OUTCOME ASSESSMENT

Mobile Innovation Roadshow

infoDev Mobile

THE WORLD BANK
This Outcome Assessment has been produced by the Centre of Partnerships for Development (CAD) and commissioned by infoDev, a global partnership program with the World Bank. The report features an analysis of the effects of the Mobile Innovation Roadshow, as a pilot project of infoDev’s Mobile Innovation Program. The Mobile Innovation Roadshow has been implemented under the Creating Sustainable Businesses in the Knowledge Economy (CSBKE) program. This report would not have been possible without the valuable contribution of the SAIS coordinators in Mozambique, Namibia, Botswana, and Zambia, as well as the participants of the Mobile Innovation Roadshow in these four countries.

About infoDev and CSBKE

infoDev, a global trust fund program in the World Bank Group, supports growth-oriented entrepreneurs through creative and path-breaking venture enablers such as incubators and accelerators. It also assists entrepreneurs with securing appropriate early-stage financing and convenes entrepreneurs, investors, policymakers, mentors, and other key innovation ecosystem stakeholders for dialogue and action. Among other initiatives, infoDev implemented the Creating Sustainable Businesses in the Knowledge Economy (CSBKE) program with the objective to increase the growth of small, innovative and technology businesses, primarily in the ICT and agribusiness sectors. The CSBKE program was designed as a public-private partnership between infoDev, Finland, and Nokia Corporation and covers the period from March 2010 to June 2014.

About CAD

CAD (Centre of Partnerships for Development) is a network of international experts specialized in international development, local economic development, and public-private partnerships, with a focus on SMEs in developing countries, entrepreneurship, Base of the Pyramid, and Monitoring and Evaluation tools and methods.
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1. EXECUTIVE SUMMARY

With some six billion subscriptions in use, three quarters of which are based in developing countries, mobile communications offer many opportunities to advance human development. Many mobile innovations arose in developing countries and are spreading from there. These locally designed solutions are better suited to address development challenges than approaches derived elsewhere and can often address developing country concerns such as digital literacy and affordability. However, to be able to fully develop the potential for mobile innovation, as well as the potential development impact of mobile applications, an enabling ecosystem needs to be in place. In most Southern African economies, with the exception of South Africa, such entrepreneurship ecosystems in the mobile industry are nascent and not well developed. Against this background, infoDev organized a “Mobile Innovation Roadshow” in cooperation with The Southern Africa Innovation Support (SAIS) program, an initiative of the Ministry for Foreign Affairs of Finland. The Roadshow consisted of a series of events (Mobile Innovation Stakeholder Workshop, Business Incubation Training, Mobile Innovation Bootcamp, and Mobile Innovation Hackathon) implemented in Botswana, Namibia, Mozambique, and Zambia. The objectives of the Roadshow were to:

- Gain a better understanding of the current pool of existing and prospective mobile applications entrepreneurs, so as to gauge whether a larger investment in a potential mLab or similar intervention would be appropriate.
- Increase local awareness of, and commitment to, the promotion of mobile innovation.
- Increase local institutional capacity to provide support services for mobile developers and entrepreneurs.

This assessment aims to identify and analyze the effects of the Mobile Innovation Roadshow that was delivered to a total of 410 participants. The analysis includes direct short-term effects on the participants, potential medium-term effects by evaluating participants’ learning and application of knowledge, as well as an analysis of catalyzing effects. Input from 221 participants was considered for the assessment.

Results and Conclusions

The Roadshow was rated as an important eye-opener for Mobile Innovation Ecosystems in all four countries. The establishment of networks and contacts was emphasized as the main added value throughout all the different events. Short and mid-term effects especially appeared in three different areas: (i) learning and experience, (ii) establishment of contacts and networks, and (iii) creation and professionalization of local start-ups.

Overall, the Roadshow was valued as a first step towards the creation of a mobile developer community. A number of participants mentioned the novelty of the Hackathon concept and the opportunity it provided to discover other players in the area of mobile innovation and mobile applications. They emphasized that the Hackathon exposed the available potential and skills:

“...Never knew we had people in the country that could actually come up with working concepts as they did during the Hackathon.” - Participant of the online survey.

With regard to the Bootcamp, participants especially valued the possibility to present and pitch their ideas to a professional audience, as well as the opportunity to improve negotiation skills. As one young developer from Botswana emphasized, the Hackathon and the Bootcamp encouraged her to have more confidence.
She was able to pitch her idea to a company as a result of the presentation skills she learned at the Bootcamp. While most of the participants in the Hackathons and Bootcamps were either students or very young developers, some of the ideas developed during the Mobile Innovation Roadshow were commercialized or are in the process of being brought to the market. Another company in Botswana hired three of the developers whom they met at the Hackathon for their operations.

Participants of the Incubation Training emphasized the value of networking and contacts. In Zambia for example, the contacts generated between the local office of the International Labor Organization (ILO) and the BongoHive Incubation Technology and Innovation Hub led to the preparation of a long term project using BongoHive’s technical knowledge to tackle youth unemployment in rural areas. In all four countries, the Mobile Innovation Roadshow triggered the development of activities in the area of mobile innovation and took the very first step towards the viable development of a mobile entrepreneurship ecosystem. In Mozambique, the Roadshow created a movement with follow-up Hackathons and also prompted the development of a developer community. In Namibia, a Mobile Innovation Challenge Competition took place as a consequence of the first Hackathon. In both countries, other organizations such as the government or local companies are now funding further mobile innovation related activities. Botswana also organized a follow-up Hackathon and the local SAIS manager noted that these types of events are gaining popularity in the country.

Based on the findings of the Outcome Assessment, the Mobile Innovation Roadshow is deemed to be an effective tool to gain a better understanding of the current pool of existing talent and potential mobile entrepreneurs in a country. All countries have expressed interest in developing a larger initiative; for instance, an mLab or a similar intervention. It has also proven successful to increase local awareness and commitment towards the promotion of mobile innovation. Albeit local institutional capacity itself has not been strengthened through the Mobile Innovation Roadshow, it has led to an increased awareness for the topic. Due to the lack of available information with regard to the Stakeholder Workshops, it was impossible to analyze in detail the extent to which the Roadshows have led to long-term changes on an institutional level.

The Outcome Assessment has revealed that a successful Innovation Roadshow requires 1) effective stakeholder engagement, 2) careful participant selection thorough planning and preparation, and 3) adequate technical equipment. These elements are necessary to realize the full potential of the Roadshow and trigger the development of a mobile innovation ecosystem.
Innovation typical process with a MNO

A

Innovative Ecosystem - Expressions / identification of needs

B

Results shared with the involved countries

GO/NO GO Project development

C

Experimetnation with local users

D

prototypes by Start-ups
Universities or Orange

E

Funding Provider - Universities, incubators, start-up, industrial institutional Partners.
2. SCOPE AND OBJECTIVES

The overall goal of the assessment is to identify and analyze the effects of the Mobile Innovation Roadshow, including short-term direct effects and mid-term effects on participants and the mobile innovation ecosystem of participants’ countries of origin.

In this regard, the outcome assessment features three levels of analysis:

1) Direct results of the events, defined as the immediate effects of the Roadshow.
   This level includes the satisfaction of participants with delivery and quality, as well as how participants value the usefulness of the events of the Mobile Innovation Roadshow.

2) Outcomes, defined as short- and medium-term effects of the Roadshow
   At this level, the objective is to assess participants’ learning and application of knowledge, that is, to what extent participants have made use of the results of different events of the Mobile Innovation Roadshow. This will especially be analyzed for the Bootcamp, the Hackathon, and the Incubation Training.

3) Catalyzing effects
   This level of analysis describes and analyzes what long-term effects have been achieved or can be expected as a result of the Mobile Innovation Roadshow. infoDev did not originally intend for this level of analysis. However, the assessment revealed catalyzing effects that had to be covered in order to showcase the full potential of a Roadshow.
3. ASSESSMENT METHODOLOGY

Approach and rationale

The assessment encompassed three phases:

1) **Desk review** of infoDev brochures and existing reports elaborated by infoDev staff or Mobile Innovation Roadshow delivery partners. These short reports contain information about participants, as well as outputs and results of the events.

2) **Data collection** was conducted in several ways:

   (i) In-depth interviews with the local Southern Africa Innovation Support (SAIS) country coordinators in Botswana, Mozambique, Namibia, and Zambia by phone and face-to-face.

   (ii) An online survey was sent to 205 participants from three countries by email. Twenty-four answered surveys were received.

   (iii) The online survey was complemented by two focus groups; featuring a total of ten participants, 11 in-depth interviews conducted face-to-face in Mozambique, and...
nine phone interviews with participants from Namibia, Botswana, and Zambia.

Additionally, data collected by the infoDev team after the Roadshow was tabulated and analyzed. Overall, data sets from 221 persons from Bootcamps, Hackathons, and Incubation Trainings were analyzed. infoDev did not collect any information to evaluate the Stakeholder Meetings.

The approach of combining an online survey with in-depth interviews was chosen because they complemented one another. The survey provided comparable output and outcome data on the Mobile Innovation Roadshow, whereas the focus groups and in-depth interviews implied a degree of interaction that made it possible to understand the changes generated in the participants’ environment after the Mobile Innovation Roadshow. Focus groups also allowed for insights into the potential effects on the mobile ecosystem in the participants’ countries of origin.

3) Data analysis: The survey answers and the evaluation results of the events were tabulated and analyzed. This analysis was complemented with in-depth interviews used as a qualitative tool to obtain deeper insights about the effects that occurred, and how and why they happened.

Selection of interviewees and survey participants

The online survey was sent to all participants who were not interviewed in person during the field visit to Mozambique and for whom email addresses were available. For face-to-face interviews conducted during the field mission to Mozambique, participants were chosen based on their availability for an interview. Follow-up interviews with survey participants also took place based on the availability of the participants. After completing data collection, the information was processed and analyzed according to the three levels of analysis: immediate effects; short- and mid-term effects and sustainability of the effects.
4. CONTEXT

4.1 The Mobile Innovation and Entrepreneurship Ecosystem

With some six billion subscriptions in use—three of quarters of which are based in developing countries—the mobile sector offers major opportunities to advance human development, from providing basic access to education or health information to making cash payments to stimulating citizen involvement in democratic processes. Many mobile innovations arose in developing countries and are spreading from there. These locally designed solutions are better suited to address development challenges and can address concerns for developing countries such as digital literacy and affordability.

However, to be able to fully develop the potential for mobile innovation, as well as the potential development impact of mobile applications, an enabling ecosystem needs to be in place. Applications that may prove most useful are developed within an ecosystem that involves many different players and stakeholders ranging from software developers and network operators to governments, NGOs, and users. Policy makers need to create an enabling environment that provides the possibility for mobile developers to collaborate and compete.

In most Southern African economies, with the exception of South Africa, the entrepreneurship ecosystem in general and especially the mobile enabling ecosystem is nascent and not well developed. However, despite the early stage of the ecosystems in the four countries, stakeholders have expressed interest in the start-up and growth of mobile applications companies. Against this background, infoDev decided to implement Mobile Innovation Roadshows to:

- Gain a better understanding of the current pool of existing and prospective mobile applications entrepreneurs, so as to gauge whether a larger investment in a potential mLab or similar intervention would be appropriate;
- Increase local awareness of, and commitment to, the promotion of mobile innovation;
- Increase local institutional capacity to provide support services for mobile developers and entrepreneurs.

4.2 The Mobile Innovation and Entrepreneurship Ecosystem

The Mobile Innovation Roadshow has been implemented in a partnership between The Southern Africa Innovation Support (SAIS) program and infoDev. SAIS is a program funded by the Finnish Ministry of Foreign Affairs (MFA) that seeks to guide innovation in Southern Africa. The program supports collaboration between the innovation systems of African countries in order to create a positive impact on economic and social development in the region. SAIS has a local partner organization in each of the implementation countries, notably the ICT Institute in Mozambique, the Business Innovation Centre in Namibia, the National Technology Business Centre in Zambia, and the Innovation Hub in Botswana. The Mobile Innovation Roadshow was organized in collaboration between these local partners, the SAIS secretariat, and infoDev.
5. INTERVENTION

The Mobile Innovation Roadshow was delivered to a total of 410 participants in four different countries in Southern Africa, namely Mozambique, Zambia, Botswana, and Namibia.

The Mobile Innovation Roadshow typically consisted of one-week events, which included a series of activities such as:

- The Mobile Innovation Stakeholders Workshop set the stage for the Mobile Innovation Roadshow. The Stakeholder Workshop convened key innovation and entrepreneurship ecosystem stakeholders, including: representatives of government agencies responsible for innovation promotion; private sector leaders and technology startup founders; innovation and business support organizations; universities; and the donor community. The workshop provided participants with the chance to discuss the status quo and the necessities with regard to Mobile Innovation in their country.

- The Business Incubation Training, based on infoDev’s Business Incubation Management training curriculum and approach using infoDev certified trainers, targeted existing local intermediaries (innovation and business support practitioners, policy makers planning to initiate projects aimed to support entrepreneurship and incubation), and aimed to improve their understanding of different business incubation approaches and models and how they can be applied. The training also featured the presentation of real case studies and sharing of best practices.

- The Mobile Innovation Bootcamp was a one-day training with a special focus on business development and pitching ideas prior to the Hackathon in order to provide complementary support to Hackathon participants as well as to stimulate further interest in mobile innovation and entrepreneurship.

- The Mobile Innovation Hackathon summed up the Roadshow and focused on turning promising ideas into mobile application prototypes, further increasing awareness amongst the technical community, especially the youth, with regard to the opportunities for mobile entrepreneurship and providing a general overview of the mobile innovations talent pool.

All four Mobile Innovation Roadshows took place between February and March 2013.

A total of 410 participants took part in the different events of the Mobile Innovation Roadshow, which was around three times more than originally anticipated by the organizers. Figure 1 shows an overview of the distribution by country and event. However, while the overall number of participants was 410, there were a number of people who participated in more than one event. A more detailed analysis of those countries, where names per event were available, revealed an overlap of participants especially in the Hackathon and the Bootcamp. In Zambia, 17 persons participated in the Bootcamp and the Hackathon, and in Botswana and Namibia 8 persons participated in both events. There was little overlap between the participants of the Incubation Training and other events. Information on the participants of the Stakeholder Workshop was not available.

4. The total number of participants is unclear, because an unknown number of people participated in various events of the Mobile Innovation Roadshow and have thus been counted several times, as participant lists are available only per individual event.
As participants for the events were very different, with the exception of the overlaps in the Hackathon and the Bootcamp, the different events will be treated separately, given that most people interviewed did not have information about the overall Roadshow.
6. OUTCOME ASSESSMENT OF 
INFODEV’S MOBILE INNOVATION 
ROADSHOW

6.1 Direct results

This section analyzes the level of participants’ satisfaction with delivery and quality, as well as how participants value the usefulness of the different events. The analysis of participants’ satisfaction with the Mobile Innovation Roadshow includes overall satisfaction with the events and the appropriateness of the approaches. It also includes participants’ critical assessment and recommendations for improvement.

- The Roadshow provided participants with the opportunity to participate in independent events. Thus, most participants only participated in one or maximum two events.
- The Hackathon, Bootcamp, and Incubation Training were valued as very positive overall by all participants in the four countries. Data for the stakeholder workshop was unavailable.
- Incubation Training: the training style and content was rated as very positive, but more than 35 percent of participants thought that the time dedicated to the training was too short.
- Hackathon: 97 percent of all participants found the Hackathon either excellent or good. It has been valued as an eye-opener and a first step towards the creation of a mobile developer community.
- Bootcamp: 92 percent of participants thought that the Bootcamp met their expectations. Presentations especially related to the importance of pitching and presenting ideas were valued very high. There were criticisms with regard to the organization of the one-on-one coaching sessions, especially in Mozambique.

The Roadshow consisted of a number of independent events, each attended by self-selecting participants without significant overlap, therefore it is not possible to provide an overview with regard to the participants’ expectations of the Roadshow. Interviews with the local SAIS coordinators revealed that they felt that it was an important event to trigger interest in mobile innovation in the four countries, where mobile development had received only very limited prominence. They also thought the mix of events was helpful and felt they were able to reach the objectives of local awareness, capacity building, and reaching an overview of the existing mobile application entrepreneur talent pool.

The analysis has therefore been concentrated on the short-term effects of the different events.

Stakeholder Workshop

In Mozambique, it was emphasized that it was necessary to ensure the right level of participants and decision makers are on board. While the right stakeholder groups participated in the event, it was not possible to reach the decision-making level, which made follow-up and establishing concrete outcomes from the meeting challenging. In Botswana, the SAIS coordinator emphasized the good mix of participants. In contrary to other countries, they organized the Stakeholder Workshop around three weeks before the Hackathon. The SAIS coordinator mentioned that this was helpful to communicate and promote the Hackathon, as well as to motivate relevant stakeholders.
The Incubation Training met the expectations of 95 percent of participants responding to the survey (see Figure 2). The presentation and training style was valued as very positive, with 57 percent of participants valuing the training as interactive, and 33 percent valuing it as engaging (see Figure 3).

One aspect that has been criticized is the time allocated to the Incubation Training. More than 35 percent of participants considered the time allocated to Incubation Training to be too short. This was especially the case in Zambia, where Module 1 and Module 2 of the Incubation Training were delivered in less than one day. While participants interviewed emphasized the quality of the content, they felt that the training was rushed through and did not allow for questions and further clarifications. Additionally, in Mozambique participants criticized that the training was delivered in English. In a country context where the level of English is not very high, this led to some frustration among the participants. There was a clear difference in participants’ satisfaction between this training and the highly valued Agribusiness Incubation Training in Mozambique that was part of the same training cycle, but was delivered in Portuguese. Another feature that was criticized was adaptation to the local context, which was partly missing. The SAIS coordinators from Botswana and Zambia put special emphasis that trainers should be more informed about the local context when giving an Incubation Training.

In spite of these shortcomings, participants highly valued the Incubation Training in country contexts where incubation is still in its infancy stages. To most of the participants it was the first in-depth introduction to the business incubation concept, processes and models, and they valued very highly the insights that they received throughout the training.
The Hackathon was also rated positively by participants. A total of 97 percent rated the event as either excellent or good. Only 3 percent of participants rated the event as average.

Most respondents participated in the Hackathons in order to have the chance to exchange with other innovators, as well as to find inspiration and new ideas. Another important reason was to get in touch with the organizers of the event, thereby increasing existing networks.
The results of the evaluation were supported by the interviews. Respondents valued the exposure that they received, both as developers and companies. Participants in Botswana for example valued the possibility to create networks with other developers or companies.

A number of participants mentioned the novelty of the Hackathon concept and the opportunity it provided to discover who was working in the area of mobile innovation and mobile applications in their respective countries. It was emphasized that the Hackathon showcased the innovative potential and skills available in the different countries where mobile innovation and application development is still incipient. In fact, it was complicated to reach qualified developers to participate in the Hackathon because the development of mobile applications was still a new topic in all four countries,. In Namibia for example, the SAIS manager emphasized it was difficult to gather a relevant number of developers because the existing developer community was still scarce. The opportunity to motivate young developers to participate and show their potential at the Hackathon was therefore highly valued.

With regard to the organization of the Hackathon itself, feedback varied depending on the country. In Namibia, where many people participated in a Hackathon for the first time, the fact that organizers explained the context and steps to follow in an easy and digestible way was valued positively. This experience coincided with the perceptions in Mozambique where participants emphasized the quality of the Hackathon facilitator.

In addition, the focus on specific thematic areas was valued as positive. The focus on agriculture in Botswana, on health in Zambia and on health, agriculture, and education in Namibia was perceived as a positive aspect of the Hackathons.

When defining areas for improvement, the quality of logistics was mentioned in Mozambique. The first Hackathon did not provide adequate facilities and Internet access was poor. Another important criticism raised in Zambia was the type of participants, in a scenario where the Hackathon was implemented in collaboration with a local incubator, BongoHive. While the partnership with the BongoHive incubator was generally seen as positive - due to BongoHive’s expertise - participants in Zambia were mainly limited to the BongoHive community due to time constraints in organizing the event. This led to decreased networking possibilities, as the targeted community was tied to an already existing incubator.

“

A hidden planet emerged from this platform. Never knew we had people in the country that could actually come up with working concepts as they did during the Hackathon.

(Participant of the online survey)”

“In Mozambique the Hackathon started a small revolution.

( Participant of the Mobile Innovation Roadshow in Mozambique)”

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“
Participants from all four countries perceived the Bootcamp positively. Ninety-two percent of participants stated that it met their expectations.

In all countries, the Bootcamp was organized before the Hackathon. As intended by the organizers, some of the participants opted in to both events and the Bootcamp served as a first introduction to pitching and presenting, two skills highly relevant for the Hackathon. In Botswana, Zambia, and Namibia, the Bootcamp was directly related to the Hackathon. In Mozambique it also included agribusiness entrepreneurs, as the roadshow combined the analysis of the potential for mobile innovation with a feasibility study for an Agribusiness Innovation Center.

The analysis of qualitative data, as well as the focus group conducted in Mozambique show that opinions with regard to the Bootcamp differ widely.

The main focus of the Bootcamp was on idea generation and pitching, which was highly valued by the participants. Especially the emphasis on the importance of pitching and “how you present your ideas” versus “what you present” was regarded as highly relevant and innovative in the context of the four countries. In Mozambique, participants evaluated the presentations and input provided by the facilitator positively. In the one-on-one sessions, participants appreciated that they received concrete recommendations on how to shape their business model. However, participants reported a lack of time to prepare for the coaching session. All participants interviewed felt that with more preparation time or more precise information on what to prepare prior to the bootcamp, they would have been able to extract substantially more from the session. Participants also felt that the one-on-one sessions were badly coordinated. Various participants left before or during the session, as they did not know what was expected of them and did not understand that the Bootcamp provided one-on-one guidance for their business ideas and business plans.
6.2 Short- and Mid-term Effects

This section analyzes what participants learned and how they benefited from the Mobile Innovation Roadshow, as well as if and how they used or applied the new knowledge acquired or other benefits.

- Mobile Innovation Roadshows provided technical learning as well as soft skills in country contexts with little formal developer education.
- The Hackathon, Bootcamp, and Incubation Training provided valuable networking in countries with little activity in the Mobile Innovation space.
- While most of the participants were either students or very young developers, some of the ideas developed during the Mobile Innovation Roadshow were commercialized or are in the process of being commercialized.

SAIS coordinators perceived the Roadshow as a success and an appropriate format for promoting mobile innovation in their respective countries. However, no information about short- and mid-term effects of the overall Roadshow was available from participants, as they only benefited from the events that they participated in. Therefore the analysis focused on results and outcomes of the individual events. Results are mainly based on the focus groups conducted in Mozambique, in-depth interviews with participants from the other three countries, and the results of the online survey.

Learning and Experience

Hackathon and Bootcamp

Increased learning and experience were the features highlighted by a number of participants. The Hackathon was especially perceived as supporting participants with the development of new skills and knowledge in programming. The Bootcamp was valued for knowledge generation with regard to business development. In Mozambique, as well as in the other countries most of the participants were students. Insights gained throughout the Hackathon and the Bootcamp, as well as practical experience on “how to do things” on a technical level, such as programming for smartphones, provided a number of young developers who will enter the job market in a few years with new skills and knowledge.

Learning not only encompassed technical skills but also included soft skills. As one young developer from Botswana emphasized, the Hackathon and the Roadshow provided her with more confidence to work as a freelancer. She was able to pitch her idea of website development to a company in Botswana as a result of the presentation skills she received in the Bootcamp. Participants from Mozambique highlighted that they improved their negotiation skills and learned new ways of improving business processes and marketing at the Bootcamp.

Establishment of networks and contacts

The establishment of networks and contacts was emphasized as the main added value across all the different events.

Incubation Training

Participants of the Incubation Training emphasized the value of networking and contacts. In Zambia, the contacts generated between the local office of the International Labor Organization (ILO) and the BongoHive Incubation Center led to the preparation of a long-term project using BongoHive’s technical knowledge to tackle youth unemployment in rural areas. In Mozambique, the participants of the Incubation Training created a Facebook based
knowledge exchange platform for training participants.

In Namibia, the participants developed the idea for the set-up of a business incubation network. The establishment of the network is still in its development phase, but the launch is planned for 2014.

Hackathon and Bootcamp

When it came to the Hackathon and the Bootcamp, the added value with regard to contacts and networking was even bigger. During the Hackathon, the developers became acquainted with one another and participants emphasized that they increased personal contacts with fellow students and developers, as well as with local companies. Participants in focus group discussions emphasized that they know more about “who else is part of the Mobile Innovation ecosystem” and “what is going on” in the sector as a result of the Roadshow. The Hackathon provided the first possibility for network development and the opportunity to understand the breadth of the existing mobile developer community. Many of the developers participated in their first Hackathon and were happy to have the possibility to see and listen to other local entrepreneurs, as well as to get exposure for their activities and ideas. At the same time, the Hackathon and Bootcamp provided possibilities to connect developers amongst themselves, but also with other stakeholders from the ecosystem as well as with potential future clients. As a follow-up in Mozambique, a Facebook group was created; it is still active and has more than 300 members.

The Hackathons provided us with the necessary networking and “connect” space that we did not have before.

(Hackathon participant in Zambia)

In addition to networking with other participants, the Hackathon also provided a space for greater teamwork and increased networking inside teams. As one participant from Zambia put it, “We worked two nights to develop a product, and attending and presenting this product at the Hackathon helped us to create a real team spirit and to grow as a team.”

Creation and Professionalization of Local Start-ups

Most of the participants were relatively young students and developers. Consequently, there were only a few cases where the ideas generated or presented at the Hackathon turned into businesses.

In Botswana, the winner of the Hackathon (who was further supported by the SAIS program) is in the process of commercializing his application, a farm management tool linking farmers with the market, called Agricomm. Another company hired three of the developers that they met at the Hackathon for their operations. Modisar, an application providing a software management tool for farmers, was incubated to develop the business model after having participated in the Hackathon.

In Namibia, a team that had been working on a health application is in the process of starting a company. The launch is planned for summer 2014. However, to be able to launch, approval from the medical board of Namibia as well as the Ministry of Health is still pending. The only female participant of the Hackathon in Namibia emphasized that due to better pitching abilities after participating in Hackathon and Bootcamp, she was able to develop freelance services in web development.

In Mozambique, the Hackathon and the Bootcamp mainly served as inspiration for professional development. The experiences inspired participants with regard to what they would like to do after university. One participant of the focus group did register his first company as a result of the Mobile Innovation Roadshow. Other young entrepreneurs from Mozambique highlighted that they improved their business processes as well as their marketing and negotiation skills through the Bootcamp, which led to improved client relations.
6.3 Catalyzing Effects of the Roadshow

This section encompasses an analysis of catalyzing effects, such as follow-up events or effects at the mobile innovation ecosystem level. It should be mentioned that while the Mobile Innovation Roadshow was a one-time event, SAIS programs on the ground have further implemented activities and built upon what the Mobile Innovation Roadshow had accomplished.

- In all four countries, the Mobile Innovation Roadshow was the starting point for the development of the ecosystem in these countries.
- In Mozambique, the Mobile Innovation Roadshow created a movement with follow-up Hackathons and also prompted the development of a developer community.
- In Namibia, as a consequence of the first Hackathon, a Mobile Innovation Challenge Competition took place afterwards.
- In Namibia and Mozambique, other organizations such as the government (Ministry of Science and Technology), universities (Namibian Business Innovation Center), or local companies are now funding further mobile innovation related activities.

In all four countries, the Mobile Innovation Roadshow triggered the development of activities in the area of mobile innovation. Given that in all countries mobile innovation was still in its infancy stage and hardly any related activities had taken place, the Mobile Innovation Roadshow served as a starting point for the creation of the ecosystem.

In Mozambique, the Roadshow helped make the mobile application sector visible and provided the possibility to get access to practitioners. Today, it is possible to find practitioners available for mobile development - for example through a Facebook group. Also in Mozambique, two further Hackathons took place and a third one was under preparation at the time of data collection. While STFIMO (an innovation program financed by the Finnish government) and SAIS are important players when it comes to the development of Hackathons, other actors, such as the Ministry of Science and Technology, have come on board as sponsors and organizers. Furthermore, the Mozambique Information and Communication Technology Institute (MICTII), the local partner of SAIS, is developing a Mobile Academy to tackle poor quality in developers’ skills in the country. With the help of Korean lecturers, a Training of Trainer course for Android has already been conducted, and local facilitators from the university have been trained to replicate these courses in the country. After the second Hackathon, a number of developers were sent to the mLab Southern Africa for further training and exposure. Despite these positive developments, the ecosystems in the different countries are still in a very incipient stage, and participants of the focus groups pointed out that the Mobile Innovation Roadshow did not have impacts on the existing challenges in the ecosystem, such as the high cost of communication (Internet), the lack of regulation and legislation, or the lack of protection for intellectual property.

In Namibia, similar to Mozambique, a follow-up Hackathon took place sponsored by a private company. Simultaneously, a Mobile Innovation Challenge Competition was organized. At the time of data collection, the top 10 participants out of 31 submissions were being selected. The competition was implemented through the Namibian Innovation Center and a private sponsor has committed 100,000 Namibian Dollars for the implementation of the competition.

In Botswana, a follow-up Hackathon was also organized, without the support of infoDev, and the local SAIS manager noted that these types of events are steadily growing in popularity in the country.
Based on the findings of the Outcome Assessment, the Mobile Innovation Roadshow is a valuable vehicle to promote mobile innovation in countries with an ecosystem that is still in its infancy. It has proven successful in conveying the fundamentals for a wide range of stakeholders.

Based on the findings of the Outcome Assessment, the implementation of a Mobile Innovation Roadshow is a valuable vehicle to promote mobile innovation, especially in countries with limited experience. The Roadshow proved successful in creating momentum for mobile innovation, leading to follow-up activities that created further linkages, and it may be the very first step towards the development of mobile innovation ecosystems in the countries. Networking and knowledge exchange have commenced in countries where no former knowledge about existing resources was available, and follow-up activities such as additional Hackathons are taking place. It also led to a better understanding of the current pool of existing and prospective developers in these countries, and has helped to establish the status quo of the nascent entrepreneurship ecosystems in the different countries.

While local institutional capacity has not been strengthened per se through the Mobile Innovation Roadshow, the events led to an increased awareness for the topic. As there has been little information available with regard to the Stakeholder Workshops, unfortunately it is not possible to analyze in detail how far the Roadshows led to long-term changes on an institutional level.

Based on the results of the Outcome Assessment, the following aspects could still be improved when developing future Roadshows:

Regarding the Stakeholder Workshop, it is strongly recommended that the targeted high-level stakeholders attend the workshop, and that invited stakeholders do not send junior or mid-level staff, as was the case in Mozambique. If no decision-making stakeholders participate, the impact of the Stakeholder Workshop is limited. It is also recommended to implement the Stakeholder Workshop two to three weeks before the other events, in order to make use of the results for awareness raising and outreach for the rest of the Mobile Innovation Roadshow.

Based on participants’ feedback for the Incubation Training, it is recommended to plan more time for implementation. The trainer selection is also important, as participants especially valued trainers with knowledge of the country context and who could speak the local language.

With regard to the Bootcamp, organizers should provide guiding questions for the one-on-one coaching session that allow for preparation and improved coaching results.

Regarding the Hackathon, it is extremely important to ensure well functioning equipment – especially fast broadband Internet – to make the event a success. Partnering with a mobile operator that can provide the required services has proven to be a good option. The Hackathon and Bootcamp events should include a broad range of participants from different communities, in order to stimulate country-wide networking.
ONLINE SURVEY
SURVEY ON YOUR PARTICIPATION IN
THE MOBILE INNOVATION ROADSHOW

PLEASE FILL IN THE FOLLOWING QUESTIONNAIRE:

1. Personal information
   1.1 Please enter your name
   ______________________________________
   
   1.2 Name your country of origin
   ______________________________________
   
   1.3 Select all the events that you attended during the Mobile Innovation Roadshow
       (    ) Mobile Innovation Hackathon
       (    ) Start-up Bootcamp
       (    ) Business Incubation Training
       (    ) Stakeholder Workshop
   
   1.4 Name of the organization you work for
   ______________________________________
   
   1.5 Type of organization you work for
       (    ) Business Incubator/Business Support Service Provider
       (    ) Government or related organization
       (    ) University
       (    ) Company
       (    ) Others, please specify ____________________
   
   1.6 Position within the organization you work for
   ______________________________________
2. About the event(s)

If you attended more than one event, please make short feedback statements for each event separately. Of course, you can give specific examples from different events.

2.1 Did the event(s) meet your expectations?
(  ) Yes
(  ) No

2.1.1 If no, could you explain why?
______________________________________________________________________________

2.2 What did you like best about the event(s)?
______________________________________________________________________________

2.3 What did you not like about the event(s)?
______________________________________________________________________________

2.4 Which aspects of the event(s) would you like to see changed in the future? (For example, regarding organization, methodologies, content?)
______________________________________________________________________________

2.5 What do you think are the key barriers to promote mobile innovation in your country?
______________________________________________________________________________

2.6 How can events like the Mobile Innovation Roadshow add to mobile innovation in your country?
______________________________________________________________________________

3. Results and Impacts

3.1 Did you change your way of working after attending the event(s)?
(  ) Yes
(  ) No

3.1.1 If yes, what changed (position, application of new concepts, network, etc.)
______________________________________________________________________________

3.1.2 If yes, could you specify which part of the event(s) made this change happen?
______________________________________________________________________________
In-depth interviews

Interview code
Name interviewer
Organization
Date
Name Interviewee
Key Area
Type of interviewee
Country

Issue 1 – Introduction, involvement and participation

**Question 1.1** – What does your organization/you do, how, why, etc.?

**Question 1.2** - In which events of the Mobile Innovation Roadshow did you participate?

Issue 2 – Direct Results of the Mobile Innovation Roadshow

**Question 2.1** How would you evaluate the quality of the event(s)? (For example, the presentation/facilitation, the organization, the contents, etc.) Ask for a specific example for each event.

**Question 2.2** Name the three aspects that you liked best.

**Question 2.2** Name three things that you did not like about the event.

Issue 3 – Mid-term effects of the Mobile Innovation Roadshow

**Question 3.1** – What are the most important things that you learned in the event(s)?
Question 3.2 – What other important benefits did you take out of the event(s)?

Question 3.3 What are the main changes that these events (for example Hackathons) brought about? [To whom and why?] [Ask her/him for examples and supporting evidence.]

Issue 3 – Road Show added value

Question 3.2 – What would have never happened if the Roadshow had not been there? (Would the same changes have come about?)

Issue 4 – Other Comments?

Ask participant if he has any additional comments about the Mobile Innovation Roadshow, anything that we have not asked.

SUMMARY OF MAIN CONCLUSIONS

FOCUS GROUP FORMAT

Introduction

Issue 1 – Assessment of the effects (snapshot of the effects) on the personal level: we would like you to tell us about what happened (if anything happened) after the Hackathon/Bootcamp

Issue 2 – The (causal) links between the effects / outcomes and the Hackathon/Bootcamp.

Issue 3 – How could key barriers be overcome?

Issue 4 – What was the role and value added of the facilitators/InfoDev of the Hackathon/Bootcamp?

Issue 5 – What would you like to see changed in a future Hackathon/Bootcamp?