Consultancy: context and role of the private sector in the transition to a green economy in Peru conceptual and methodological framework

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1.   Introduction

Review context and role of private sector in the transition to a green economy in three regions in Peru implies to distinguish two complementary or juxtaposed approaches: research and intervention. The research is based on recovery information from owners or workers of green businesses, and policy designers and makers inside selected regions. Questionnaires and other dynamics of data collection will provide evidence of opportunities and challenges to undertake business in these locations. Categorization and codification will facilitate find some patterns in responses. Therefore, a contextual and methodological framework should serve to systematize primary and secondary information from different angles.

Intervention is also expected to happen since perceptions and facts related by actors will exposed them in conjoint meetings. Network formation and shared information will facilitate new responses to current challenges and solutions to similar problems among actors. Foro Nacional Internacional represents an external actor in these regions, involved in stimulation of such networks exchange of knowledge and expertise, and it will mediate debates and discussion among innovators, entrepreneurs and regional public authorities engaged in fostering green and sustainable projects and regulations.

2.   Conceptual Framework

In the current consultancy, conceptual approaches will serve to understand findings. Concepts are conceived to be interlinked and complementary between these two scopes of the task, i.e. research and intervention would be seen under similar lens. Thus, academic literature provides with concepts and theoretical construction leading with this goal. Overall, data scrutiny will extend on the analysis of entrepreneurship and innovation among firms, and on policy regulations, both perspectives under variants of concept interpretations. These concepts have been proven useful in many studies and it should create a synchronized theorical and conceptual framework, applying to understand the social, political and environment inquiry of green innovations and sustainable business, and policies to different levels (especially regional and firm level).

Concepts will lighten about research and intervention plan. Their explanation and convenience to the consultancy will be treated in depth in following subtitles, but now just listed and shortly explained:

1) *Path dependence*. History matters shaping a prevailing path, where it is costly to scape. Innovators and police-makers face many constraints to boost change.

2) *Path creation.* Agency is relevant on devise change. Actors search for novelty, interpret and create from an intricated context where there are embedded.

3) *Mindful creation.* Agents purposely move from different paths, taking carefully into account risks and costs.

4) *Bricolage.* A bricoleur use what is on hand to create: artifacts and networks (network bricolage).

5) *Positive deviation (PD).* Opposed to average behaviour, positive deviation represents outliers of success.

6) *Problem driven iterative adaptation (PDIA).* It is based on positive deviance: a problem-driven perspective in contrast to solution-driven or best practices expert recommendations.

Overall, these concepts would delineate an umbrella over the research and the intervention. Although they could see in insolation, as has being considered by the economic perspective of path dependence and sociology one of path creation, new research tries to conciliate a unified them in a complementary understanding. Nevertheless, this literature review will focus rather on the usefulness of concepts than the discussion of their methodological convenience or support to explain entirely our findings.

2.1. Leaving behind traditional economic outlook for innovation and policy research

Innovation, entrepreneurship and policies to foster business environment requires open-ended insights to understand unknow dynamics of green activities and policies in Peruvian regions. Insomuch as, there are information gaps in these field studies. Therefore, in face of lack of expectations to understand in an deterministic way relevant data, we see worthlessness applied a traditional neoclassical economics to deal with equilibrium or optimal perspective as the concept of causation has been referred to understand innovation and entrepreneurship (Agogué, Lundqvist, & Middleton, 2015). Causation forecast specific goals under a linear and controlled process (Agogué et al., 2015; Fisher, 2012), insufficient scrutiny to assess socio-technical complex systems where firms and policy makers act.

Contrary to causation, effectuation face unpredictable goals, through interactive and non-linear events and opportunities socially constructed (Fisher, 2012). Innovation through latter concept are beyond to explain creation process by prices signals (Garud & Karnøe, 2003). Similarly, in the next section path dependence has been constructed and applied on opposition to "[n]eoclassical economics assumption of optimal choice", since innovation trajectories would lead to inefficient and persistent paths (Garud & Karnøe, 2001, p. 6). Other concepts, as path creation, bricolage, mindful deviation, and positive deviation allow us to see the technological and institutional change. These are strategies pushing innovation, some of them part of the natural behaviour of agents to overcome entrepreneurship constraints and create new products and services. Also, a pre-established method to solve development problems, such as the case of PDIA.

2.2. Path dependence

History maters according to the notion of path dependence. Paths or regimes form by randomly and small accidents during history and reinforce itself through "increasing returns"[1], shaping locked-in scenarios, due to cost constrains, such as "sunk costs, learning effects [and] coordination costs" (Arthur in Garud & Karnøe, 2001, p. 5), besides "risk aversion and network externalities", that busts the institutional and the industrial status quo (Simmie, 2012b, p. 760). This stochastic and persistence scenario breaks only by an exogenous events (Vergne & Durand, 2010),

During last 20 years many papers have analyzed path dependence concept, especially relevant used on management and on organizational studies (Vergne & Durand, 2010), but extensively applied on political studies, too (Greener, 2005). Both, innovation and entrepreneur firm ecosystems in green economy, and instrumental policies in Peru may explore through this concept. Based on this concept, innovative green firms challenge the prevailing socio-techno system established by fossil fuels and other non-renewable resources. Current policy designers and makers may be reluctant or find difficult to act "out of the box". Alike, entrant policy makers also perceive resistance to change this pattern, "because institutions and policies have a tendency towards inertia" (Greener, 2005, p. 62).

Nevertheless, an appropriate use of the concept must take the narrow definition of Vergne and Durand (2010), where only through contingency and self-reinforcing mechanisms lead to a locked-in scenario, difficult to scape, caused by "positive network externalities" (Vergne & Durand, 2010, p. 743); different from a broader concept, where an event is consequence of previous ones (Sheikh & Jadoon, 2011). In this context it prevails "a persistent market domination explained by first mover advantage" (Vergne & Durand, 2010, p. 741), i.e. first election to one direction limit others in the future (Kay, 2005), a possible suboptimal result pronounced by considerable opportunity costs to deviate from the prevailing path (Greener, 2005).

Green innovation studies need to explore the mainstream paradigm. Non-renewable resource activities represent this paradigm. Constraints to break it could be understood by the path dependence perspective. Path dependence constrains individual agency by institutions collectively created (Kay, 2005). Current economic activities which "contribute to global warming are often locked-in to historical and path-dependent technological development trajectories" (Simmie, 2012a, p. 729). This lock-in scenario is difficult to escape, as less endogenously (Vergne & Durand, 2010). This straitjacket is caused by positive feedback which reinforce a suboptimal result pronounced by considerable opportunity costs to deviate from it (Greener, 2005).

However, path dependence presents several critics. One of them is this concept differ from a theory or a model, since it does not include enough variables to undertake research (Ostrom in Kay, 2005). Yet, a more relevant critic is that path dependence only can explain innovative incremental change. Under this perspective "[p]olicies, one established, can be difficult to change or reform" (Kay, 2005, p. 558), change referring to a new and disruptive scenario. Individuals are stuck in a

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[1] Cotation marks come from the original paper.

technological and an institutional paradigm. Following concepts could explain better the "flexibility" to new regimes of institutions and technologies.

2.3.   Path creation

Path creation compete to path dependence explaining novelty. Persistence related with path dependence change to flexibility, according to Garud and Karnøe (2001), which is only conceivable by agents (Garud, Kumaraswamy, & Karnøe, 2010). The history of accidents on explaining prevailing technologies and policies change by the power of agents.

However, path creation supporters do not deny the importance of history, but they stand out the participation of agents to shape their future and innovate. Change is not a exogenous process; but it is consequence of insider's actions (Garud et al., 2010): "entrepreneurship is not a random act of genius but is a disciplined effort involving many" (Garud & Karnøe, 2001, p. 27). Thus, complexity of entrepreneurship relay on human agency, who collectively transform ideas to "generate a technological field" (Garud & Karnøe, 2001, p. 20).

Multiple actors are embedded in technology entrepreneurship, but it could result in different trajectories of success or failure (Garud & Karnøe, 2003). Actors creation elaborates over "learn[ing] by doing" and "learning by using" (Garud & Karnøe, 2003, p. 280). Accidents could happen as path dependence supporters propose, but these events are controlled by agents, who are aware of them (Garud et al., 2010). These agents form communities of practice, where groups of people with similar interests, through interaction and discussions, exchange ideas and knowledge (Schienstock, 2011).

Collective behaviour in a process of uncertainty in early stages of technology entrepreneurship relates to 'mindful deviation' – a property of path creation –, where problems seem as opportunities envisaged through different stakeholders engaged (Agogué et al., 2015). This kind of deviation represent variations to regular practices rather than a "random deviation from prior routines", explaining novelty through improvisation (Baker, Miner, & Eesley, 2003, p. 259). "[M]indful deviation implies disembedding from the structures that embed entrepreneurs" (Garud & Karnøe, 2001, p. 7). Existing structures and inertia are challenged by entrepreneurs, who intentionally "deviate from existing artifacts and processes despite the perceived inefficiencies that deviations may create" (Garud & Karnøe, 2001, p. 6).

On green business, entrepreneurs and innovators challenge the economic ecosystem based on non-renewable resources. Activities related with the green economy foster by policy designers and makers constitute new institutional venues to scape from the main economic and social paradigm, too. Special cleverness is required to find opportunities among institutional and economic constraints to create profit from clean activities, and to take advantage of reduced financing and information to undertake successful results.

2.4. Path creation and path dependency: opposite or complementary perspectives?

Conceived by Garud and Karnøe (2001), path creation and path dependence are impossible to reconcile, being that each concept departs from opposite epistemology and ontology views. Agents on path creation through relevant actions line adopt a sociological ontology (Garud & Karnøe in Simmie, 2012b), while "[p]ath dependency theory explains organizational, institutional, and political change processes mainly from a techno-economic view" (Tiberius, 2011, p. 4).

On spite of main stances' rigidities, there is room for harmony between these two concepts. In fact, path creation and path dependence are interrelated and cannot be separated, according with Sheikh and Jadoon (2011). Integration between concepts is possible, insomuch as Sydow, Windeler, Müller-Seitz, and Lange (2018) conciliate path dependence and path creation in a common path or process, named path constitution analysis. This unified perspective relax restricted arguments of path dependence and path creation and interlink them to explain both cointinuity of a technological, organizational and institutional path, making feasible breakthorughs and changes to different trajectories.

In this integrated proposal, objectivity of the path dependence perspective cannot be separated of human will on the development of a new national path (Bassani & Dosi in Schienstock, 2011). And, initial conditions – first history events opening the prevalence path – may appear in front of the eyes of relevant actors or not, where blindness allows that "outside observers (e.g., consultants, market analysts or researchers) are deemed to add valuable insights and shed different lights upon the expost reconstruction of the respective paths" (Sydow, Windeler, Müller-Seitz, & Lange, 2018, p. 160) in contraposition to Garud and Karnøe (2001, 2003) and Garud et al. (2010), authors who allow only insiders analysis to understand particular technological and institutional persistence or change. Our research proposal on green economy is based on the integration of concepts and it will serve rather as methods than a prove of the joint use of them.

Additionally, from the apparent irreconciliability of both concepts, a socio-economic hibrid may explain, for instance, the transit from one fossil fuel energy path to the instalation of renovable energy sources – wind power in Denmark, for example (Simmie, 2012b). This conection between paths has been explained from three stages: preformation, formation and lock-in (Wang, Hedman, & Tuunainen (2016); Sydow, Schreyogg and Koch in Sheikh & Jadoon, (2011)).The finally static lock-in is concibed by the institutional frame and by the geographical barriers, break it no only by exogenous disruptive events, but for small changes inside the system (Sheikh & Jadoon, 2011).

For instance, inside small changes reveals confrontation with competitors of the technological prevailing path and strategies to match demand and supply, manage storage, control distribution and peaks of demands of the energy supply case of wind power in Denmark (Simmie, 2012b, p. 767). Notwithstanding, willing actors, such as scientists, engineers and policy makers mold institutions through different scenarios, unto the new path progress (Schienstock, 2011).

Nevertheless, changes of institutional and technological paradigm do not start with the lock-out of the predominant path. As matter of fact, the new trajectory emerges "more or less independently from the existing technological regime" (Schienstock, 2011, p. 71). Such a wide room from

innovation happens in niches, places for experimentation and learning, enabling conditions "to draw on new or deviant local or international knowledge" (Simmie, 2012a, p. 762).

In conclusion, both paradigms have pros and cons to explain technological and institutional continuity and change. Take them together enrich the analysis instead of block it. Furthermore, critics, juxtapositions, and different methodological applications rather than reveals terminated theories leave space for more research to expand the virtues of these concepts. As Martin and Sunley in Simmie (2012b, p. 764) a hybridization including path dependence, path creation and path destruction occurs under different areas through actor mindfully deviated to establish new development paths in an "evolutionary theory".

2.5. Bricolage

Bricolage is the capacity to employ what is at hand to create, concept firstly mentioned by Claude Lévi-Strauss, in his master piece *The Savage Mind*[2] (Zollo et al., 2018). Since the French author's definition, bricolage has been adapted to different areas (Abu & Reed, 2018), such as teaching, lawmaking and institutional building (Fisher, 2012). Bricolage appear under challenging, resource constrains, and risky scenarios to look for solution in mentioned disciplines.

Bricolage as strategic execution option appears thanks to his versatility to move among different possibilities, ""making do by applying combinations of resources at hand to new problems and opportunities"" (Nelson in Zollo et al., 2018, p. 21). Additionally, when one theory solution in isolation fails, hence it is convenient put in practice a solution for day-to-day troublesomes. That's what bricolage brings a mixed application of different theories (Mahlomaholo, 2013). This "hybridization" or "blending" of artifacts and knowledges reconstruct "new meanings", combinations of components for a better and adapted responses to practical problems (Abu & Reed, 2018, p. 440).

Application of bricolage imply innovation by itself. Experimentation, emergent decisions and actions, out of global common practices, but appealing to local knowledge distinguish it (Garud & Karnøe, 2001). At least under three motivations bricolage may serve as a method for solution of problems. Firstly, in the face of complex and unexpected problems, when there is not a determined theory to solve it (Mahlomaholo, 2013). Secondly, if the organizational plan does not contemplate certain adverse occurrences, the plan for solutions has not worked or there are no planification at all. And thirdly, under scarcity of resources and hostile environments (Fisher, 2012).

Truly, in practice, entrepreneurs' founders do not elaborate plans in the beginning – letting the second motivation a necessary strategy to start a firm, thereupon bricolage serve as a improvisation strategies under firms formation – but no vice versa, when there is little time to act, and continuously practice legitimists their use as a valid strategy (Baker et al., 2003).

Besides theoretical postulations, bricolage has been related to the success of interventions; two studies serve as examples. These stories of success compare bricolage advantages of incremental

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[2] Cursives come from the original paper.

innovation and local negotiations vis-à-vis disruptive innovation and following global orders. The implementation of wind turbines in Denmark is one of them. Garud and Karnøe (2003) describe a wind power generation in Denmark as an emergent technology in the latest 70s, supported by innovator policy makers with reduced budget support; contrary to significant subsides for the development of this technology in USA. The case of Denmark could be considered as a bricolage intervention, since engineers and policy makers adapted and innovate incrementally under the tie-up predominant technology that time; contrary to USA, through extensive subsides, discontinued for periods, but failed in generating a radical innovation in the field, opposite to the success of the case in Denmark (Simmie, 2012b).

The second intervention took place in the learning domain. The goal was to increase research skills in students in a study developed in a northern Canadian Indigenous community (Abu & Reed, 2018). Authors found that research capacities increased faster when they approached to negotiate in the community natural environment, through the bricolage method, "exploring how locally developed adaptation practices have been formed" (Abu & Reed, 2018, p. 439).

In the beginning, the strategy of Bricolage pertained to business matters, nowadays could be serve to deal with social and environmental performance in social entrepreneurship (Zollo et al., 2018). The relevance of our research and intervention in green economy regional ecosystems involve these three goals (economic, social and environment), under the notion of sustainable development; therefore, utility of this concept is pertinent for both public and private concerns.

2.6. Positive Deviation (PD) and Problem Driven Iterative Adaptation (PDIA)

According to Mertens, Recker, Kohlborn, and Kummer (2016) deviation has two different sides: i) negative deviation reflects moving away from society norms and regulations, incurring in crime or alcoholism, for instance; while, ii) positive deviation refers to actions outside from the mainstream solutions that has success. In fact, any kind of deviation has a negative connotation in statistical terms, because represents outliers of the normal distribution of observations (Goldstein, Hazy, & Lichtenstein, 2010), but being highly positive successful have required great attention for their well performance comparing with regularly external recommendations.

Different domains have used the concept of positive deviance. At the beginning of the concept acknowlegment, in the recognized book "The Power of Positive Deviance: How Unlikely Innovators Solve the World's Toughest Problems", their authors: Richard Pascale, Jerry Sternin, and Monique Sternin reports sucesful cases resolving malnutrition, hospital infecctions, cultural body mutilations, success of a pharmatheutical company, girl-post-world refugiees in Uganda and infant mortality (Pascale, Sternin & Sternin, 2010).

Example of figthing child-malnutrition in Vietnam is the first examples in the book reffered in the paragraph above. Positive deviance are out-of-the-box responses, different from established formulas in different environments or socias systems, such as "neighborhoods, communities, small firms, even multinational corporations" (Goldstein et al., 2010, p. 156).

Positive deviance relates to a strategy in public policies, too, named Problem Driven Iterative Adaptation (PDIA). This stratgey refers to anormal success intervention in public sector reforms by a problem-driven perspective comparing to a solution-driven one, latter reffered to good-practices solutions that have worked in the past, under the premise that they must still work in the future (Andrews, 2015).

This approach is based in insiders' solutions through unique practices that overperformed experts solutions. Local knowleldge and behaviour in these cases make population in need or insider's workers in a organization attempt solutions by problems that they only know, requering clear understanding of a well constructed definition of the problem among actors through participation and discussions among them (Andrews et al., 2017), "a solution looking for a problem" (Lidndhal in Garud & Karnøe, 2001, p. 13).

However, anything is not on black or on white. Mainstream solutions may also combine local knowledge, helping external experts to determine how some solution emerge under common cases of failure, and being these 'outsiders'[3] aware and modest to find responses to success on regular people: ordinary public servants and workers. They could, in addition to following doctors' prescriptions deviate positively from them, to find their own community, firm or governments' cures for some specific 'social and behavioral diseases'. A convenient metaphor, since PD firstly appeared in endemic health diseases.

3.   *Methodological Framework*

3.1.   **Methodology**

The conceptual framework allows us to understand different lens to see innovation and entrepreneurship, in the matter of green economy business. Every concept cannot be denied ipso facto according to several circumstance, because we are in front of complex and non-linear events. Yet, predominant business environment makes us decide which methodology – involving certain concepts – that better apply to our hypothesis from previous studies. Specifically, findings in green SMEs in Lima, through the Green Economy Coalition (GEC): low visibility and lack of financial support – short access to credits or grants. However, these results are from 2016, outdated to the current circumstances in Lima. Nowadays, Development Banks are mobilizing soft loans to promote startups and innovations, but It is unknown whether they already have been known and are being used in the three regions of Peru, locations of our research.

However, we must recognize that history of lack of political will in Peru, remains as a main constraint, especially in some Peruvian regions. Thus, the past effect matches with the path dependency posture. Yet, knowing the past is still important as constraints, too. Therefore, innovative strategies such as bricolage or positive deviance could have been used by green SMEs

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[3] Notation marks to indicate rather a relative concordance with the negative terminology of outsiders' scrutiny in Garud et al, (2000, 2003, 2010) during path creation an optative response to do research and to intervene as an open method with odds to work together with other insights, such as path dependence or other mainstream concepts.

entrepreneurs and innovators to deal with these barriers. Accordingly, break the fossil fuel paradigm should change to a new path. They involve phases of exploration to find new case studies to support steps towards a green path economy. "Methodologically... path creation perspective suggests… to study processes in 'real time', i.e. place oneself at the time that events occurred even if one were looking at data gathered in the past" (Bijker et al., &; Porac in Garud et al., 2010, p.770). The research is better suited to qualitative research, though employing secondary quantitative information to define contexts and diagnostics.

As well, bricolage represents a good concept to introduce qualitative research, since "complexities of research [can only carry out] without reducing any variable for control and determination of causality and prediction" (Mahlomaholo, 2013, p. 4690), doing untenable "adopted positivistic empiricist approaches". Finally, positive deviation follows the same methodology position. Suitable methods for the latter concept may be observed in the following sub-title and in Annex 1.

"Individual agents and groups act in a context that is collectively constrained and these constraints take the form of institutions" (Kay, 2005, p. 555).

Three different levels of institutions are regularly distinguished: the macro or constitutional level; the collective choice or policy decision level; and the operational level of individual decisions (Kay, 2005, p. 555)

3.2. Methods

Case studies and semi-structured methods correspond to qualitative methodology, regularly applied to report path dependence a path creation. Nevertheless, ontology and epistemology of path creation shapes research to narrative evidence (Garud et al., 2010). "Simulations, experiments and counterfactual models" methods proposed by (Vergne & Durand, 2010, p. 737) to prove the narrow perspective of path dependence cannot be applied, since we do not count with specific variables to understand the phenomena.

GEC's guides hypothesis only serves as to predict some responses in interviews and workshop, but we wait for wider information to define our green innovator and entrepreneurs. Any variable has been determined per-se. I agree that such discretion is impossible in a real word where variables are unpredictable and interact among each other (Garud et al., 2010). Such kind of research if far away from an initial phase of variable findings in green economy in Peru, where individual stories may frame the study, an unexplored sample.

An extension of the lack financing hypothesis, it is more suitable predict that small green firms depart from low investments in Peruvian regions. R&D investments, singular cases of technology investment in some developed countries, USA for instance, to pursue a context-driven research.

A part from case studies, we do not put away on purpose "[o]ther approaches, among them innovation biographies, and real ethnography, especially in combination with quantitative methodologies such as social network analysis or the analysis of time-series data (as mixed methods), still await use in research projects on technological, institutional or organizational

paths" (Sydow, Windeler, Müller-Seitz, & Lange, 2018, p. 157). Nevertheless, Foro National Internacional will apply successful previously semi-structured and workshops to obtain individual information from the first method to share common findings and validate them in the second method, by the logic that participants are the experts and we only facilitate and systematize their information to arrive to conclusions. A guide and principles of how to answer in "*The Power of Positive Deviance: How Unlikely Innovators Solve the World's Toughest Problems*" *(Pascale, Sternin, & Sternin*, n.d.) frame clearly this perspective. Annex 1 contains all the guide questions in this book.

4.   Conclusion

Small businesses must work in different ecosystems which could foster or constraint them. Explained concepts provide us with alerts and precepts of what we can find in the field. We understand that through these concepts qualitative exploring methodology suits well the research and the intervention, preparing for following and wider social interventions. Semi-structured interviews to design case studies and participative workshops are proven ways to Foro Nacional Internacional to recover relevance information and socialize them to every stakeholder involved in the subject.

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Purpose of the Field Guide

This basic guide is intended to orient newcomers to the PD approach and provide the essential tools to get started. It includes a brief description of the guiding principles, methodology, and process that have made PD projects successful. It is recommended as a resource to enable facilitators and apprentices to quickly initiate the PD process using the four basic steps (the four D's: *define, determine, discover*, and *design*). These comprise an iterative road map for the process.

Its brevity and simplicity are meant to invite curious and intrepid implementers who face complex problems requiring behavioral and social change. It is suitable for those who seek solutions that exist today in their community and enables the practitioner to leverage those solutions for the benefit of all members of the community.

PD is best understood through action and is most effective through practice.

When to Use Positive Deviance

Positive deviance should be considered as a possible approach when a concrete problem meets the following criteria:

- The problem is not exclusively technical and requires behavioral or/and social change.
- The problem is "intractable"—other solutions haven't worked.
- Positive deviants are thought to exist.
- There is sponsorship and local leadership commitment to address the issue.

Guiding Principles of the PD Approach

Remember these basic principles when initiating the PD process in a community:

- The community must own the entire process.
- The community discovers existing uncommon, successful behaviors and strategies (PD inquiry).
- The community reflects on these existing solutions and adapts them to their circumstances.
- The community designs ways to *practice* and amplify successful behaviors and strategies.
- Community members witness that "someone just like me is succeeding against all odds with the same resources that are available to me" (social proof).
- PD emphasizes *practice* instead of knowledge—the "how" instead of the "what" or "why." The PD mantra is: "You are more likely to act your way into a new way of thinking than to think your way into a new way of acting." Remember the wisdom of the villagers in Vietnam.

- Involve everyone; go to improbable places and to unlikely people to find solutions.

- "Don't do anything about me without me."

- The community creates its own criteria for success and monitors progress.

Characteristics of the PD Process

The PD process promotes behavioral and social change because:

- It is generative (i.e., it is self-organizing and emergent).

- It is based on strengths and assets.

- It is not "expert" driven. Community members provide culturally appropriate expertise.

- It is embedded in the social context of the community.

The PD process:

- Combines relational and technical considerations.

- Leverages existing formal and informal networks.

- Generates new networks and bridges barriers created by gender, status, expertise, and so forth.

- Promotes further change by inviting the community to monitor its own progress.

- Makes the invisible visible (i.e., calls attention to the PDs and the community's own hidden wisdom).

- Enables the community to translate its discoveries into immediate actions.

Tips for PD Facilitators

Tap the expertise in the group (remember: the people in the community are the experts).

- Ensure the participants talk more than you do. Encourage them to exchange stories and information among themselves.

- Refrain from making suggestions or giving advice (unless *repeatedly asked*).

- Ask open-ended questions (e.g. what, how, what if?). (Avoid questions that elicit yes or no answers.)

- Don't try to exercise control; let the group guide the conversation.

- Invite participants to tell their stories or share their experiences about the issue at hand. Tap into emotions.

- Make the process personal and fun.

- Share relevant personal experience with participants to make them feel comfortable. Develop trust by admitting your own vulnerability.

- Let silence speak! (Pause for twenty seconds after asking a question. That's long enough to sing Happy Birthday!)

- Stay with the questions. Don't press for quick fixes. Insights often come when one is least expecting them.

- Support a climate where speaking the truth is OK, even when doing so may make the facilitator or a participant look foolish, confused, or unprepared.

- Believe that there will be enough time. "Go fast by going slow."

- Commit to learn, to be influenced, to be personally changed by the experience.

The Art of Asking Questions

For the most thoughtful and revealing responses, use open-ended questions that ask what, how, why, why now? Here are some examples of what you might ask or say in specific situations to facilitate or refocus discussions.

To spur continued reflection and thinking within the group, you might ask:

- To answer your question, let me ask a question.

- Can I ask you a question about your question?

- I have a question for you …

To generate more interactive discussion among the group:

- Who can answer this question?

- Who wants to answer this question?

- Who has any idea about this?

- How would anyone here answer this question?

To involve more stakeholders, ask:

- Whose problem is it?

- Who else should be involved?

- How might we involve them?

To uncover or identify PD individuals or groups:

- Are there any groups of individuals who have overcome (or prevented) the problem?

You can also use the somersault question:

- So, if I understand correctly, nobody here is (or has achieved) *X*?

- So, there are no people in your community who have overcome this problem?

Once the group realizes that PDs actually exist in their own community, then follow up with some direct questions, such as:

- How can we learn from them?
- When is a good time to meet with them?

To discover PD behaviors and strategies, ask probing questions:

- You said that you did *X*; how were you able to do that?
- Most other people have had problems with *X* and *Y*; how have you been able to overcome them?
- Many people have explained to us how difficult it is to do *X* because of busy schedules, high costs, conflict with community customs or traditions, etc. I was wondering what you do to overcome these barriers or challenges encountered by others in your community?
- How are you able to overcome these common challenges and barriers?
- Can you show us how?
- What do you do when *X* problem happens or you are faced by the challenge of *Y*?
- Encourage participants to repeat what they've heard or understood to get more specificity: "So, if I understand correctly, you do *X* only during the day and you do not do *Y* at all during the day or night?
- Do you know other individuals like you?

To help define or target actions to be taken, ask:

- What are our next steps?
- Who is going to do what?
- What will it take to accomplish this?

To ask permission to make a suggestion:

- Can I make a suggestion?
- Would it be possible for …?
- You are the experts, but would it make sense if …?

Commitment of Leaders and Sponsors

Before the PD process can begin, the first step is to identify a sponsor as noted below. This leads to assembling those who might potentially be interested in tackling an intractable problem. To do this:

- Introduce the PD concept and approach to potential sponsors.

- Extend invitations for involvement beyond the "usual suspects."

- Once potential participants are assembled and the PD concept is described through examples, ask: "Does this make sense? If so, is there anyone here who would like to become involved?"

- It is essential that this initial orientation to PD authentically allows potential participants to opt in or opt out.

- Enroll a resource team of volunteers that is diverse and includes members of the community as well as local leaders.

- Allow the group to invent the forms of organization and work processes that best suit it.

- Invite others who are willing, and at times eager, to become involved. Each person is valuable to the process.

Basic steps:

Step 1. *Define* the problem and desired outcome.

Step 2. *Determine* common practices.

Step 3. *Discover* uncommon but successful behaviors and strategies through inquiry and observation.

Step 4. *Design* an action learning initiative based on the findings.

STEP 1: THE COMMUNITY DEFINES OR REFRAMES THE PROBLEM BY:

- Involving members of the community in generating or reviewing data that measures the magnitude of the problem

- Articulating a preferred future that is different from the past

- Exploring the issues impacting the problem and current behavioral norms

- Listing common barriers and challenges related to the problem

- Identifying all stakeholders who should be involved

- Sharing the group's findings in a community-wide meeting

TOOLS OR ACTIVITIES FOR DEFINING THE PROBLEM:

- Creating or using baseline data (mapping, creating visual scoreboards)

- Establishing a time-framed goal known and agreed on by all (e.g., eradicate childhood malnutrition in our community within two years)

STEP 2: THE COMMUNITY DETERMINES COMMON PRACTICES BY:

- Conducting discussions with various groups in the community to learn about common practices and normative behaviors

- Using participatory learning and action (PLA) activities such as mapping, improvisation, Venn diagrams, and prioritizing

- Continuing "focus groups." Even if what you're learning is repetitive, involve as many members of the community as possible in the conversation

STEP 3: THE COMMUNITY DISCOVERS THE PRESENCE OF POSITIVE DEVIANTS BY:

- Identifying individuals, families, or entities in the community who exhibit desired outcomes

- Establishing exclusion criteria. Select only those individuals or entities who face the same or worse challenges and barriers as others

- Conducting in-depth interviews and observations by the community and PD facilitator(s)

- Identifying uncommon practices that correlate with better outcomes (having established common practices in step 2)

- Vetting the results with the whole community

TOOLS OR ACTIVITIES TO IDENTIFY AND LEARN ABOUT COMMON BEHAVIORS (STEP 2) AND IDENTIFY BEHAVIORS AND STRATEGIES FROM POSITIVE DEVIANTS (STEP 3):

- In-depth interviews

- On-site visits for structured observations

- Discovery and action dialogues; as described in chapter 4, these brainstorming sessions serve to surface new, untried ideas once a community has been mobilized to address intractable problems

- Community feedback sessions on PD findings (see www.positive deviance.org for examples of PD inquiry tools)

STEP 4: THE COMMUNITY DESIGNS AND DEVELOPS ACTIVITIES TO EXPAND THE PD SOLUTIONS BY:

- Expanding the solution space by engaging multiple stakeholders in applying the discovered existing PD behaviors and strategies

- Starting small to demonstrate success

- Connecting people who haven't connected before

- Targeting the widest range of appropriate community members

- Creating opportunities to practice and "learn through doing" in a safe environment with peer support

- Using imaginative approaches to involve the community in the work (e.g., feeding workshops in Vietnam, Healthy Baby Fairs in Pakistan)

TOOLS OR ACTIVITIES FOR DESIGNING OPPORTUNITIES FOR COMMUNITY MEMBERS TO PRACTICE THE DISCOVERED BEHAVIORS AND STRATEGIES:

- Community meeting to share PD inquiry findings

- Creation of an action team involving the resource team and self-selected volunteers who have participated in the process

- Develop an action plan; pin down roles and responsibilities

The community measures, monitors, and evaluates the effectiveness of its initiatives based on the PD findings by:

- Developing a way to monitor progress of initiative (assess, analyze, and act on information)

- Making progress real by engaging the community in developing its own indicators to monitor progress (quantitative and qualitative indicators of behavioral and social change)

- Creating culturally appropriate ways to communicate the data to the community as a whole

- Evaluating initiatives at regular, frequent intervals

As the process evolves and has a successful impact on the problem, other communities and groups will hear about the process and may want to learn more. Suggestions for dissemination might include:

- Documenting, evaluating, and sharing results

- Honoring and amplifying the success stories by storytelling

- Creating a living university for other communities to discover how the PD process could help them solve the same problem

Useful Definitions for Practitioners

The *PD concept* is based on the observation that in every community or organization, there are a few individuals or groups who have found uncommon practices and behaviors that enable them to achieve better solutions to problems than their neighbors who face the same challenges and barriers.

The *PD approach* is grounded in the assumption that communities have assets or resources they haven't tapped. The PD process enables a community or organization to identify and amplify those practices and behaviors, measure outcomes, and share their successful strategies with others. The

PD approach is used to bring about sustainable behavioral and social change by identifying solutions already existing in the system.

A *PD individual or group* demonstrates special or uncommon behaviors and strategies that enable the person or group to overcome a problem without special resources. However, a person is defined as a PD only in the context of a specific problem.

PD design or *methodology* consists of four basic steps (the four D's: *define, determine, discover*, and *design*). These comprise an iterative road map for the process.

PD inquiry refers to the stage in the process whereby the community seeks to discover demonstrably successful behaviors and strategies among its members.

PD process refers to the entire journey encompassing the skillful use of experiential learning methods and skilled facilitation applied to the four steps of the PD design. It results in community mobilization and ownership, discovery of existing solutions, and emergence of new solutions as a result of community initiatives.

The Positive Deviance Initiative (PDI) would love to hear about your project. Please send us the following information:

- Name of your organization
- Contact information
- Name of the project
- Location of the project
- Problem statement
- Project impact
- Population impacted by the project
- Special target group
- Any documentation that might be shared on our Web site (stories, videos, photos, reports, articles, etc.)

(Pascale, Sternin, & Sternin, n.d.)