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# • The Partnership Health of ICT Projects in Developing Countries

A.J.Gilbert Silvius

*Utrecht University of Applied Sciences, gilbert\_silvius@hu.nl*

Anand Sheombar

*Utrecht University of Applied Sciences, a.sheombar@umcutrecht.nl*

Jakobus Smit

*Utrecht University of Applied Sciences, kobus.smit@hu.nl*

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# THE PARTNERSHIP HEALTH OF ICT PROJECTS IN DEVELOPING COUNTRIES

## Abstract

*There have been, generally speaking, for many years high expectations that information and communication technologies (ICTs) can make a contribution toward development. However this is not always achieved and, as has been found by several researchers, this unfavourable outcome is, amongst other things caused by partnership problems between partners.*

*The basic argument of this paper is that successful contributions in developing countries that are made with, and through, ICT are partly dependent on the health of the relationship between partners. It would therefore be necessary to study the factors that may influence the health of the relationship between partners in ICT related projects in developing countries. This could eventually serve as a foundation for some form of framework of partnership issues in such projects. This framework could then serve as the foundation for further research into developing a diagnostic instrument for this purpose.*

*The research was conducted in 10 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 namely driving force factors, skill factors, input-output factors, socio-cultural factors, systems factors, and trust factors. These are explained in this paper. It is suggested that further research can serve to interrogate the proposed factors.*

**Keywords:** partnership cooperation, partnership health, partnerships for development, information and communication technology for development, multi-national companies, development projects

# 1 INTRODUCTION

The idea that information and communication technologies (ICT) can play an important role in the developing world is not new. Heeks (2008) suggests that the history of using technology in developing areas started with the first computer in Kolkata in 1956 for the use of statistical calculations. ICT then filled the role of administrative function, mostly for governments. Things have progressed over the years to more advanced and complicated efforts, not in the least as a result of the internet and the World Wide Web. The lessons learnt so far are about sustainability, scalability, and evaluation according to Heeks (2008). Projects needed to have a longer life, needed to reach more people, and needed some form of objective assessment.

But at the beginning of the 21<sup>st</sup> century stakeholders also started focusing on partnerships as a potentially influential factor in the success of development efforts in general (Van Tulder, 2008). The term ‘partnership’ became the new buzzword and, according to Van Tulder (2008) partnerships were being regarded as essential to the goal of addressing increasingly complex challenges.

This is also true for ICT projects in developing areas and researchers such as Das and Teng (2001), Kramer et al. (2007), Seelos and Mair (2007) and Simanis et al. (2008a) emphasise that the success of such projects is dependent on the health of the relationship between partners. A specific issue of interest for the purpose of this paper is therefore the nature of the relationship and interaction between multinational ICT companies (ICT MNCs) and local partners.

For the purpose of this paper the definition of partnerships as discussed by Mullinix (2002) will be used, namely that partnerships refer to “an association between two or more persons, groups, or organizations who join together to achieve a common goal that neither one alone can accomplish”. Furthermore the term ‘partnership health’ will, for the purpose of this paper refer to the general status, or well-being, of the relationship between partners in a BOP project.

The next section provides the research questions, as well as some background to the study. This is followed by the literature review. The methodology is described and finally the findings are discussed.

## 2 RESEARCH QUESTIONS

The basic research questions for the research that is reported in the paper were:

- What are the difficulties that ICT MNCs experience in their cooperation with partners in their efforts to reach markets in developing countries;
- And more specifically, how could these observed issues be categorized as factors that influence the health of these partnerships?

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. 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 set of factors 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 relationship issues that may have an impact on the success of ICT projects in developing countries.

### **3 LITERATURE REVIEW**

Recent years have seen a significant growth in the number and size of projects where partnerships are being regarded as a way to address complex problems. Zadek and Radovich (2006) suggest that partnerships are “...*emerging as the institutional ‘pathway of choice’ across an extraordinary range of activities.*” It would be reasonable to suggest that this choice is driven by expectations of greater success. Jamali & Keshishian (2009) indeed argue that strategic partnerships can lead to better results for all stakeholders.

The notion that the success of projects is related to the partnership between stakeholders in development efforts in general is not new. 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 developing 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. Jenkins (2007) suggests that collaborative action by business and development communities is important in order to achieve systematic impact. When it comes to ICT related projects, Kramer et al. (2007), similarly suggests that strong partnerships have the potential to expand economic opportunity.

Other advantages that can be achieved through partnerships also enjoy attention in the literature. Jenkins (2007) for instance found that collaboration allows partners 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. Mullinix (2002) essentially suggests that partnerships are being seen as an important way to address complicated problems.

However, it is clear from the literature that these partnerships require some attention, and that purely creating a partnership does not guarantee success. Das and Teng (2001) for instance regard trust is an important factor of successful partnerships. They argue that some effort should be made towards fostering trust, and that this is the main challenge of non-commercial stakeholder partnerships in low-income markets because it leads to effective cooperation. Unwin (2005) highlights 7 key elements that need to be in place for the success of ICT for development (ICT4D) partnerships: Trust; Focus; Champions; Sustainability; Balance between demand and supply; Networking and Transparency and sound ethical basis.

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.

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

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 a more holistic point of view of 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 several sources of evidence in case studies and he suggests that a combination of different sources can provide more reliable data. Case studies often use triangulation, which means that data items are affirmed from at least one other source and normally by another method of data collection. Golafshani (2003) highlights that triangulation also serves as a way to improve the validity and reliability of findings in qualitative research.

The kind of documents that were used as sources for this project 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 participating companies, some details about the projects they were involved in as well as the sources of evidence that were used in each case.

<b>Project</b>	<b>Description</b>	<b>MNCs</b>	<b>Local partners</b>	<b>Source(s) of information</b>
<b>M-Pesa</b>	Mobile payments & banking	Vodafone (Safaricom in Kenya)	microfinance organization Faulu-Kenya	Case reports, website, research papers, cf. (Vaughan, 2007, Hughes and Lonie, 2007, Lonie, 2007, DFID, 2007), interview with sr. manager of company involved.
<b>Village Phone in Uganda</b>	Rural shared telephone facility	Grameen & Nokia	Nine microfinance institutions (MFIs) and a cellular provider, MTN Uganda.	Case reports, website, research papers, cf. (Tetelman et al., 2004, Knight-John et al., 2005, Keogh and Wood, 2005, Nokia, 2006, Lakshman, 2007, Grameen-Foundation, 2008)
<b>Village Connection</b>	Rural local phone network in the village	Nokia-Siemens	Local entrepreneurs	Case reports, website, research papers, cf.(Granath, 2007, Nokia-Siemens, 2007, Schwartz, 2008), interview with sr. manager of company involved.
<b>Unlimited Potential</b>	Various ICT activities aimed at emerging markets.	Microsoft	NGOs, local authorities, community	(Microsoft, 2007, Bossicard, 2007), interview with manager of company involved.
<b>Public-private partnerships - Tapping into innovation</b>	IT consultancy activities in developing countries.	Several companies ICT MNC (like Altran, Atos Origin & Cap Gemini)	IICD acted as intermediary for several local NGOs in 9 countries in Africa and Latin America.	Case reports, website,cf. (Rozendal, 2002, IICD, 2004, IICD, 2006, IICD, 2007), interview with manager of IICD involved with projects.
<b>Public-private partnerships - ICT &amp; media</b>	IT consultancy activities in developing countries	Several ICT MNCs like Logica CMG, KPN	Hivos acted as intermediary for several local NGOs.	Case reports, website, research papers, cf. (Doodewaard, 2006a, Doodewaard, 2006b, Muller & van Tulder, 2006), interview with NGO officer involved with projects.
<b>i-Community in South Africa</b>	Telecenter.	HP	Mogalkwena Telecenter	Case reports, conference proceeding, research papers, cf. (Didier, 2003, WBCSD, 2005, McFalls, 2008)
<b>World ahead (e.g. Class-mate PC)</b>	Sustainable technology for users in developing	Intel	Local government/ civil society	Case reports, online multimedia, research papers, cf. (Intel, 2006, eLA, 2007, Intel, 2007) interview with sr. manager of

	countries.			company involved.
<b>Digital Bridge</b>	Bringing connectivity to the unconnected	Alcatel-Lucent	ATD Quart Monde in Madagascar,	research paper, Web page cf. (Alcatel and Infodev, 2005, Alcatel, 2006), interview with sr. manager of company involved.
<b>Communication for all</b>	Bringing communication to all.	Ericsson	Health care NGO	Conference paper, cf. (Nielsen, 2008, Fontanini, 2006), 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 identification of categories such as those being presented in this paper. It has to be noted however that the categories 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 factors. The result should therefore not be regarded as a grounded theory.

Constant comparative analysis can be explained, rather simplistically, as a process of looking for patterns in data and conceptualising them. In practical terms one has to compare incident with incident (and incidents with concepts) in the data, by looking for patterns indicating similarities and differences between incidents. Similar incidents are coded into a category, and the category is given a conceptual name (Glaser, 1992). In this project the resulting categorisation therefore enjoys a close link with data that was collected in the field and is therefore 'grounded' in data. The next section serves to present the categorisation of factor that influence partnership health in ICT projects in developing countries.

## 5 FINDINGS AND DISCUSSION

The data reveals several factors and these were categorized as driving force factors, skill factors, input-output factors, socio-cultural factors, systems factors, and trust factors. For the purpose of presenting some kind of 'chain of evidence', Table 2 firstly illustrates how the identified factors relate to the data by presenting each project, then an example of an observation or direct quote from the project, and finally the factor into which it was categorised. The table is followed by an explication of each factor in which some references to the literature are also added. Finally Table 3 summarizes perspectives from the literature that relate to the identified factors.

<b>Project</b>	<b>Quote or example</b>	<b>Factor(s) identified</b>
<b>M-Pesa</b>	<ul style="list-style-type: none"> <li>The differences in operation culture between profit and nonprofit organizations and the difficulties it brings in cooperation.</li> </ul>	Socio-cultural Factors

	<ul style="list-style-type: none"> <li>Integrating with Faulu's back office information management systems proved to be an obstacle.</li> <li>The actual usage of implemented systems tends to be different from the intended usage.</li> </ul>	Systems Factors
<b>Village Phone in Uganda</b>	<ul style="list-style-type: none"> <li>ICT MNCs struggle to deal with the diversity in skill levels found</li> </ul>	Skill Factors
<b>Village Connection</b>	<ul style="list-style-type: none"> <li>The partnership exhibits unequal risk sharing.</li> <li>The nature of the cooperation transforms from a partnership to employer-employee relationship.</li> </ul>	Input-Output factors
<b>Unlimited Potential</b>	<ul style="list-style-type: none"> <li>"If 'Company X' helps to grow ICT development and the local ecosystem then there needs to be protection of intellectual property".</li> </ul>	Input-Output factors
	<ul style="list-style-type: none"> <li>"If there is not a sustainable model, mutual benefits the project will fail."</li> </ul>	Driving Force factors
<b>Public-private partnerships - Tapping into innovation</b>	<ul style="list-style-type: none"> <li>Different foci on results versus process by different partners.</li> <li>Tendency of ICT MNCs to be technocratic.</li> </ul>	Driving Force factors
	<ul style="list-style-type: none"> <li>ICT MNCs tend to have unrealistic expectations about local skills and knowledge.</li> </ul>	Skill Factors
	<ul style="list-style-type: none"> <li>"Sometimes IT consultants promise more than can be delivered or they expect that local partner will do more".</li> </ul>	Trust Factors
<b>Public-private partnerships - ICT &amp; media</b>	<ul style="list-style-type: none"> <li>"If there is not a sustainable [business] model and mutual benefits, the project will fail."</li> <li>Failing to maintain continuous communication with the partners can cause misalignment problems.</li> </ul>	Driving Force factors
	<ul style="list-style-type: none"> <li>"You have this underestimating of knowledge...we have forgotten that there already exists some knowledge... [of ICT]"</li> </ul>	Skill Factors
	<ul style="list-style-type: none"> <li>"IT Consultants are not always mentally prepared for the challenge they face on site"</li> </ul>	Socio-cultural Factors
	<ul style="list-style-type: none"> <li>"It starts with mutual understanding: the local partner has to understand what the IT MNC wants and vice versa. Trust is essential..."</li> <li>"...this 'willingness to please' led to dissemination of misinformation. A possible motive was the eagerness to keep the partnership going..."</li> </ul>	Trust Factors
<b>i-Community in South Africa</b>	<ul style="list-style-type: none"> <li>Focus on short term profit strategy and therefore this project was abandoned.</li> </ul>	Driving Force factors
<b>World ahead (e.g. Class-mate PC)</b>	<ul style="list-style-type: none"> <li>Change of priorities of the partner</li> </ul>	Driving Force factors
	<ul style="list-style-type: none"> <li>"You need have to patience. Results come not fast."</li> </ul>	Socio-cultural Factors
<b>Digital Bridge</b>	<ul style="list-style-type: none"> <li>It took a year before one finally understood each other and the project could start.</li> </ul>	Socio-cultural Factors
	<ul style="list-style-type: none"> <li>"One needs time for mutual understanding before going in a project."</li> </ul>	Driving Force factors
<b>Communication for all</b>	<ul style="list-style-type: none"> <li>IT MNCs in general want to act fast, whereas the local partner has a different, slower, pace, which causes some friction"</li> </ul>	Socio-cultural Factors



	<ul style="list-style-type: none"> <li>• Inflexibility from the NGO according to the MNC.</li> <li>• ‘ although...a NGO is much easier than working with the UN’</li> </ul>	
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Table 2: The ‘chain of evidence’.

As can be seen from Table 2, the identified factors relate closely to data that was collected in the field. These factors are now explained further in the following sections.

### 5.1 Driving Force Factors

Driving Force factors refers to problems that occur as a result of misaligned fundamental driving forces that shape the goals, purposes and process of ICT projects in developing countries, 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.

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 Factors

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 Factors

Input-Output factors 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 many ICT projects in developing countries 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 Factors

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 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 Factors

The data reveals that systems integration seems to be an issue. 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 Factors

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 favourable 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 context of this paper a more suitable term may be "business desirability bias".

The discussion above explains the six categories of factors that may influence the health of partnerships and the discussion combined the findings from the case study with information from the literature. For clarification Table 3 illustrates how the categories that were identified in this research are supported in literature.

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

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

*Table 3: Examples of Relevant Theoretical Perspectives for the identified Categories of Factors.*

## 6 CONCLUSION AND RECOMMENDATIONS

The categories of factors 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 (10) was 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 ICT projects or even other development projects can only be answered through further research.

Clearly this categorisation 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.

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 factors suggested here could 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. Nevertheless it can well be argued that this work provides a relatively clear and sober perspective on issues that may be of concern to ICT MNCs and their partners in ICT related projects in developing countries. 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 these factors as a guide, and then to mitigate them by taking appropriate steps.

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