"nishauri"
A Mobile-Counseling Service for Youth-at-Risk in Mathare, Kenya

Viability Document
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31 May 2011

Physical, financial and skill accesses are boundary conditions to the successful implementation of ICT solutions. One prominent reason for the high rate of failure in ICT programs has been captured succinctly by Heeks (2002) as a "mismatch between Information System design and local user actuality."[1] Failure is also attributed to the poor analysis of the sociocultural dimensions of ICTs in harnessing ICT for development.[2] We describe below the technical, financial, and operational requirements of the design and implementation process for "nishauri," as well as some of the social and cultural circumstances specific for our own prototype.

The document is organized as follows:

I.   Implementation plan
II.   Cost of solution
III.   Technological architecture
IV.   Skills required
V.   Customer acquisition
VI.   Government regulation
VII.   Competition
VIII.   Organization and sustainability
IX.   Other stakeholders

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[1] Heeks, R., 2002. "Failure, Success and Improvisation of Information Systems Projects in Developing Countries." Development Informatics Working Paper Series, No.11/2002, Manchester: Institute for Development Policy and Management.
[2] Morales-Gómez, D., and Melesse, M., 1998. "Utilizing Information and Communication Technologies for Development: The Social Dimensions." *Journal of Information Technology for Development*, 8(1): pp.3-13.

I. Implementation plan

We envision "nishauri" to be implemented in three distinct phases with increasing cost and increasing action/responsibility for the MYSA team. (Note: Costs are outlined in detail in Section II.)

Phase	Timing	Actions / Goals	Stanford Team Responsibilities	MYSA Responsibilities
Pilot	July - Sept 2011	• Test the barebones prototype in SMS form (not USSD). • Low-cost prototype will answer major viability questions (e.g., youth's willingness to write private questions, length & timing of responses, etc). • Observe the youth and counselor user experience through >1,000 discrete interactions. • Evaluate whether USSD is required for functionality. **Budget: $1,000[3]**	• Two members of the Stanford team will travel to Nairobi to assist with the implementation of the SMS pilot and design.	• Primary role of MYSA will be the provision of counselors' time and youth user recruitment. • No need to recruit additional staff.
Tech Design	Oct - Dec 2011	• Identify PRSP partner to develop USSD platform.[4] • Develop USSD platform and troubleshoot. **Budget: $6,000[5]** *(includes Ramp-up activity below)*	• Assist MYSA in identifying the PRSP vendor and trouble shooting USSD technology	• Provide feedback on USSD interface • Troubleshoot technology
Ramp-up	Jan - Dec 2012	• Roll out USSD platform with PRSP partner. • Implement the FAQ interface. • Achieve an average of 30 users per day. • Conduct counselor training **Budget:** *Included in tech design budget above*	TBD	• Counseling, quality-control • User feedback analysis • Marketing / customer acquisition • Managing operations • See below for more detailed explanation of MYSA's role long-term.
Scale	Jan 2013 - onwards	• Achieve 75 users per day.	TBD	See below for more detailed explanation of MYSA's role long-term.

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[3] $1000 includes telephone hardware, SIM cards, basic computer acting as a server, GSM modem, cost of 3 months of SMS interactions (>1000 users, bulk order of mobile-originating) and customer acquisition activity. This budget does not include Stanford team travel.

[4] See Technological Architecture section to understand premium rate service providers (PRSPs).

[5] This budget is based on M-Maji's experience of hiring a PRSP to build the USSD system. We believe our system may be a bit more complex than M-Maji and, therefore, we have budgeted $2,000 for the one-time development cost of (compared to $1,500 with M-Maji). In addition, we anticipate other costs of hardware and human capital.

MYSA Operating Plan

While the MYSA operating plan will evolve with the learning from the pilot, we believe it is important to spell out MYSA's exact responsibilities and activities. The activities below are based on input from the MYSA team, but we are, of course, open to further input and feedback from the MYSA staff and counselors for how to adapt this model.

Specific responsibilities:
1. *Counseling*: One mobile phone will be placed in each of the three MYSA resource centers. Based on input from MYSA, it appears that, each day, one MYSA counselor in each of the three resource centers can be the point person for the mobile counseling. This MYSA counselor will be expected to check the phone 3 times each day (at 9am, 12pm and 3pm) and respond to any sms questions received.[6]
2. *Marketing*: MYSA would be expected to promote "nishauri" among its member base, place physical media advertising "nishauri," host high-impact promotional events, etc.
3. *Operations*: MYSA will need to maintain the relationship with the PRSP, which operates the server that intermediates between the youth messages and the counselor responses. This will involve closely managing the PRSP's work to ensure that the technology development sticks to the allotted timeline and that the PRSP provides the quality of work that "nishauri" expects and requires.
4. *Cost*: We are currently evaluating a model that would be cost-free to youth users. If this model were pursued, MYSA (or an outside funder) would be required to bear the cost of the SMS or USSD messages.

II.   Cost of solution

We recognize that our cost estimates are rough at this time and will need to be adjusted with further input from MYSA. We have broken our costs into the three-phases outlined above. Our projections of the pilot phase are the most concrete. Beyond that, the costs associated with the ramp-up phase of "nishauri" will be revised during the pilot phase (July-August 2011).

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[6] Note: MYSA Resource Centers are staffed with 3 counselors every day. Given current daily foot traffic of youth at the Resource Center, MYSA believes that each center will have a counselor with sufficient bandwidth to manage the mobile phone.

PRELIMINARY BUDGET				
USD 1 =	86.22 Ksh			
Exp. Cost / USSD interaction	16 Ksh			
Exp. Cost / SMS interaction	6 Ksh			
		Pilot Phase	**Ramp-up Phase**	**Scale Phase**
Timeline (months)		3	12	12+
Technology		SMS	USSD	USSD
Up-front Tech Cost		**$600**	**$3,000**	**$1,000**
Transaction Costs				
Users / RC per day		5	10	25
# Resource Centers		3	3	3
Users per day		15	30	75
Users per month		375	750	1875
Cost per month (Ksh)		KES 2,250.00	KES 12,000.00	KES 30,000.00
Cost per month (USD)		$26.09	$139.17	$347.93
Transaction cost for timeline		**$78.28**	**$1,670.06**	**$4,175.15**
# of Users for timeline		1,125	2,250	5,625
Time period		3 mo	12 mo	12 mo
Operating Costs				
Number of counselors		20	20	30
Customer Acquisition /Marketing		$300.00	$500.00	
Training costs / counselor		0	$50.00	$50.00
Training costs			$1,000.00	$1,500.00
Total Cost		**$978.28**	**$6,170.06**	**$6,675.15**

A. Upfront technology cost

As we intend to roll out the "nishauri" program on a USSD platform, there will be some initial costs in (i) minimal investment in required computer/server equipment and (ii) costs associated with designing the USSD system. In the pilot phase, the hardware includes mobile phones for the Resource Centers, SIM cards, a basic computer acting as a server, and GSM modem. In the ramp-up phase, this would include a server for the USSD platform. For building the USSD system, we intend to outsource the majority of this work to a premium rate service provider (PRSP, the middlemen for USSD interactions). As outlined in the implementation plan above, we have budgeted $3,000 for the upfront technology costs in the ramp-up phase. We are basing this figure on M-Maji's experience of outsourcing the USSD platform development to a PRSP.

B. Transaction cost

Above and beyond the up-front cost of designing and rolling out the USSD system, one of the major operating expenses is the accumulated cost of message exchange (SMS or USSD sessions). We are proposing a "mobile-originating" USSD system, which means "nishauri" bears the cost of all SMS and USSD sessions (cost-free for youth). Thus, we have outlined below the annual cost of user engagement.

It is important to highlight that our pilot will be rolled-out on a SMS, which is designed to be a low-cost test of the major outstanding questions around viability and user behavior. Therefore, the costs are substantially different in the "Ramp-up" Phase, once USSD has been introduced.

The unit level costing is based on the inputs we have on PRSP fees for USSD. Fees are either charged per session or "per hop" (meaning the number of times a user moves between screens/activities in one USSD session). There is a large potential fee range, which ultimately depends a great deal on our negotiations). We are anticipating a range of 1-10 Ksh per session.[7]

In "scale phase", "nishauri" will also likely need to make intermittent technical investments, as the interface evolves (responding to customer feedback), and conduct regular maintenance on the server. We suggest a buffer budget for these costs, which will be determined after we identify the upfront cost of the USSD platform and hardware.

C. Human resource cost

Management: While we had initially suggested that MYSA will require a full-time manager for leadership and oversight of "nishauri," our MYSA partners do not believe this will be necessary in the near-term. The program will be managed by the team of existing MYSA counselors, led by Edwin Masonga.

Staff: MYSA counselors are currently volunteers that staff the resource centers daily. This means that, in the short-term, there will not be an additional human resource cost associated with "nishauri." However, we do envision a training costs associated with both (i) refresher training for all counselors and (ii) training on the system and protocols of "nishauri." We recommend that an additional section be added to the current training curriculum as contained in MYSA Sports and Community Leadership Academy's "Giving Youth a Sporting Chance" document. There will be some costs associated with training the first group of "nishauri" counselors, as well as ongoing training as the counselor pool is expanded. We suggest a annual budget of $50 per counselor for these costs. With 20 counselors in the initial program, this would involve a $1,000 budget.

D. Customer acquisition and marketing cost

Marketing costs will be one of the largest line items in "nishauri's" budget, but much of these costs will likely be concentrated in the first 3 months of the program. The marketing budget will include physical media (billboards/posters), SMS-based advertisement, promotional events, MYSA team sponsorship (i.e. sponsoring a MYSA team's jersey), and regular customer feedback programs. We suggest a budget of $300 in the pilot phase and $5,000/year in the ramp-up phase for these costs.

E. Travel

We do not anticipate material travel expenditures at this time, since the project will remain local to Mathare. In the ideal situation, our team envisions piloting to be carried out by our local partner MYSA, which will foster local ownership over the service.

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[7] PRSPs will charge either per hop or per session. Depending on our bargaining skills, we could get it to be as little as KES 1 per session. However, if the ultimate fee is KES 1 per "hop," it will add up to ~KES 5-10 per session (user goes through 5-10 screens).

Additionally, two members of our project team are very interested in traveling to Nairobi in Summer 2011 to assist with the pilot implementation of "nishauri." These travel costs will require support.

F. Sources of Funds

We acknowledge that additional funds most be raised to enable MYSA to cover these costs and operate the "nishauri" program. We have, therefore, identified a number of potential sources of funding for the platform.

- **Pilot Funding**
  We intend to target sources of funds within Stanford University for the initial capital to test out the "nishauri" program. We believe that "nishauri" will be a compelling project for the follow-on d.school funding that may be available for students in this course, as well as funding from Stanford Center for Philanthropy and Civil Society.

- **Ramp-up Funding**
  As we look ahead, we see two primary sources of funds for "nishauri." The first is private foundations. We believe that our program will appeal to the missions and objectives of a number of philanthropic institutions, such as Omydiar Network, Nike Foundation, and FIFA. The second potential source of funds would be through Kenyan government agencies, such as The Ministry of Gender, Sport, Culture and Social Services and the Provincial Children's Department, which are currently partners of MYSA in sports programming and the Jailed Kids project. Further the Ministry of Health, a key partner with MYSA in the area of HIV/AIDS prevention, may be a potential source of funding on peer counseling.

III.   Technological architecture

While the following description of the technological architecture of our system may be detailed, we believe this is extremely important and will give the team direction going forward. This technological architecture has designed to meet the needs of the user experience, which is outlined in the prototype and interaction trees presented in conjunction with this document.

Our prototype solution utilizes Unstructured Supplementary Service Data (USSD), complemented by Short Message Service (SMS). The user is walked through an interactive menu, and provides text input to send his or her question. This content is automatically delivered to the end user (the counselor) in the form of a text message. The same applies when the counselor responds to a user.

USSD is a common protocol for all low-fidelity GSM phones, and currently enables such services as checking airtime balance or topping up your balance with an airtime scratch card. For the purposes of "nishauri," we have deemed USSD more desirable than an SMS-based service in the following aspects (see also "Trust in Mobile Technology," under section IV. Customer Acquisition on issues of trust related to this particular technology):

- **Simple to form, easy to send**
  The session can be directly entered on the default mobile screen, and the USSD string sent by pressing Call. A USSD message can be up to 182 alphanumeric characters, longer than an SMS message.

- **Menu-based interaction**
  Unlike SMS, USSD is a session-oriented service, and guides the user through an initial menu, reducing confusion and making the service more intuitive upon the user's first usage of the service. The menu-based service will also enable youth to ask salient, culturally sensitive, and exigent questions, to which peer counselors can provide guidance of added value (as opposed to a question that can be researched easily on Google through mobile web or one that the counselors are not qualified to answer, for example). The lack of latency in request and response makes USSD a desirable platform for a menu-driven application such as "nishauri," which will involve a combination of menu selection and free text input.

- **Interaction with external applications**
  The USSD gateway can interact with external applications, based on the USSD command--this is particularly significant if the "nishauri" project is scaled up in the future to include a diverse range of location-based, value-added services to the current prototype. The USSD gateway also uses the same application-programming interface as SMS does, meaning it is easy to port services based on SMS and still utilize USSD as the bearer.

- **Existing familiarity**
  An astounding 99% of total mobile subscriptions of the Kenyan phone markets are prepaid (CCK, Jan 2011). As such, subscribers are already extremely familiar with USSD applications, and USSD sessions are also significantly cheaper for the user than a series of SMS messages or a lengthy phone call, since there is no discrete fee associated with USSD usage. The recent decline in mobile tariffs has influenced a majority of subscribers' preference over USSD sessions and voice calls over the use of SMS alone (CCK, Jan 2011). On the operator side, USSD avoids operational costs such as unbilled voice calls or interactive voice response system maintenance costs.

- **Cost Effectiveness**
  We evaluated the cost of our three technical options for "nishauri:"
    i. SMS: 0.5 - 4 Ksh per user
    ii. USSD: 1-10 Ksh per session, depending on cost structure (per session or per hop)
    iii. 3G: as low as 2 Ksh/MB
  While USSD may be slightly more expensive than SMS or 3G, we believe the benefits outweigh the costs. In comparison to SMS, USSD provides significantly more functionality and value to users (i.e., enabling a dialogue to transpire between "nishauri" counselors and users; providing youth users with FAQs, etc). In comparison to 3G, USSD can be universally adopted, while the scale of 3G will be limited to those youth with internet-enabled mobile phones.

  Once the USSD platform is developed (often through collaboration with a PRSP player as explained above), there would be a cost per session on both the user side and the counselor side. PRSPs will charge either "per hop" or "per session." Depending on our bargaining skills, we could get it to be as little as KES 1 per session. However, if the ultimate fee is KES 1 per "hop," it will add up to ~KES 5-10 per session (user goes through 5-10 screens).

There are two standard payment models for USSD: mobile-originating (we pay) or mobile-terminating (the user pays). We intend to roll-out with the mobile-originating model, which would make "nishauri" free for youth users. But, we will evaluate transitioning to mobile-terminating once we observe sufficient demand.

IV.   Skills required

Below we have outlined the skills required for each stakeholder in "nishauri" operations:

A. Users

Our target users (youth-at-risk in Mathare) will need to be comfortable with mobile handset interfaces, such as SMS and USSD. Our research in Nairobi and information from MYSA gives us the impression that most teenagers (above the age of 16) in Mathare (a) possess mobile phones, and (b) are familiar with mobile handset interfaces. SMS and USSD sessions are actually the preferred medium for communication since they are significantly more affordable than a phone call.

Mobile technology is very much integrated into the daily lives of young people. MYSA reports that many teenagers have internet access on their phone, and there is a considerable level of familiarity with social network applications, such as Facebook for which Safaricom Kenya currently offers a low-cost SMS-based application targeting young people.

Another area of user skills that we must further test is literacy and language fluency. Based on conversations with MYSA, we believe the required literacy level and language fluency do exist. To investigate this issue in a more robust way, however, we currently have two user tests underway, implemented by MYSA. Pending results, "nishauri" should consider multiple language interfaces (i.e., English and Kswahili).

B. Counselors

The skill requirements of the counselors are two-fold. First, the counselors must be competent in their fields of expertise (i.e., sexual health, employment, drug abuse, etc). Based on exchanges with MYSA administrative and managerial staff and peer counselors themselves, we believe the MYSA counselors meet this bar--they are equipped with relevant expertise and training in reproductive health, HIV/AIDS, and other areas, provide voluntary counseling and testing (VCT) at the MYSA Football For Hope Centre, and have a rich experience of interacting with young people in Mathare. As the project is piloted and there emerge additional issue areas, we may need to budget for additional training.

Second, the counselors must also be comfortable with mobile handset interfaces, such as SMS and USSD. Given feedback from MYSA, we are confident that the counselors have sufficient fluency in English and are competent in the basic handset interfaces that we will be introducing.

C. Technical partners

In addition to the MYSA team, we will likely need a technical partner that we can hire on a contract basis to handle any local technical requirements for the USSD platform and servers in Kenya. We need to

conduct more research on the companies or individual consultants who would be competent and trustworthy to complete this work in a cost-effective and timely manner. While a partner has not yet been identified, we are confident that the technical skill sets exist in Nairobi, given the fast proliferation of mobile-based systems (in particular USSD services such as mobile banking platforms).

V.   Customer Acquisition

A. Customer Acquisition Strategy

Our initial customer acquisition strategy has a number of components:

- First, we will have an aggressive blast marketing campaign at the launch of "nishauri" where we will employ a high volume of physical media across Mathare to increase visibility. This may include distribution of billboards, posters, and business cards in schools and at youth and MYSA events, as well as through MYSA's "Jail Kids" program, which specifically aids youth-at-risk. These types of marketing media have proven to be successful with consumer products, particularly in the telecom industry.

- Second, we will engage in SMS-based advertisements to the inventory of mobile phone numbers that MYSA has access to.

- Third, we will host a few high-impact promotional events to increase visibility. These may include cultural performances (music, dance, etc), side-events at MYSA soccer games, or MYSA counseling outreach that highlights the benefits of the "nishauri" program.

- Fourth, we may offer discounts to the initial batch of users -- i.e., a 50% rebate on the cost of an SMS by returning 0.5 KSH for every question submitted (see section 8. Other Stakeholders). If MYSA pursues the USSD platform, the system may be entirely free-of-cost to youth and, therefore, this strategy is unnecessary.

- Lastly, we will leverage MYSA's greatest asset—the network of 25,000 youth who are currently engaged with MYSA (note that the number of actual users targeted may be smaller as we will not be reaching out to younger children or those outside of Mathare in the initial phase).

The MYSA members are expected to be the first real adopters of "nishauri" because these are youth that already trust the MYSA brand and can hear about the program directly from the MYSA team. "nishauri" may consider sponsoring some of the MYSA teams in order to gain visibility amongst this group (i.e. sponsoring a MYSA team's jersey). "nishauri" will also be offered as an opportunity to youth who participate in MYSA's "Jailed Kids" project, which provides support to youth who have been repatriated from the juvenile court system.

We believe that peer-to-peer recommendations will be the strongest advertisement for "nishauri," and therefore new customer acquisition is highly tied to customer satisfaction. "nishauri" will engage in regular customer feedback programs, especially in the first six months of operations, to ensure that current customers are (i) satisfied, (ii) becoming repeat customers, and (iii) recommending "nishauri" to their friends.

B. Socio-cultural Challenges

We acknowledge that there may yet exist socio-cultural challenges to customer acquisition:

- **Trust in technology**
  Mobile phones over internet
  Some users may be nervous about submitting personal information and details on a faceless and decentralized Internet. At the same time, others may willingly enter details, which can leave them susceptible to scams. Given such considerations, we have opted for closed cellular networks with which users will feel more comfortable and secure.

  Messaging over voice
  We chose USSD over a spoken dialogue system, a graphical interface, or a simple live operator. We are cognizant that in some social and cultural contexts, in particular those in which users are low-literacy or novice users of mobile phones, textual interfaces tend to be more error-prone than their voice- or graphics-based counterparts.[8] However, as stated earlier, we have specific knowledge that our users are experienced phone-users with the required minimum level of literacy that allow them to use SMS messaging and such text-based social networks as Facebook (see section on "Skills Required" above). Moreover, given that the nature of the youth-counselor exchange may be highly sensitive (reproductive health, HIV/AIDS, drug or alcohol abuse, etc.), interaction via an application that combines USSD and SMS is expected to induce a higher sense of security and confidentiality.

- **Gender Gap**
  Existing tele-counseling services (see section VI. Competition) report a gender gap in their usage. A bulk of users tends to be young males. While our particular persona that inspired "nishauri" as a solution is a young male at risk, we want to include young women as well. This must be a standing consideration throughout the implementation process, in particular in the customer acquisition phase, by employing physical media and other marketing strategies that pay special attention to young women. This might include, for example, posters that advertise "nishauri" by highlighting issues specific to young girls and women, and drawing attention to the existence of empowered, reliable female counselors like Evelyn Ajing at MYSA. We will evaluate the current gender breakdown of youth coming into the Resource Centers for counseling to give us an indication of demand levels. MYSA can also evaluate its breakdown of male-to-female counselors and recruit accordingly.

VI.   <u>Government regulation</u>

Fortunately, "nishauri's" program will not confront significant government policies or regulations. Since "nishauri" will be initially rolled out through MYSA, it will not require separate incorporation (as a non-profit or for-profit) in the short-term. However, we should be foresighted and conduct research on the incorporation process in Kenya well in advance, in order to avoid any clashes with state policy or the risk of corruption.

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[8] See Medhi, Indrani et al, 2009. "Designing Mobile Interfaces for Novice and Low-Literacy Users." Working paper, June 2009.

One question to which "nishauri" must be sensitive is whether the advice or information provided by "nishauri" could be scrutinized by the authorities. For example, by Kenyan law and the Convention on the Rights of the Child, children cannot work until they are eighteen years of age. Although the law is loosely enforced, "nishauri" -- in particular the peer counselors participating in the service -- must be careful not to provide employment advice to minors that could encourage them to break the law.

VII.   Competition

Liverpool VCT (LVCT), an NGO based in Nairobi currently provides a toll-free healthcare hotline for youth, "One2One." The organization as a whole provides counseling, HIV testing, care and treatment services in Kenya. The hotline service is a peer-based program staffed by youth counselors trained in basic HIV/AIDS information, and can be accessed by any user with a mobile phone or landline, or via e-mail.

"nishauri" differs from the LVCT hotline in at least two significant aspects. First, our service accords a unique benefit to our users by being an asynchronous system, so users can send questions at all hours and every day. Unlike the hotline, which has limited hours of operation, the USSD and text-based "nishauri" allows youth to use the service at their convenience—though questions will only be answered during business hours). On the counselor side, "nishauri" optimally uses the counselor's expertise and time. Counselors can reply during discrete time bocks during their working day. Further, counselors can reflect on the questions and gather more relevant information before replying to ensure quality responses for our youth users.

Second, and more importantly, we reach a population of youth-at-risk in the slum of Mathare, where LVCT's programming activities are absent. LVCT explicitly partners with schools, while "nishauri" intends to serve youth that are outside of the formal education system. The most pressing concerns of "nishauri's" target user are not necessarily "relationship problems," which constitute the majority of the questions received by the LVCT hotline (according to LVCT's publicly available statistics). Our marketing strategies will differ accordingly—our target users are not necessarily regular readers of teen magazines, through which LVCT conducts their outreach campaign. In sum, "nishauri" will be providing a unique service to a distinct population whose needs are currently not being met by other NGOs.

Youth 'hotline' services have been very successful in developed countries and we hope to replicate such results with "nishauri." For instance, "Kids Help Phone" based in Ontario, Canada provides a web-based social forum and online 'games' in addition to a phone line. "Cha Cha" in the United States employs a text- and web-based forum for generating what the organization terms a "human-powered" answer to questions. Unlike "Cha Cha," however, the target audience of "nishauri" is specific, and our responses will be generated by seasoned, trained counselors, instead of by the general public. "Kids Help Phone," on the other hand, has been a useful model in inspiring specific features that we may want to employ in future iterations of the project, if it is scaled up from a simple USSD platform to be complemented by web-based fora that allow social interactions among youth themselves.

VIII.   Organization and sustainability

To develop a sustainable system, a key requirement is that the target community can readily adopt and maintain the system, and has a sense of local ownership. There are three components of commitment of

local stakeholders:[9] (1) affective/emotional commitment, as presented in the youth-counselor rapport; (2) continuance commitment, based on the benefits that people receive from participating and engaging in the service; and (3) normative commitment, a sense of obligation to maintain the service, and strengthen the sense of community.

We are fortunate to work with MYSA whose continued work and existing peer counseling services offered at their 16 Resource Centers are a testament to both the affective and normative commitment in the Mathare community. We are particularly mindful of (2) continuance commitment as a critical factor in ensuring the success of nishauri. In order to achieve this, the involvement of our partner organization MYSA in all stages of the development process has been a key part of our design process. Throughout our work, the development of the point of view, the solution, and its technology were flexible and shaped by input from administrative focal points within MYSA, as well as the coordinator of the peer counselor program. Also key to our process has been our ongoing exchange with three current peer counselors.

MYSA has enthusiastically expressed an interest in carrying this project forward. Our design inspiration has been to provide a complementary mobile -based application to buttress youth-counselor relations in a way that builds on the existing MYSA expertise and architecture. Conversations in early May revealed strong motivation from David Thiru, Director, MYSA Sport and Community Leadership Academy, and John Ndichu Ngeth'e, Public Relations Manager, who have stated that MYSA could dedicate its counselors and other resources to this project. Edwin Wasonga, HIV/AIDS Programme Manager, has also expressed enthusiasm. In its essence, "nishauri" is an extension of the counseling work that MYSA already leads. It is a natural evolution. "nishauri" is simply leveraging the expertise of MYSA counselors to reach exponentially more youth-at-risk in Mathare.

We, of course, recognize that we should not become overly optimistic about MYSA's verbal commitment to take this forward. We will still need to be actively involved in iterating on the prototypes and designing the final USSD software, training materials, and other aspects as needed. Nonetheless, MYSA has proven to be an increasingly well-run institution in Mathare over the past 25 years. The organization has both a close-knit, competent team of counselors and an unmatched understanding of the youth of Mathare. We believe our solution is well aligned with their mission and their practical operations.

IX.   <u>Other stakeholders</u>

We seek to develop meaningful collaborative partnerships with the following stakeholders, in addition to MYSA:

A. *Telephone service providers*

As part of option four of our customer acquisition strategy (on an initial discount), it is desirable to secure a collaborative partnership with one or more mobile operators. As of September 2010, Safaricom had the largest market share of subscriptions (75.9%), with the rest of market shares occupied by Airtel Networks (13.5%), Essar Telecom (6.7%), and Telkom Orange (4%) (Communications Commission in Kenya [CCK] statistics, January 2011).

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[9] Drawn from Meyer, J.P. and Allen, N.J., 1991. "A Three Component Conceptualization of Organizational Commitment." *Human Resource Management Review*, 1: 61-89.

Safaricom has in the past partnered with other ICT4D enterprises, such as txteagle operations in Kenya and Rwanda; moreover, Safaricom Kenya Ltd. has been a past partner with MYSA on the Mathare United FC project. Discounts may be more easily procured through the smaller mobile operators who have an incentive to acquire new customers. Despite the potential for partnerships, we will not assume that this type of operational or financial support is achievable in the medium-term.

B. Schools

Both primary schools and informal schools will be an important avenue of advertisement in the customer acquisition process, to orient children and youth to our service. These include Mathare Primary School; Mathare Community Education and Development Organization; MCEDO School; Precious Kids Academy; Valley View Academy; Murema Primary School; Loving Concern Education Centre; Kiboro Primary School; Undugu Society School. We have not yet reached out to these players, but will coordinate with MYSA to do so.

C. Government partners

The Ministry of Gender, Sport, Culture and Social Services; Ministry of Home Affairs and National Heritage; Provincial Children's Department are currently partners of MYSA in sports programming and the Jailed Kids project. Further collaboration may be achieved on the "nishauri" service. The Ministry of Health, a key partner with MYSA in the area of HIV/AIDS prevention, may be a potential source of funding on peer counseling. That said, we would have to evaluate whether the involvement of government would affect youth's perceptions of "nishauri" (positively or negatively).

D. Private sector partners

Macharia Njeru Advocates, based in Kenya, is currently a legal advice partner for MYSA's "Jailed Kids" project. The entity is a potential source of technical experts to train MYSA counselors on legal matters, should this emerge in the future as a key category for the "nishauri" service.

On the technology front, Nokia is a potential remote partner. The nature of the partnership would be facilitation of application development.

E. International agencies

Potential funders may be organizations that have been financing partners with MYSA in the past on projects whose interests are broadly aligned with "nishauri": NORAD, Norway; Strømme Foundation, Norway; Netherlands Development Cooperation Agency; Prince Claus Fund, Netherlands; Jamii Bora Trust, Kenya. United Nations Educational, Scientific and Cultural Organization (UNESCO) has been known to fund ITC4D enterprises, including a text-based literacy program in rural India co-implemented by Mobilink in 2010.

F. Non-traditional funders

We may wish to reach out to non-traditional funders from both domestic and international private sectors. MYSA may wish to expand on existing partnerships with such entities as the Simkins Partnership in the UK; NIKE; Sara Lee Kenya Ltd.; and K.D. Wire Kenya.