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Replicating Village Phone from Uganda and Bangladesh

Telecommunications and information and communication technologies reduce poverty in underserved areas of the world. In 2003, Uganda's leading telecommunications company, MTN Uganda, joined Grameen Foundation USA, an arm of the Bangladesh microfinance institution Grameen Bank, to create MTN Village Phone. Village Phone (VP) brings telecommunications services to isolated communities by providing members with mobile-telephone equipment and training them to become Village Phone Operators, who sell phone services to other residents.

IFC was an investor in the original GrameenPhone project in Bangladesh. It provided Advisory Services (AS) to the project in Uganda and to MTN in Nigeria, where an initial pilot of the VP concept has been carried out and a full scale implementation is being considered. IFC also funded an evaluation of the projects in Nigeria and Uganda and produced a Report and "Learning Note" which assessed best practice for future VP replications, on which many of the recommendations contained in this paper are based.

Experience in Uganda, Nigeria, and Bangladesh suggests that IFC and the World Bank Group are in a unique position to replicate Village Phone elsewhere around the world. But they will have to prepare for this role and recognize that the approach may vary from country to country depending on local circumstances. In 2005, IFC contracted an independent consulting firm, Intelecon Research and Consultancy Ltd. (Canada), to review the replication of Village Phone in Uganda and provide recommendations on how IFC could replicate the model in other countries.

Comparing Projects in Bangladesh and Uganda

The Bangladesh and Uganda Village Phone projects differ in several respects:

The partnerships. In Bangladesh, the partners are all inter-related. The Village Phone company is owned by the main national telecommunication carrier, GrameenPhone (GP), which is part-owned by the Grameen Bank, the largest micro-finance institution in the country. In Uganda, the Village Phone company is a joint venture between Grameen Foundation USA and MTN Uganda, and involves nine independent microfinance institutions that serve as its channel to market.

The target clientele. As of February 2006, the program in Bangladesh had more than 196,000 Village Phone Operators, an estimated 96 percent of whom are women. The MTN Uganda model was originally projected to grow to a maximum of about 5,000 operators, currently there are over 3,6000 operators. As of the time of the project review 55% of its operators were men, and 45% were women.

The channel to market mechanisms: Both models assume that rural micro-finance institution members will accept small loans to buy Village Phone equipment kits, which enable them to become Village Phone Operators. In Uganda, however, the institutions can bypass the loan process, and offer the kits to members and nonmembers for cash.

The competitive environment. In Bangladesh, GrameenPhone dominates the market in rural areas, but faces increasing competition. MTN Uganda deals with a competitive and dynamic sector that brings new products on the market. Other developments include a 25% reduction in tariffs, reduced prices for equipment kits, and relaxations of the

Village Phone Operators selection criteria and controls designed to reduce local competition among operators.

Four Models for Replication

The variations between the Bangladesh and Uganda VP models demonstrate that there is no single way to establish and deploy Village Phone. Evaluation of the experiences in each of the markets assessed indicates that future VP operation models could be configured in at least four different ways:

- **Legacy:** Focuses mainly on micro-finance and women entrepreneurs; ideally operates in a market with one dominant operator, and involves funding partners who are interested in financing gender-specific programs.
- **Broadband:** Works with a broad range of operators and micro lenders; ideally operates in a market with one dominant operator and very little competition.
- **Virtual:** Works through an independent commercial operator; can operate in a competitive environment where intermediary partners are not involved.
- **Light:** A commercial variation wholly within the control of a mobile operator; ideally operates in a competitive environment as a stand-alone product for resale, but may also fall under the operator's Corporate Social Responsibility program.

Identifying an appropriate model

While each of the proposed VP program models supports the goal of universal access, the means to achieve that goal vary considerably. Some issues to be considered when choosing between the different models include:

Program objective. Specific approaches will vary according to the objectives of funding agencies and the interests of partners. While the Ugandan project shared with its Bangladesh predecessor the goal of delivering telecommunication opportunities to rural communities via microfinance institutions and their members, it did not ultimately[1] focus on women as the earlier program had. Because of the highly competitive nature of markets in most countries limiting an entity's opportunities by serving only one gender group could place the development objectives of a program in conflict with the business objectives of the operator.

Cost of Village Phone Operator equipment kits. The sale of kits was not intended to be a source of profit for the project. The competitive nature of Uganda's telecommunications market (for example availability of second-hand sets) has forced Village Phone to offer clients the option to purchase the kits outright rather than take out six-month loans. If the cost of the kits provided through micro-finance institutions becomes uncompetitive or prohibitive when compared with other products available on the market, the business model should be reassessed.

Incentives for the Village Phone Operators and their support institutions. In Uganda airtime sales incentives were introduced to give microfinance institution partners a percentage of the cost of airtime they sell to their Village Phone Operator members. While this allows partners to earn revenue, there is no incentive for Village Phone operators to purchase airtime from their MFI field officers rather than from private distributors who are flourishing throughout much of the country. Furthermore, while MFIs are charging small, one-time handling fees for the cash sales of equipment kits, cash transactions deprive them of interest revenue they otherwise would earn from the loan mechanism. The challenge of aligning each party's incentives could jeopardize the role of micro-finance institutions in the longer term.

In Uganda the business model was under constant evolution in response to competitive pressures and implementation and operational challenges. Incentive schemes were tried, rejected, and adapted along the way. In Uganda, the project created a successful business in a difficult environment by adapting to the market.

Funding Future Village Phone Projects

The Uganda project raised $ 800,000 in grants, loans and investments from many institutions and funding agencies. A review of its operations suggests two funding challenges in replicating the program in other markets: funding predeployment—which consists of country identification and assessment, relationship building and company formation—and funding operational activities. Unlike predeployment, operational activities mean the potential to generate returns on investment and is thus more attractive for investors. In fact, to fund operational activities, at least one in-country partner of the investment has to be identified or confirmed after predeployment has been completed.

The sources and levels of investment required for a Village Phone program depend on circumstances. For example, the Virtual or Light models, which do not depend on microfinance institutions, theoretically require much less investment for capacity building and financial support than models that do require intermediary development partners. Similarly, if equipment kits are sold for cash, Village Phone partners might not need lines of credit—the amount of required investment could be substantially less than that required in Uganda.

IFC Opportunities

IFC should consider several options as it thinks about its next steps for involvement with the Village Phone

Identifying potential program models. An agency, institution or project office could promote various Village Phone models and value-added services that could be deployed in Africa and other developing countries.

Producing a brief guide.[2] This would inform potential partners and investors on different business models, risks and opportunities. It could be distributed to potential stakeholders, operators, and civil society organizations.

[1]Note that the original aims of the program were focused on women. The current business model is a rational and appropriate response to the evolving competitive market.
[2]Distinct from the "how to" Replication Manual which has been developed by GFUSA.

Voice Phone Models for Replication

Operation Model	Legacy	Broadband	Virtual	VP Light
	Focuses on micro-finance and women entrepreneurs; involves funding partners who are interested in financing gender-specific programs.	Works with a broad range of operators and micro lenders	Marketed through an independent commercial operator as a separate service	Marketed within a mobile operator, using commercial channels only (market-wide product)
Preferred Telecom Operating Environment	Ideal for a monopoly, could operate in an environment with up to two telcos, but better with one dominant operator	Ideal for a monopoly, but could be adapted for a more competitive environment	Ideally suited for a competitive, dynamic environment with two or more strong mobile operators (Telcos)	Ideally suited for a competitive, dynamic environment with two or more mobile operators (Telcos)
Need for attractive, preferential wholesale tariffs	Definitely required to protect operators who take loans from non-loan competitors	Definitely required to protect operators who take loans from non-loan competitors	Important to Virtual Operators, but less crucial if network is based on non-borrowing VPOs	Less crucial if network is based on non-borrowing VPOs
Distribution/management mechanism	Loans to women clients	Loans to men and women, plus cash-only sales	Cash-only, plus loans for micro-finance institutions (if required)	Cash-only and no loans, to general public
Training	Training program plus manual	Training program plus manual	"Slim" manuals, possible fee-for- service training for microfinance institutions	"Slim" manuals only
Revenue streams	VPO: airtime VP: VPOs and total airtime MFI: airtime sales, credit payments Telco: airtime sales and branding	VPO: airtime VP: VPOs and total airtime MFI: airtime sales, credit payments, equipment sales' handling fees Telco: airtime sales and branding	VP company: equipment kit sales, airtime sales Telco: bulk airtime sales to VP virtual operator and possibly branding VP Virtual Operator: airtime sales	Telco: franchise package fee, airtime sales and branding Franchisee: airtime sales
Airtime distribution	Preferential incentives with MFIs (pre-paid cards and virtual top-up system) and some private dealers	MFI (pre-paid cards and virtual top-up system) and private dealers	Private distributors (pre-paid cards) and MFIs	Private distributors (pre-paid cards) and virtual top-up system (could include MFIs)
Funding process	Funding required for country assessments, MFI relationship-building, and operating budget	Funding required for country assessments, MFI relationship-building, operating budget	Start-up capital required for telco sensitization and deal making, MFI sensitization and operating budget	Start-up capital required for telco sensitization and operating budget

Assessing the appropriateness of the various models in different operating environments. Helping Village Phone proponents weigh which proposed model would be most appropriate to a given operating environment, could minimize risks for new replication efforts.

Ensuring that financial incentives and mandates are established to promote Village Phone sustainability. Future replication models should have a clear and fair incentive-reward scheme from the outset so that partners can be sure they will receive the rewards. In Uganda, there is concern that the future viability of the program may be challenged because of the absence of financial incentives for the Village Phone Operators to purchase airtime from microfinance institutions. Without such incentive rewards, the MFIs' reduced revenues could impact their willingness to remain in the program. An open and accessible resource center could sensitize stakeholders to the importance of incentives.

Establishing funding mechanisms to support Village Phone replication. While some future replication initiatives need not cost as much as the MTN Uganda Program (the investment portion of VP start-up costs are likely to be in the range of US$500,000 or less), funding remains a stumbling block to Village Phone replication. An international Village Phone fund and coordinating unit would:

- Coordinate and distribute assessment studies and reports.
- Coordinate or facilitate partnerships between international donors and commercial investors for Village Phone style rural telecom and development initiatives.
- Serve as a liaison between international donors and funding agencies, on the one hand, and local, in-country Village Phone proponents on the other. The coordinating unit would help identify funding opportunities for pre-deployment activities, training and capacity building, program evaluation, start-up micro-loan financing and Village Phone working capital. Because of the diversity of activities that may require support, the fund would need to comprise a range of donor partners who would focus on their respective areas of interest and a discrete division that would offer equity or loan capital in partnership with commercial partners.

Choosing a Model: Pros and Cons

	Pros	Cons
Legacy Focuses on micro-finance and women entrepreneurs; involves funding partners who are interested in financing gender-specific programs.	Continues the Grameen model exclusively for women via MFIs Provides MFIs with a new loan product and an opportunity for future revenue streams MFI involvement provides rural channel to market	Focus on women could leave potential male VPOs looking for another product from another telco Focus on MFIs and need for credit mechanism potentially increases the cost of the equipment kits for VPOs Within a competitive environment this modle will be less effective as a Universal Access (UA) mechanism due to VPO gender selectivity Slowest channel to market option of the four due to relationship building, capacity building, etc.
Broadband Works with a broad range of operators and micro lenders	Meets existing demand for rural phones from MFIs and general public Provides MFIs with a new loan product and an opportunity for future revenue streams MFI involvement provides rural channel to market Business objective offers whatever services are required to remain viable/relevant in the market	Not exclusively focused on maintaining a business focus on women Focus on MFIs and need for credit mechanism potentially increases the cost of the equipment kits for VPOs Within a competitive environment will be less effective as a UA mechanism due to VPO selectivity owing to MFI-only membership
Virtual Marketed through an independent commercial operator as a separate service	Demand-driven with a possible social component via the MFIs Opportunity for SME focusing on rural telecom operations Telco offers support as required via existing help lines, etc. Offers a low-cost equipment package for place phones in more rural localities	Operating budget required to support the VP virtual company operations, thus less profit Is more of a UA initiative than a social development initiative Possibility of management not having a presence in rural areas could jeopardize the sustainability of the network
Light Marketed within a mobile operator, using commercial channels only (market-wide product)	Demand driven, low overhead, and relatively little revenue sharing required Product sold as any other product by the telco Telco offers support as required via existing help lines, etc. Offers a low-cost equipment package for place phones in more rural localities Fastest channel to market of the four options	A purely UA initiative with few traditional, donor-driven "development" themes Possibility for little attention to the strategy of the program beyond its launch (program management?) Few dedicated staff to manage Lack of rural MFI involvement and the possibility of management (field offices) not having a presence in rural areas could jeopardize the sustainability of the network

Next Steps

The window of opportunity to take action and support the evolution of the VP program across Africa, Asia and other continents is changing rapidly due to the intense competition within the telecommunications sector. IFC should take the following actions without delay:

Refine and expand the four operational models. IFC can become a leader in Village Phone by commissioning a rapid, detailed study of operating models and the countries where each would be appropriate.

Quickly develop "how-to" replication manuals corresponding with each of the viable operating models.

Ensure a fast route to market for the Village Phone model. To accelerate the speed at which the Village Phone operating models can be implemented and tested in a variety of international environments, IFC should approach mobile operators in which it has a stake, assess their interest in Village Phone, and help steer them towards the most appropriate model based upon individual country conditions and demand.

Establish a central Village Phone resource Web site. Content could include information for investors, program evaluations and best practice case studies, rural telecommunication demand studies, model assessments, questions and answers for prospective stakeholders, and a contacts page that proponents can use to develop their opportunities further.

Establish a Village Phone operational fund. IFC should take the lead in bringing donors and other funding agencies that have an interest in the Village Phone program together with local in-country proponents who have expressed a need for funding assistance and capacity support. The role played by IFC could range from simply bringing different partners together to creating a funding channel for new initiatives.

Monitor

Monitor shares key findings from in depth reviews of advisory services programs and projects conducted by external evaluators.These reviews address the relevance, efficiency, effectiveness and sustainability of the Advisory services programs.

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