a range from under 10 to over 20 years in age; however, our data does not allow us to make inferences on the sequencing of the two over various stages of the venture. Examining the posed questions and issues would enable us to develop a comprehensive process model of social value creation which is only possible using primary data. In this regard, comparative in-depth, longitudinal data on successful and unsuccessful ventures will be critical to offer insight into the ordering of the various bricolage and ingenieuring processes from the inception of the social ventures into their more mature stages.

Such data will also enable researchers to tease out the minor differences across country contexts. The aim of our study was to examine bricolage across three very different settings in terms of cultural and institutional practices, level of economic development and historical and political traditions. While we found no marked differences in the use of bricolage vs. ingenieuring across these contexts, future studies are needed to delve deeper into the possible influences of country-specific attributes on the role of bricolage and ingenieuring in creating social value. Our propositions provide initial insights into the interplay between bricolage and ingenieuring which we hope will spur empirical testing and more in-depth exploration of these dual modes in various SE contexts.

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Appendix A: A description of social entrepreneurs in our sample

All websites accessed between December 12–19, 2014.

<table>
<thead>
<tr>
<th>Name</th>
<th>Gender</th>
<th>Year elected as Ashoka Fellow</th>
<th>Field of work: subsector</th>
<th>Organization Launched in:</th>
<th>Data sources with information about the organization (in addition to Ashoka)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regina Cabrál</td>
<td>Female</td>
<td>2010</td>
<td>Access to Learning/Education, Education Reform, Microenterprise, Youth Development Children, Citizen Sector Organizations, Teachers/Educators, Youth</td>
<td>Centers of High School Education and Professionalization (CEMPs) 2003</td>
<td><a href="http://wulfencemp.wordpress.com/about/history-cemp/">http://wulfencemp.wordpress.com/about/history-cemp/</a></td>
</tr>
<tr>
<td>Name</td>
<td>Year elected as Ashoka Fellow</td>
<td>Field of work: subsector Target population</td>
<td>Organization Launched in:</td>
<td>Data sources with information about the organization (in addition to Ashoka)</td>
<td></td>
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<td>----------------------------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------</td>
<td>----------------------------------------------------------------------------</td>
<td></td>
</tr>
</tbody>
</table>
Earl Phalen  
Male  
(US)  
2008  
Children, Families, Teachers/Educators  
Education Reform, Youth Development  
Families, Students  
Building Educated Leaders for Life (BELL)  
1992  

Elisabeth Stock  
Femal e  
(US)  
2008  
Non-formal Education, Technology/Information Technology  
Communities, Underserved Communities  
Computers for Youth  
1999  

Molly Barker  
Female  
(US)  
2008  
Gender Equity, Youth Development  
Women, Youth  
Girls on the Run  
1996  

Robert P. Moses  
Male  
(US)  
2008  
Access to Learning/Education, Students, Underserved Communities  
The Algebra Project  
1982  

Terrie Rose  
Female  
(US)  
2008  
Early Childhood Development, Mental Health, Non-formal Education  
Children, Communities, Families  
Baby’s Space—A Place to Grow  
1999  

References
Garud, R., & Karnoe, P. (2001). Path creation as a process of mindful deviation. In Garud, & Karnoe (Eds.), Path dependence and creation (pp. 1–38).Lawrence Earlbam Associates.


