

TOWARDS A FRAMEWORK OF COOPERATION ISSUES IN BASE OF THE PYRAMID PROJECTS

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Abstract: Interest in the notion that there is an untapped market with significant buying power hidden at the base of the economic pyramid (BOP) has enjoyed increased attention over the last few years. The discourse on this matter is lively and abounds with opposing opinions. Although this discourse is acknowledged in this paper, it is argued that benefits can be derived for all parties if one considers partner cooperation issues (or problems) in a structured way. Partner cooperation in the case of this research refers to the cooperation between multinational information technology companies and local partners in African countries.

This area is of interest because of (frequently high) expectations that information and communication technologies (ICTs) can make a contribution toward development goals in BOP markets. However this is not always achieved and, as has been found by several researchers, this unfavorable outcome is, amongst other things caused by cooperation problems between partners.

The basic argument of this paper is that successful contribution of ICT to development goals is partly dependent on the nature of the cooperation between partners. Thus if there is a need to assess the contribution of ICTs, then one need to look further than just the basic quantitative measures and include cooperation issues as criteria for success.

The purpose of the research reported in this paper was therefore to take one step closer towards a framework of cooperation issues in so-called BOP projects, specifically in the ICT arena, with the ultimate aim of developing a way to assess factors that may present a risk to the success of these projects. This framework could serve as the foundation for further research into developing a diagnostic instrument for this purpose.

The research was conducted in 10 BOP projects involving multinational ICT companies, which were studied as separate case studies. Qualitative data was collected using the case study method and the data was analyzed for emerging patterns. It was found that problems with partner cooperation revolve around six core categories. These are explained in this paper. It is suggested that further research can serve to interrogate the proposed framework.

Keywords: Base of the Pyramid, partnership cooperation problems, information and communication technology, multi-national companies

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1. INTRODUCTION

There has been a steady increase in interest in the so called base of the economic pyramid. Prahalad and Hart (2002) describe the Bottom of the Pyramid (BOP) as that segment of the world population with an annual per capita income of less than \$1500. Their work was followed by a myriad of publications on this and related topics. In recent research the boundary of the BOP segment has changed by definition to include all with an annual per capita income of less than \$3000 (WRI, 2007).

The basic argument held by Prahalad and Hart (2002) is that the available market in this segment of the world population is so big that multinational companies (MNCs) can make significant profits if they can manage to tap into this market.

Whether these claims are realistic is a matter for debate, as will be seen later in the paper, but it could be argued that projects with these aims in mind could be more successful if the problems related to cooperation between the different role-players are better understood. Subsequently it could be argued that if one needs to assess the contribution of these projects, it may well be reasonable to assess the health of the relationship between partners as well. This paper reports on a project of which the aim was to create a provisional framework of cooperation issues in information and communication (ICT) related BOP projects.

The term "Bottom of the Pyramid" is used widely to refer to this segment of the world population, but some researchers have moved away from that use, towards terms such as "Bulk of the Population", arguing that estimates of the number of people belonging to this group is more than the bottom of the world's income pyramid; rather, it represents the majority of it (BRINQ, 2008). Other terms have also appeared such as "Business for/with the Majority", "Sustainable markets" or "pro poor markets". For the purpose of this paper the term Base of the Pyramid (BOP) will be used, as there is some disagreement about the number of people involved as for instance suggested by (Karnani, 2007).

This BOP market promises to have certain demands for ICT products and services. Although relatively small compared with other demands, the market for information and communication technologies is estimated to be \$51 billion but probably twice as much, \$100 billion per year, as a result of rapid growth (WRI, 2007).

The Organization for Economic Co-operation and Development (OECD) defines the ICT sector as ICT economic activities (industries) where production, goods and services are primarily intended to fulfill or enable the function of information processing and communication by electronic means, including transmission and display (OECD, 2007). For the purpose of this paper this definition is used to identify case studies of multinational ICT companies (ICT MNCs).

A specific issue of interest in this area is the nature of the relationship and interaction between ICT MNC and local partners. This has been investigated by several researchers, for instance Das and Teng (2001); Kramer et al. (2007); Seelos and Mair (2007) and (Simanis et al.,

2008a), and it is acknowledged that the success of such projects is dependent on the health of the relationship between partners.

The argument then follows that if there are cooperation problems in any BOP project, that the nature and level of contribution that ICT can make towards development goals would be affected. It is therefore reasonable to argue that if one wants to monitor and assess the contribution of ICT towards the achievement of development goals, then it would be prudent to also include some form of diagnostic attention to the nature of cooperation between partners. This is especially necessary if one considers the Millennium Development Goals (MDGs) as published by the United Nations (2008) and particularly Goal 8 (namely to: “Develop a global partnership for development”), Target 8.F (namely to: “In cooperation with the private sector, make available the benefits of new technologies, especially information and communications”).

However it has to be noted that currently the indicators for monitoring progress of the MDGs are stated purely in quantitative terms (see United Nations, 2008), and that it is probably more reasonable to suggest that there are additional, more qualitative issues that one might need to consider. In the case of this paper the argument is that a healthy relationship between partners in itself indicates, at the very least, more sustainable benefits than merely, for instance, the indication that 70 out of 100 people have a telephone (an example of one of the indicators mentioned for Goal 8, Target 8.F by the United Nations, 2008). Phone sharing, for instance seems to be common practice in African countries and therefore it might be more important to know whether people have access to (mobile) phones than whether they own a phone (James and Versteeg, 2007).

2. RESEARCH QUESTION

A variety of cooperation issues that might need consideration have already been identified by researchers such as Das and Teng (2001); Kramer et al. (2007); Seelos and Mair (2007) and (Simanis et al., 2008a). However there seems to be need for a more holistic frame of reference for studying and diagnosing these issues. The basic research question for the research that is reported in the paper was therefore:

- What are the difficulties that ICT MNCs experience in their cooperation with partners in their efforts to reach the BOP market;
- And more specifically, how could these observed issues be categorized?

Such a categorization could serve as the foundation for the development of a diagnostic instrument that will help create a better understanding of cooperation issues in BOP projects.

For clarification purposes it needs to be mentioned that in this research project the relationships that ICT MNCs have with local partners was identified as always including a local for-profit organization and sometimes also including local non-profit organizations who act as intermediaries. In one case the local partner was the local branch of the IT MNC but the command structure of the MNC provided autonomy for the local national branch. Figure 1 clarifies this explanation. The relationships marked with stars indicate the area of interest for this research, namely the relationship between ICT MNCs and local partners, albeit non-profit or for-profit organizations.

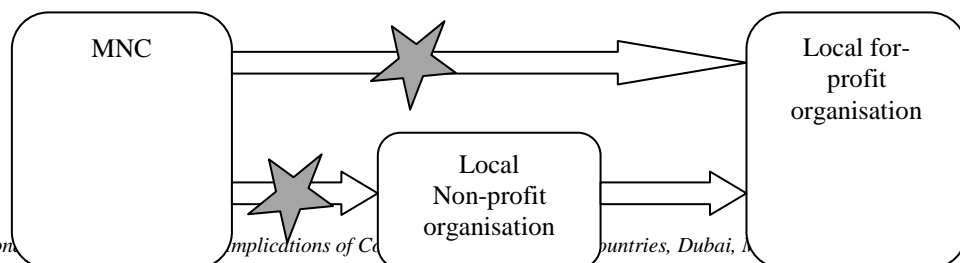


Figure 1: The relationships between partners

In order to find answers to these questions the research project followed a general exploratory research design consisting of an in-depth study of the literature, followed by data collection and analysis using qualitative research methods. The result is a provisional frame of reference that could serve as the basis for further research.

The next section of this paper details some existing research work that has been done in this area, as reported in the literature, with specific reference to cooperation issues that may have an impact on the success of BOP projects.

3. LITERATURE REVIEW

There has been some interest in the area of partner cooperation in BOP projects with research that focused on a variety of issues.

London and Hart (2004), for instance, conducted an exploratory analysis, covering in total 24 cases across the Americas, Africa and Asia and 4 additional cases of MNCs which were extremely active in BOP markets across the world. The findings show that successful ventures include (proactively) developing relationships with non-traditional partners, both profit as well as non-profit organizations. The results also show the importance of 'social embeddedness', which refers to the ability to create competitive advantage based on a deep understanding of, and integration with the local environment.

Jenkins (2007), draws on the results of eight industry-specific projects and identifies four key strategies that companies use to expand economic opportunity. These strategies are: creating inclusive business models, developing human capital, building institutional capacity, and shaping public policy. She suggests that the business community and large firms have both the capabilities and the strategic business reasons to play a major role in creating economic opportunity. Jenkins (2007) goes on to identify the importance of collaborative action in achieving systemic impact and scale by the business and development communities. The findings show that collaboration allows parties to share knowledge and information, pools scarce or diverse assets and resources, access new sources of innovation, create economies of scale and enhance the legitimacy of the parties' own individual activities.

Das and Teng (2001) on the other hand regard trust is an important factor of successful partnerships. They argue that fostering trust is the main challenge of non-commercial stakeholder partnerships in low-income markets because it leads to effective cooperation.

Building on the findings of their study using three cases, two from Bangladesh and one from India, Seelos and Mair (2007) recommend the monitoring of the dynamics of the environment and/or the development of the partner's overall model and strategic objectives. They argue that this helps to recognize and address emerging threats to the sustainability of the alliance.

More than 9 cases in the field of ICT companies were examined by Kramer et al. (2007). Their findings show that collaboration helps ICT companies address two fundamental challenges to inclusive business models. The first is establishing and strengthening the value proposition. The second challenge is business model innovation and implementation. ICT companies have enormous potential to leverage their collaborative capabilities to expand economic opportunity more widely in developing countries.

The report of UNDP (2008) showcases 50 case studies by researchers in developing and developed countries. These studies demonstrate the successful pursuit of both revenues and social impact by companies. The outcome results in a series of strategies that private businesses have successfully used to overcome the most common obstacles to doing business with the poor. In the field of cooperation this includes strategies such as leveraging the strengths of the poor, engaging with the poor to increase the labour and management pool as well as expand local knowledge, and combining capabilities and resources with other organizations (both profit and non-profit).

Simanis et al. (2008b) produced the 2nd edition to the BOP Protocol. The Protocol is a new business innovation process, developed specifically for the BOP by a group of academics and practitioners. It summarizes the findings and analysis of over three years of in-field studies from two projects in Kenya and India.

They assert that if the enterprise-based approach to poverty alleviation is to flourish in the future, it is imperative that we now move rapidly to a “second-generation” of corporate BOP strategies.

The protocol advises to initiate direct, personal relationships facilitated by non-governmental organizations (NGOs). “Second generation BOP strategy requires an embedded process of co-invention and business co-creation that brings corporations into close, personal business partnership with BOP communities” (Simanis et al., 2008a). Successful cooperation with BOP communities is identified as a key ingredient for project success

Although the literature reveals much attention to these kinds of issues and several lists of strategies and guidelines, there seems to be little effort to effectively explore these issues in a structured way using some frame of reference about cooperation issues in the MNC/Local Partner relationships, particularly in the ICT arena.

The following section describes the research process in a project of which the aim was to move towards such a frame of reference.

4. RESEARCH PROCESS

4.1. Research Method

As a research method, the case study is used in many situations to contribute knowledge of group, organizational, social, political, and related phenomena. It has been a common research strategy in social and political science, but has found usage in business and economics where for instance the structure of a given industry is investigated. As Yin (2003) states “...the case study method allows investigators to retain the holistic and meaningful characteristics of real-life events...”.

Each individual case study consists of a "whole" study, in which facts are gathered from various sources and conclusions drawn on those facts. For this research the use of multiple case studies is preferred in order to be able to generalize and raise solid evidence.

4.2. Sources of evidence and data collection

The targeted organizations consisted of either ICT MNCs or internationally operating NGOs who closely collaborated with an ICT MNC in its projects. In order to obtain a consistent group of participating organizations and projects they were selected on the basis that they were operating into and within Africa.

The second selection criterion was that the MNC or NGO was involved in a project aim at the BOP market. The third criterion was that it should be an ICT related project; in practice that meant that MNC should be an ICT MNC or that the NGO collaborated with the ICT MNC.

In order to get access to these organizations some conferences and seminars were attended to get in touch with representatives of the target group. Two of the respondents were approached after being introduced via acquaintances, i.e. "snowball sampling" (Heckathorn, 2002).

The result was the identification of (and access to) 10 separate projects involving a variety of organizations and partners that could participate in the investigation. Within each project a variety of sources were used for data collection

Yin (2003) identified at least six sources of evidence in case studies:

- Documents
- Archival records
- Interviews
- Direct observation
- Participant-observation
- Physical artifacts

A combination of different sources can provide more reliable data, and for the purpose of the research reported in this paper the focus has been on the first three mentioned. The first two sources provided secondary data, whilst the interviews served as sources for primary data.

The kind of documents that were used as sources for secondary data included existing case reports, administrative documents, and multimedia online resources. In the interest of triangulation the documents served to confirm the evidence from other sources.

Archival documents included service records, organizational records, lists of names, survey data, and other such records. Desktop research provided background material and furthermore provided means of crosschecking information.

Interviews are one of the most important sources of case study information (Yin, 2003). They may propose solutions or provide insight into events. They may also confirm evidence obtained from other sources (Tellis, 1997).

Semi-structured interviews were used for the purpose of this study and key respondents were asked to comment about certain events and issues. The discussions revolved around the topic of problems related to cooperation with partners and issues and success factors related to this. All the respondents gave permission for recording the interview. These included 8 interviews

with senior members of ICT MNCs and NGOs. The interviewees were either directly active in the described projects or were seeing to its outcome.

As Yin (2003) recommends, a case study protocol was used, which included an overview of the project, field procedures, question list and guidelines for the report.

Table 1 lists the projects, the participating companies as well as some details about the projects they were involved. In addition the sources of primary data that was used in each project are listed in the last column.

Project	Company involved	Case description	Type of partner	Primary Data
M-Pesa	Multinational and local mobile provider	Mobile payments & banking	Societal partner	Interview with sr. manager of company involved.
Village Phone in Uganda	Bank & mobile telecoms company	Rural shared telephone facility	NGO and local for profit partner	
Village Connection	Mobile telecoms company	Rural local phone network	local for profit partner	Interview with sr. manager of company involved.
Unlimited Potential	Software company	Broad range of ICT activities aimed at emerging markets and particularly the BOP market.	NGO, civil society	Interview with manager of company involved.
Public-private partnerships - Tapping into innovation	Several ICT MNCs	IT consultancy activities in developing countries.	Civil society organisation	Interview with manager of IICD involved with projects.
Public-private partnerships - ICT & media	Several ICT MNCs	IT consultancy activities in developing countries.	NGO	Interview with NGO officer involved with projects.
i-Community in South Africa	Hardware company	Telecenter.	NGO and some local private partners.	
World ahead (e.g. Classmate PC)	Hardware company	Sustainable technology for users in developing countries.	Local government	Interview with sr. manager of company involved.
Digital Bridge	Hardware company	Bringing connectivity to the unconnected.	NGO	Interview with sr. manager of company involved.
Communication for all	Mobile telecoms company	Bringing communication to all.	NGO	Interview with sr. manager of company involved.

Table 1: Participating companies and their projects.

4.3. Data analysis

For analyzing case study evidence Yin (2003) suggests three strategies for general use: one is to rely on theoretical propositions of the study, and then to analyze the evidence based on those propositions. A second is to use rival explanations by setting up a framework based on these rival explanations. The third technique is to develop a case description, which would be a descriptive framework around which the case study is organized.

For the purpose of this research multiple cases were described and cross-analyzed, effectively following, in part, the suggestions by Yin (2003) of a more specific analysis technique called cross-case synthesis. However for this project word tables, as suggested by Yin (2003), were

not used, but rather the basic coding techniques of grounded theory as suggested by Glaser and Straus (1967) and Glaser (1978).

The reason is that the use of constant comparative analysis, for instance, lends itself much more towards the creation of frameworks such as the one being presented in this paper. It has to be noted however that the framework suggested here was not created only from data collected in the field, but was also guided by propositions in existing literature as can be seen in the next section that present the findings and a discussion of the proposed framework. The result should therefore not be regarded as a grounded theory. Nevertheless it can be suggested that the resulting framework does enjoy a close link with data that was collected in the field and is therefore 'grounded' in data to some extent.

The analysis process consisted, in simplistic terms, of a search for patterns in the data; recurring issues, in other words. These were categorized into groups and these categories developed and became more robust as the analysis continued.

The next section illustrates these categories and provides support for the emerging framework.

5. FINDINGS AND DISCUSSION

The data reveals several issues that could be categorized as follows:

- Driving force issues
- Skill issues
- Input-Output issues
- Socio-cultural Issues
- Systems issues
- Trust Issues

Each of these is explained in the following sections. Where possible examples of evidence from the data are offered that helps to illustrate the issues. In each case there are also references to instances in the research literature where these issues are confirmed.

5.1. Driving Force Issues

Driving Force issues refers to problems that occur as a result of misaligned fundamental driving forces that shape the goals, purposes and process of BOP projects, both from the perspective of the ICT MNC as well as that of local partners.

The data reveals that problems arise when the goal and purpose of the project are different for each partner, and when these differences are not acknowledged. "*If there is not a sustainable [business] model and mutual benefits, the project will fail.*" one of the respondents told us.

Another driving force is that which involves the different foci on results versus process by different partners. A respondent stated: "*[western] consultants are very result orientated, whereas in developing countries there is more focus on the process. ...How to explain this to a [western] consultant?*". In support of this Kumar, et al (2005) highlight the difficulties this creates and mention how projects can fail as a result of a mismatch in this regard.

At the same time the data also reveals that another more covert driving force could also lead to cooperation problems namely the tendency of ICT MNCs to be technocratic or technology driven in situations where small business driven projects may rather be more successful. One respondent said: "*IT consultants, often male consultants, are technology driven. IT will*

become a target instead of the means for an aim “. This tendency is also suggested by Chio (2005).

Another, fairly debilitating, issue for projects that is revealed by the data is that of failing to get local input before investments are made. This is a critical driving force that often gets neglected. In the literature Gurstein (2005) laments the over-emphasis in research on "top-down, closed access and 'expert' driven" (p. 3) research in the ICT4D area. Ranganathan (2005) adds that actual ICT implementation (in this case within the educational sphere) itself suffers the same fate and that a bottom-up approach that build on indigenous knowledge provides much more sustainability. Simanis et al. (2008b) confirms this and their BOP protocol provided guidelines in this regard. However establishment of cooperation and mutual understanding takes time as was found in the data. This time factor has to be taken into account when starting a project and has been acknowledged by Simanis et al. (2008a).

Furthermore the data reveals that as expectations and aims tend to shift through time, failing to maintain continuous communication with the partners can cause further misalignment problems. This confirms Seelos and Mair's (2007) argument, which effectively implies that failure to continuously monitor the relationship could add to difficulties in the cooperation.

5.2. Skill issues

The data reveals that ICT MNCs tend to have unrealistic expectations about local skills and knowledge on a variety of topics ranging from IT skills and knowledge to managerial skills and knowledge. The word 'unrealistic' is used here because ICT MNCs tend to either over-estimate or under-estimate the knowledge and skills levels, as this phrase of one the respondents illustrates: *“You have this underestimating of knowledge...we have forgotten that there already exists some knowledge... [of ICT]”*

In addition it emerged that ICT MNCs struggle to deal with the diversity in skill levels found at the local environment. An example is the Nokia project for shared telephony in Uganda where it was found that skill and knowledge levels vary greatly from one individual or partner to the next. The difficulty that ICT MNCs seem to experience is that of becoming and staying aware of this variety of resources as well as tapping into and cultivating these resources.

Prahalad (2005), Simanis et al. (2008a) and Jenkins (2007) highlight the importance of this kind of collaboration and sharing of skills and knowledge.

5.3. Input-Output Issues

Input-Output issues refer to difficulties that may arise as a result of unequal investments by partners in projects, as well as unequal gains by partners from their projects.

The data reveals in some cases that the partnership exhibits unequal risk sharing. Very often one party has the burden of all financial investments. Local entrepreneurs most often do not have the means to bear a high investment. When local entrepreneurs do not find their own financing and ICT MNCs have to be the majority investor, the nature of the cooperation transforms from a partnership to employer-employee relationship.

The fact that there is unequal risk sharing may not be new; in fact it may well be argued that almost all BOP projects are characterized as such, even with the knowledge and agreement of both partners. However a matter for concern may be the impact that this inequality could have

on cooperation in terms of aspects such as misaligned driving forces. The reality is that those who take the most risk are more careful with a project than those who take less risk.

In addition certain outputs of projects might be cause for problem. Matson (2006) highlights problems in business partnerships related to intellectual property and patents. This may be true for profit-profit relationships, but even more so in profit-nonprofit settings as encountered between ICT MNCs and NGOs. In these partnership new products and services may arise which have a potential market value. The sharing of revenues and protection of investments is an aspect common to ICT MNCs but unfamiliar terrain for their nonprofit partners. *"If 'Company X' helps to grow ICT development and the local ecosystem then there needs to be protection of intellectual property"*, a senior manager stated.

It would seem that all partners are not always explicitly aware of their mutual interest and potential mutual gains. It is not stated that "selling to the poor" is the foremost aim of ICT MNCs, but it is an aspect which arises in sustainable business (Prahalad, 2005, Simanis et al., 2008b), and it brings the need for agreement upon the spinoff of ventures on the surface. Trust will be a relevant factor in this (Das and Teng, 2001).

5.4. Socio-cultural Issues

A natural difficulty that organisations experience when making investments in developing areas are those related to social aspects of the partnership. In particular there are those obvious difficulties related to cultural differences. The data reveals that one or more partners seem to experience difficulty at some point in the relationship in understanding the behaviour of partners, and developing an understanding of the local environment. One respondent said that IT MNCs in general want to act fast, whereas the local partner has a different, slower, pace, which causes some friction while adjusting to a common rhythm. Some respondents touched the differences in operation culture between profit and nonprofit organizations and the difficulties it brings in cooperation, although one respondent stated: *"Working with an NGO is much easier than working with the UN"*.

These difficulties were also highlighted by London and Hart (2004) as discussed earlier, and they refer to the issue of social embeddedness.

One such social issue is that of culture shock, which refers to general feelings such as frustration and anxiety that people experience while living and working in a different country (Oberg, 1960). *"IT Consultants of IT are not always mentally prepared for the challenge they face on site"*, a respondent said. Business people from ICT MNCs seem to experience business culture shock when having to spend time in the local environment, an issue that has enjoyed some attention from Marx (2001). She suggests that business people experience problems in something that is called the culture shock triangle; referring to three problem areas namely: an emotional side, a thinking side and a social side.

There has been some interest in the phases that people go through when adjusting to a new environment (Ward et al., 1998). The generally accepted explanation has for many years been the U-curve theory, originally suggested by Lysgaard in 1955 according to Ward, et. al. (1998). The explanation is that cultural adjustment is a process that starts with an initial phase characterized by positive perceptions and experience (referred to as the "honeymoon" phase), followed by a phase where the situation is experienced more negatively, and ending with final phase where adjustment has taken place. Ward et al. (1998) however propose that problems with adjustment are actually greater at the entry point and tend to decrease over time. This

effectively implies that approaches to cultural adjustment programmes for individuals in BOP projects may need to be revisited.

5.5. Systems issues

Systems integration proves to be an issue as the data revealed. Although partners expect that some form of integration is required it seems that problems are often more than expected. One example is that of the Vodafone project in Kenya where the integration of systems with the local partner's back-office was a noteworthy obstacle. Butt et. al. (2008) suggests that these problems are common confirming the findings of this study.

In addition it seems that it may also happen that the actual usage of implemented systems tends to be different from the intended usage. This may result in redundant systems. An example comes once again from the Vodafone project in Kenya, where the original intention was micro financing, but in reality users only utilized the system to make person-to-person payments, effectively making the installed micro-loan systems redundant (Hughes and Lonie, 2007).

5.6. Trust Issues

The data reveals that for establishing a solid partnership a fair amount of mutual trust is needed.. One of the respondents said *“It starts with mutual understanding: the local partner has to understand what the IT MNC wants and vice versa. Trust is essential...”* This is confirmed by Das and Teng (2001).

The data reveals in certain cases instances of partners (on both sides of the relationship) that promise more than what could be delivered. A respondent said: *“Sometimes IT consultants promise more than can be delivered or they expect that local partner will do more”*. This could clearly impact on the trust relationship between partners.

An interesting observation is what seems to be a high level of eagerness on the side of the local partner to report in a favorable or positive way to the ICT MNC or sometimes the NGO acting as an intermediary party. *“The local partner has the tendency to tell you what you want to hear”*, a respondent stated; *“...this ‘willingness to please’ led to dissemination of misinformation. A possible motive was the eagerness to keep the partnership going...”*

It is possible to borrow a term from the social sciences research field namely that of "social desirability bias" which refers to the tendency of research subjects to behave in a way that they think may be perceived as favorable by the researcher (Randall et al., 1993). However in the case of BOP projects a more suitable term may be "business desirability bias".

Table 2 illustrates clearly how the categories that were identified in this research are supported in the literature.

Category of Issue	Examples of Relevant Theoretical Perspectives
Driving force issues	<ul style="list-style-type: none"> • Different foci on results versus process (Kumar et al., 2005) • Technocratic approach of MNCs (Chio, 2005) • Over-emphasis on "top-down, closed access and 'expert' driven" research (Gurstein, 2005) • Bottom-up approach that builds on indigenous knowledge (Simanis et al., 2008b) • Failure to continuously monitor the relationship (Seelos and Mair, 2007)

Skill issues	<ul style="list-style-type: none">• Becoming and staying aware of the variety of resources, e.g. Prahalad (2005), Simanis et al. (2008a) and Jenkins (2007)
Input-Output issues	<ul style="list-style-type: none">• Sustainable business (Prahalad, 2005, Simanis et al., 2008b)• Business partnerships related to intellectual property and patents (Matson, 2006)
Socio-cultural Issues	<ul style="list-style-type: none">• Social embeddedness (London and Hart, 2004)• Culture shock (Oberg, 1960, Marx, 2001)• U-curve theory e.g. Lysgaard and (Ward et al., 1998)
Systems issues	<ul style="list-style-type: none">• Integration of systems (Butt et al., 2008)
Trust Issues	<ul style="list-style-type: none">• Trust as a relevant factor (Das and Teng, 2001).• "Social desirability bias" (Randall et al., 1993)

Table 2: Examples of Relevant Theoretical Perspectives for the identified Categories of Issues.

6. CONCLUSION & RECOMMENDATIONS FOR FURTHER RESEARCH

The categories of problems identified and described in the preceding section were created through analysis of data collected from a variety of sources, with the purpose of creating a basic and provisional frame of reference.

Certain limitations of this research need to be acknowledged. A fairly small sample of projects were used and these projects were only those that specifically involved local for-profit organizations. The question of whether these findings can be generalized to other BOP projects or even other development projects can only be answered through further research.

Clearly this frame of reference also requires some work, in particular confirmation of the patterns (or core categories) that were identified. To this end further research on the stability of these core categories is required. In particular it might be useful to conduct further qualitative research in which these categories could be further investigated with the aim of obtaining richer descriptions of these issues, and, perhaps, to adjust the existing categories for better fit with newly collected data.

Once a more robust framework is established further research can be conducted to verify the elements of the framework. For this purpose some quantitative research may be appropriate.

Finally further research may be required in order to investigate the relevance of contextual issues, such as the nature of partnerships, and their impact on project success. It could for instance be argued that certain types of partnerships (such as ICT MNCs with non-profit partners) experience different problems than others (such as ICT MNCs with profit partners).

Ultimately the framework suggested there would serve as the foundation for the development of a diagnostic instrument to help study the nature of cooperation issues in this field. It would in addition add an extra dimension of assessing the contribution of ICTs to development goals.

Notwithstanding the provisional nature of the framework, it can well be argued that it provides a relatively clear and sober perspective on issues that may be of concern to ICT MNCs and their partners in BOP projects. At the very least players in this area would do well to prepare themselves for these kinds of projects by analyzing the potential pitfalls using this

framework as a guide and to mitigate them by incorporating best practices from the field and known theoretical solutions.

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