

“We Can’t be Defeated by Something that Cannot Talk”

Mmamakanye Rampa¹
Lungile Mulamo²
Larry Stillman³

¹CSIR Meraka Institute
²Tulo Development Consultants
³Monash University

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Introduction

The Digital Doorway Initiative is funded by the Department of Science and Technology (DST) and the Department of Rural Development and Land Reform to make a fundamental difference to computer literacy in South Africa in poorer and often isolated communities. The physical Digital Doorway is a content server with three computer terminals that allows community members access to a range of content that may be relevant in addressing their needs. It is meant to help people learn how to use computers informally, through users’ intuition and exploration without formal training (Stillman, Herselman, Marais et al. 2012). More than 200 DDs were installed across the country in the period 2004 -2102. However, rather than having direct connectivity, computers are installed with cached information.

In 2012 an evaluation to determine whether the DD initiative has achieved this aim was completed by Meraka Institute and Narrative Lab in which Outcome Mapping and narrative assessment methods were combined. The evaluation proved to be a unique approach to bridge the gap between qualitative (narrative) and quantitative (scalability of numbers) research. The result determined how the DD has affected the lives of the communities; mainly children, where it was deployed. Following this evaluation and the lessons learned the next step was to deploy the DD for a specific target group. In this regard, the use of the DD by middle-aged women for food production in a remote rural area was agreed upon, and via contacts, it was decided that the remote Mafarara village in Limpopo Province had potential. The first visit was undertaken in April in order to discuss with the community the purposes of the project and gain their informed consent. A follow up was made in August 2013. This initial, empirical and deliberately straightforward ethnographic (Hobbs 2006) and interpretivist (Walsham 2006) paper describes the intense and close relations which were encountered in the second visit, and other observations and recommendations are made. Another self-reflective account of the first consultation earlier in the year from the point of view of the project workers is being prepared, and the empirical observations from each paper will also be analyzed through different lenses (community development, social-technical theory and so on) as a contribution to broader understandings of ICT4D implementation.

The idea is that women whose ages are 40 to 65 with no formal computer training would receive one week’s basic training from CSIR researchers. This group of women works together in their produce garden. Land has been allocated to 20 women who individually own their plots. They also work on one plot which is owned communally by all. They use it to grow their seedlings. They produce food for themselves.

The intention is to work with this group of women for the duration of the study. The aim is to allow women to use the DD for two months. The written content is in English but there is a considerable amount that is other media. It is our experience that lack of English does not inhibit exploration of the DD. We know that there are people in the village that

know English and they rely on each other's strength. Thereafter, the DD team in Pretoria will obtain feedback and modify it using comments and suggestions participants have made. These comments will assist in making adjustments to the DD and make it useful for food production in Mafarafara village. In the end, the DD will remain in the community after the study is completed.

The Field Diary as a source of data

The participants' reactions, experiences and interaction with the DD were documented for the four days that we were there through diary observations which record the sequence of things that happened and gives a flavour of the complex embedding of "technical activity" in community life where what is important to the community members may not necessarily be obvious to outsiders. Yet the recognition and incorporation of these things—such as the participation of the women in the physical installation into the process of technology adoption can be very important for the acceptance of an outside initiative. It is owned in a symbolic and physical sense from the start. The account here should be seen as a work in process.

Day 1

From the onset women wanted to be seen to be contributing to the work being undertaken. There was great excitement that this was indeed happening. They assisted during the installation. One of the women remarked that:

"We want to hold on to the rods [for the installation] so that people can see that we were part of this occasion and making our own contribution"

Women also assisted in covering the hole. Four women at a time were assisting in holding the rods to remain in a rectangular form whilst the hole was being filled up. These were the ones used to construct the framework for the solar panels.

One of the young men remarked that the thieves were going to uproot the solar panel. He was responded to by one of the women who warned that they would become the first suspects if the solar panel was stolen because they have been part of the installation. This was treated as a joke but at the same time concern was raised about the rampant crime in the village and the fact that the youth were the perpetrators. The concern was also influenced by the fact that sewing machines belonging to the group had previously been stolen. Security at the community center is not tight and as a result of this, renders the assets of the group vulnerable.

Once everything was done and the panels were hoisted, there was a lot of excitement and praises were showered on Grant (the Meraka engineer) for working so hard. This excitement was expressed in the following manner.

"Oh! I can't wait for this thing to be connected. We are going to be educated; but why? When we are already in our twilight years?"

"We are now going to start competing with each other on who will learn faster than the other."

"You don't know how excited we are with this project. Now that the DD is here, there's no turning back. We are going to be successful. We can't be defeated by something that cannot talk" (Sepedi saying that means "we will not fail").

In this excitement some of the women doubted their capabilities. One of the women lamented:

“Do you think I can make it?” to this the researcher immediately answered “of course you can. Do not undermine yourself, you’ll see, you’ll surprise yourself instead.”

The very same woman had an aha! moment the very next Wednesday. Ma Palesa¹ (one of the group members and community development worker by default) assisted her to spell her name and open her own file. (Ma Palesa demonstrated how the DD could complement the with the adult literacy program– Kharigude (learn how to read and write). What was significant here was the fact that the participant was able to see and punch the alphabetical letters of their names, letter by letter making sounds which would produce a word which a participant never thought it was possible to spell. The learning was immediate and exciting. It was visual, audible and tactile. This left participants with a sense of fulfillment and empowerment.

The ladies prepared bogobe and morogo (pap and wild greens) for lunch. We all enjoyed the meal.

Day 2: The Visit to the Chief

Visit to the Chief: We started the day at 08:00 by visiting the Chief, to register our presence in the community. He was updated about the DD and the envisaged training. He was invited to visit the project to see the installation of the solar panels and computers.

Ma Palesa couldn’t hold herself in expressing her excitement to the chief and trying to explain how it looked like. He likened the DD as resembling a squatting person.

“E tshwana le motho a kotame”

“E tshwana le ATM oa tobetsa le mmala o orenge” It looks like an ATM you tap on it and the colour is orange.

Ma Palesa pleaded with the chief to encourage the community to be vigilant and take responsibility of ensuring that no one tampers with it. She further told the Chief that this should be seen as the community’s property and as such belonging to the Mafarafara community. In this regard the chief promised to call a community meeting. Traditionally a chief’s announcements during a community meeting which he summons this is equivalent to a new law coming in effect.

Discussing Informed consent again

At about 09:00 on the second day, the ladies started coming in. We invited them into a covered space to allow Grant to connect the computers. The aim was also to go through consent forms that were previously signed and for those who were not present during the first two-day visit in April, their consent was also required.

At Meraka, we have become increasingly aware of the importance of the process informed consent in the participation in ICT projects in the South African situation, but this is an issue relevant to many communities (Faulkhead, Russell, Singh et al. 2007). This is for several reasons. First, informed consent is important in a South African (and in many decolonized countries) because of the history of apartheid, and the absence of rights. All the participants grew up without rights. In the new South Africa, being able to have rights is a significant achievement, and it must be respected and its assertion encouraged. Second, Meraka has learned that while the legal emphasis is upon individual consent, in the village and community setting, the dynamic is more complex. Decisions are made by the collective, with everyone entitled to have a voice. Thus, obtaining informed consent

¹ Her name has been changed to preserve anonymity.

while in the final analysis is an individual act, is as much a collectively-mediated decision. Third, we regard the obtaining of consent an important occasion for discussion about a project and getting to know one another—the project workers the community—and vice versa. This is not a short-term relationship, but something that is to have long-term effects. Because of the distance and logistics involved in getting to remote villages such as Mafarafara, it is therefore important that such occasions be treated as significant events by all concerned, commencing with a certain degree of formality, hopefully resulting in strong mutual relationships and the emergence of local leader and champions.

The briefing session was done by Lungi with Ma Palesa giving an input and motivating women in parts. Kanye on the other hand was taking the video of the whole proceedings. It went on well and was well received. All the women agreed with the conditions and didn't have any reservations. A group of men including the Village Councilor were present at the briefing indicating support for the initiatives undertaken by the women. During the briefing the following key points were emphasized, points which had also been raised during the initial consultations in April:

- Participants were reminded about the project and their role in it.
- The purpose of the DD and why the group was selected It was explained that the DD was designed for them in particular, to enable them in their agricultural production.
- The importance of the consent form to participate in research and that the participation in research is optional and that no one is compelled to participate.
- Interviews would be recorded and in some parts video and photos would be taken.

It was explained that the same research would assist in modifying the DD by implementing the changes and understanding their circumstances. We reassured the participants that confidentiality would be taken into account.

After this recap of what informed consent meant, the women were interviewed in groups of four at a time whilst others commenced training on the DD. There was anxiety and apprehension in starting to use the DD as part of the research, but Ma Palesa, as the community leader encouraged them by saying:

“There is nothing that you can't do if the will is there. This is our thing and meant for us people who are not educated”

At midday, they were invited to refreshments. When the researchers did a postmortem later that evening they agreed that serving juice and biscuits was not adequate especially since some of our participants rely on meals prepared at the centre or have only one meal per day at home. Therefore one of the key recommendations was to add something substantial and cheaper in subsequent visits like pap and beans (starch and protein). This is a good example of the need for researchers from outside to be aware of physical and other needs of participants who can be all too easily exploited.

One crucial principle of the project is to conduct the research in a manner that is non-intrusive and non-disruptive to the community agenda. The women were assured that training will continue when it is convenient for them. So when the majority of the women excused themselves from being at the project centre on third day because they were going to receive their pension money they were free to do so without fear of being excluded. Absentees and women who were presenting themselves for the first time benefited equally since every session began with a gathering where participants were reminded about what has been achieved so far and what still needs to be done and the way forward.

DD training

Another principle is to ensure that women continue using the DD even after the researchers leave. Based on the evaluation of mentioned earlier we saw that providing a

user manual and offering technical support training is important. As a result, the two younger males who assisted with the DD installation were also trained. This was one of the best outcomes of the visit because they both showed up every day to help with training the women even though we did not require them to do so. Moreover, they did not receive payment as trainers. Instead, they appreciated that they were gaining new skills and knowledge. The eyesight of some of the participants was a challenge but once the font was increased, they could cope. Most of them coped with font size 26. The women were so excited when it was possible for them to open different applications and create user accounts in which they saved personal files. They were also trained on Word and shown how to type. Probably their best achievement was typing their names and ID numbers and saving in case they lost or forgot their ID books.

The following issues about the DD were mentioned:

- Power saving: the computer should be switched off when not in use
- Safety: mount the step carefully to prevent slipping and falling
- Support: Volunteers have been trained to provide basic technical support locally
- Keep the DD clean by putting a cover on top after use.

Highlights

The women's moment of glory was when the Chief came to see the DD and the solar panel because they could demonstrate to him their newly acquired skills. Volunteer trainers proudly explained how the DD works to him. The Chief showed immense interest and was happy that developments were also being considered for Mafarafara. He also advised the women to consider having a wire mesh around the solar panel for securing the panel. He joined them in sharing the lunch that was prepared: a traditional dish called lewa which is boiled nuts, amarula nuts and mabele (wheat).

Visitors from another community development centre in Gautswane also witnessed the activities. They were a local entrepreneur with a technologist from international SAP (Software Application Program) from Germany.

Participants' Questions

Common concerns and question raised by the participants were:

"You tell us about programs that we can suggest for our benefit however, how will we know what programs we need?"

The participant was reminded that already much interest was demonstrated in women wanting to read on the diseases that have affected their animals and plants. This is one example of the needs expressed.

"Can we Google and get information on program?"

Kanye explained that there is a lot of information stored on the DD and that they can search. The DD will store the searches and this will be used to modify the DD content.

Results/Survey information

In total 23 women were interviewed.

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Ages of participants	Total number of women
Under 40	2 (9%)
41 – 50	6 (26%)
51 – 60	5 (22%)
61 – 70	6 (26%)
71 – 80	4 (17%)
	23 (100)

It is evident that the target group of 40 to 60 is fairly represented in the age groups presented above.

Participants' position in community

Most of the women involved in the project have no civic responsibilities and only two women were active. The crèche teacher and Ma Palesa who because of the role she was playing in the village, could be viewed as a Community Development leader.

Work being done by the participants in the community

The majority of the women are involved in the garden project. This is the garden where they work individually and collectively. Even though they have their individual gardens, they decide collectively when to plough, plant, water their gardens etc. The other group is involved in sewing and yet others do both sewing and gardening. The women doing sewing tended to be younger. One older woman commented that she used to be in the sewing group but due to eyesight challenges, she's stopped and is now full time in the garden. The other groups of women were the ones who were in the garden but also making grass mats and brooms. The one woman who was in the garden was having a small business of buying and selling chickens.

Ma Palesa was in the Garden project and also assisting other women in Fashion design, Candle making, developing the community and providing After Care. Ma Palesa also mentioned that she has been involved in the Kharigude Program (Learn how to read and write) a Venda term meaning "ufunda usekhaya" The skills imparted were also in simple mathematics so that they know how to use their money when they shop in Burgersfort. Lungi made them aware of the similarities in the approach by reminding them that the DD will also involve training in their own locality and that they will be trained in computers without having to go to school. One of the respondents remarked that they were excited and felt that they were blessed.

Language spoken

All the women are Sepedi speaking. Some of them had to be assisted in reading and writing. They were happy with this initiative as they felt that it would encourage them to increase their literacy.

Number of people in community/village

No one had any knowledge about the number of people in the community. The only person who could shed light on this was Ma Palesa who informed us that the only information she has, is that there are 280 households in the Mafarafara village.

Exposure to ICT

- Radios

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87 per cent of participants owned radios. This is a significant number. One of the women stated that the upsurge was influenced by the fact that they now have electricity.

Listening to radio stories also featured highly. They listen to current affairs programs because they provide information that keep the villagers informed and empowered. One such program they mentioned was “Ha re boleleng” meaning let us talk and “Thoka la tsela. The women like to follow news that interests them such as the Marikana case where some miners were killed during a riot. Church programs were also popular.

- Television

65 per cent of participants had televisions, however not all of them are working due to the fact that they don't have satellite dishes. Programs that are popular are the ones that show cultural groups. Soapies such as Muvhango, The Bold and Beautiful, Scandal, Generations, Isidingo are watched although some of the women felt that they were not receiving the full value of these programs because they just didn't have time to consistently watch these due to domestic responsibilities. They also mentioned that their children have the tendency of monopolising the use of television in the home.

- Cellphones

87 per cent of participants had cellphones and they all claimed that these belonged to them. One of the women admitted that she only receives calls and that she cannot call out because she did not know how to read or write numbers and names.

Four per cent of participants said they owned a cellphone but lost the chargers while 9 per cent did not have.

- Telkom telephone in the community

No one in the community owned a Telkom line.

Computers

The majority of women had never used computers before and for some, it was the first time to see one.

One of the respondents said that her grandson worked in computers. Other interesting comments were:

“It's difficult to respond because we are not yet used to the DD and understanding how it works”

“It is the first time of training on computers. We shall be learners and finding out more about computers”

“It will change our lives. We are going to seek information where necessary. We shall be tapping that keyboard in search of knowledge.”

“We shall request that we be registered so that we are able to access the internet.”

“We shall be able to do Internet shopping and advertise and sell our goods”

Family's own food production

Without exception, women maintained that only two meals are prepared. Breakfast is normally tea with bogobe (pap) or pap and greens. Bread is a luxury because the majority of people cannot have bread for breakfast. There is no lunch and for dinner or an evening meal women and their families have pap and greens with or without beans, pumpkin etc. They also eat dikgobe [boiled mealies].

They also harvest greens from the fields, garden and trees along the river. The mealie - meal is bought from the shops and some of it is produced by the women themselves by grinding mealies into samp, mealie rice and mealie meal. Produce depends on whether there is enough water from the river to water the garden.

Agricultural problems they experience

Crops

The problem with not having reliable source of water impacts the amount of produce harvested from the communal or family garden. Carrying water from the river using buckets is hard work and with no form of irrigation the farming is unsustainable. The women grow vegetables such as tomatoes, corn, mealies, pumpkins, watermelons, spinach, and cabbage. Sometimes these vegetables and crops are affected by insects, caterpillars, birds and other diseases.

Apparently only one family in the village can irrigate their garden with water from the river and they grow tomatoes, spinach, and cabbage that they are able to sell. Also, unlike the communal plot, family gardens are not fenced. As a result, their crops got eaten by pigs and goats.

Animals

Livestock and domestic animals' disease is also a problem. Food-and-mouth disease affected their cattle the most. To solve this problem, the women buy their medicines for their cattle and injected their cattle themselves. One of the women said:

"As long as they have shown you how to use the syringe you are free to administer it yourself."

Finding information

It was said that the information on what to grow and in which season, existed amongst them as a collective and was shared to all. This is knowledge which these women received from their parents. Some of them were using the experience they received when they were employed in farms for no pay as long as they could be accommodated in the farm and given staple food.

They stated that there were no services provided by the Agriculture Department. The women expressed concern that there has been a reduction in the provision of agricultural extension officers. They noted that they used to have an agricultural officer who died. Since his death, no replacement has been made. They were very vocal in expressing that Government was failing them.

The Coop has been helpful in providing assistance to them when they were seeking advice. The Chief has also assisted in giving advice relating to their livestock and garden. On the whole, they maintain that people have been generous in providing advice.

Food production operational issues

- Seeds

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Women explained that they bought their seeds from the Cooperative using their own monies. The women also mentioned how they were able to share costs buying seedlings in pairs. They shared with me how they were able to share their seeds if one of them had them in abundance.

“What each one of us has in access is shared. We equally practice this in what we call food collection. Food is shared, we don’t throw any of our excess food.”

- Fertilizer

All women stated that they have never used fertilizers in their garden because this was not cost effective; rather, they were using traditional manure. One of the women remarked that;

“We don’t use any fertilizer but use manure. This is what we’ve used from generation to generation.”

- Equipment

Given the socio-economic position of women, they have limited tools. The majority only have megoma (hoes). In the event of them using a tractor, they all contribute towards hiring it. When asked what happens in the event of one not having means to make her contribution? To this they responded that they know each other’s circumstances and have never left anyone without because they didn’t have means.

Assistance received if any

The women explained with sadness that they were not receiving any assistance from their children. It takes a long time to reap the fruits of one’s labour.

Some of the women lamented that some of the youth cannot plant in the garden or fields, they can’t even milk cows; but when crops are sold, they want the cash. When asked if their husbands or partners assisted them, one of the respondents remarked:

“Whose husband can help you if yours is dead and buried?”

Ma Palesa mentioned that they have been offered land at the project center to grow vegetables, however to do this they would have to receive a grant in order to erect and goat free fence, and have water for irrigation. These I was told are some of the dreams they have.

Knowledge and training

There has been no training in agricultural production and no services provided either. Ma Palesa remarked that:

“We’ve never received any training in any field, this is the first time we are receiving any form of training.”

“We are self-taught and never received any training. Two of the women have worked with Landbow and have brought with them experience acquired there.”

Advice that can be given to others:

When asked to say what advice they would give to those just starting to produce their own food, the responses were varied. They were generous in explaining that they would embrace others however, they would alert them to take the following into consideration that:

- They need to be patient and consistent in working hard because nothing is easy.
- They would have to abide by the rules and policies of the group.
- Discipline would have to be paramount.
- Time keeping is also important. You don't come at your own time.
- Tasks are done collectively.

Process used

When asked if there was anybody else in the community who should have been invited, participants explained that an invitation was extended to all. The majority of stakeholders have been invited e.g. ward committee members, the Chief, fashion designers, and home based care personnel.

"It has to come from the individual whether to participate or not, they are all welcome."

Ma Palesa felt that it would be advisable to ask the councillor to have the launch of the DD in Mafarafara published in the local papers informing them about the DD and that it was targeted at them, older women; that it was designed by the CSIR and that the installation and training has been done. She said:

"We want them to see that forward we go as women. The community is developing."

Questions and comments

"We would like to be assisted by Agricultural officers in food production. We also want to be provided with seeds. Is it possible for us to have this assistance?"

"Is it possible for you to organise a reliable source of water for our garden project?"

"We need better roads in Mafarafara in order to attract more businesses"
"Some of us cannot read nor right, can we be assisted?"

"We are looking forward to having a grid line. The Medupi power station will enable us to be connected. We can then be registered in our own name. We are not complaining because half a loaf is better than no bread. "

Conclusions & Recommendations

The experience was also a rich one for both those installing and talking about the technology as well as for the community. The careful diary-taking (as well as photos) has captured the flavour of a rich community experience from which a lot can be learned. We were well received and the interest and enthusiasm of the women was contagious because once the women started working on the computers, their faces just lightened up. We have to keep this momentum going because one positive aspect that was observed is that they all want to know how to use the computer and have been extremely patient to assist those who were lagging behind.

The purpose of the field visit was to identify key factors that will enable success of the project. The key recommendations are that:

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- The CSIR should make a concerted effort of assisting the Mafarafara woman's garden project with the provision of irrigation to their garden. The DD is meant to make them more efficient in food production. The two should run simultaneously.
- Ma Palesa is encouraged to identify someone within the group who can be mentored by her to be her assistant so that the group is not prejudiced by her incapacitation in the event of her not being active.
- Sustaining the project is critical. The two young men Sello Molobela and Katlego Mohlabini are trained at the CSIR as technical assistants for the maintenance and technical support for the DD for the following reasons:

Their passion, reliability and responsiveness was demonstrated in the way they assisted Grant on the first day and volunteered to work on day two even after they were informed that they would not be paid because there wasn't much to be done.

They were keen to be trained on day two and showed eagerness to embrace the DD as they saw it as part of their own development

After they were trained, they were able to train the women and were even familiarizing themselves with the manual. They became assistants to Kanye in training the rest of the women.

The spin-off from the DD is that it will have a socio-economic benefit for the community. While showing directed causation is difficult, based on Meraka experience, we know that it will affect the community in the following ways, and perhaps other unanticipated ways:

It has given an isolated and neglected community a sense of pride that it has been recognized and that development has been brought to the village. This is a great confidence booster to the inhabitants.

It will awaken the community to new sources of information and knowledge given them intellectual capacity and confidence to ask question, take action, and advocate their cause.

It will improve literacy.

The engagement of two young men in the training with the older ladies bridges an age and gap, and for the older ladies, it was also learning for them that they could learn from the young in a very positive way. One of their felt needs at the moment is water for their garden. Solving this challenge could transform their lives remarkably. The DD as a social and technical platform for capacity building could assist in this transformation

References

- Faulkhead, S., L. Russell, D. Singh and S. McKemmish (2007). Is community research possible within the Western academic tradition? Researching with communities: grounded perspectives on engaging communities in research. A. Williamson and R. DeSouza. Auckland, Muddycreek Press.
- Hobbs, D. (2006). Ethnography. The SAGE dictionary of social research methods. V. Jupp. Newbury Park, CA, SAGE: 101-102.
- Marais, M., Smith, R. Pitse Boshomane, M., Herselman, M., Govender, N., Blignaut, S., Choles, A., & Sebe, D. (2012). Detailed Annual Report: Outcome Evaluation of the Digital Doorway Initiative. (Report to DST). Pretoria: CSIR.
- Mulomo, L., Molamu Lungi, Rampa, M., (2013). Detailed field Report: The Use of the Digital Doorway by Middle-Aged Women Responsible for Food Production in Mafarafara. (Report to CSIR). Pretoria: CSIR.
- Stillman, L., M. Herselman, M. Marais, M. Pitse Boshomane, P. Plantinga and S. Walton (2012). "Digital doorway: social-technical innovation for high-needs communities." Electronic Journal of Information Systems in Developing Countries 50(2): 1-19.

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Walsham, G. (2006). "Doing interpretive research." European Journal of Information Systems 15: 320-330.