

Project factsheet information

Project title	Extending ECHO to Homenet Indonesia
Grant recipient	eHomemakers (Corpcom Services S/B) No 28, Lorong Burhanuddin Helmi 3, Taman Tun Dr Ismail, Kuala Lumpur, Malaysia 603-77265271, 603-77319896 http://www.ehomemakers.net
Dates covered by this report	March 1- 2014 – May 31 – 2015
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Country where project was implemented	Malaysia and Indonesia
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Team members (list)	eHomemakers' Core Team in Malaysia: Jacqueline Tan (Technical Lead); Ong KH (Technical Research Lead, Infonal); Roseline Yong (Programming Lead, Infonal); Rhonwyn Hagedorn (Testing/Training Lead/Video-production); and Christine Stanley/Belinda Wee (Logistic/Administration)
Partner organizations	Homenet Indonesia http://homenet-indonesia.blogspot.com Cecilia Susiloretno, (National Coordinator); Mohammad Ali Maksum (IT Coordinator); Rangga Ratno Amiwirantyo (Activity Coordinator), Taufan Teguh Buana (ECHO Administrator) Rotary Jakarta Metropolitan: Laina Raveendran Greene (Project Advisor) https://www.facebook.com/racjakartametro UnLtd-Indonesia http://unltd-indonesia.org Romy Cahyadi; Yusof Suharyono; Vira Soufyani Air Putih: Agung Riyadi http://www.airputih.or.id
Total budget approved	AUD 30,000
Project summary	This project extended ECHO to Homenet Indonesia, an organization working through ten chapters and supporting over 10,000 women below poverty. eHomemakers researched on the telephony set-up needed to deploy ECHO in Indonesia, developed a mobile app to serve as sending modem, and formulated a new telephony infrastructure for the deployment. A total of 300 members and staff of Homenet Indonesia were briefed about the benefit of Internet and how ECHO would promote Fair Wages for the production chain of a social business center. Staff was trained in computer and online project management software. Staff and those on a micro-loan scheme for mobile phones were trained in mobile phone usage and ECHO to pave way for the operation of a small pilot business center which will eventually collect and market members' batik handicraft products. Information about the ECHO app is available http://www.echoapp.org

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Project Summary

Tips: It is recommended to **complete this section once you have finalized the text of the report**. It will be easier to go back through to build the summary based on the highlights of the report the project team just put together.

The Project Summary can be up to **one page long**.

It should include a brief justification; an outline of the project objectives to be achieved; the project real timeline and the main activities conducted.

The abstract of the project written when ISIF Asia initially approved the project and the objectives listed in the Grants Agreement signed by APNIC and your organization should be useful inputs when preparing this section of the report.

eHomemakers Malaysia innovated and developed an integrated organizational management cloud application (Internet-mobile), ECHO for non-profits¹. It is used by 35 NPOs in Malaysia (refer to video testimonials) in the last four years as a means of cost efficiency and increased productivity by reduced staff time and telecommunication costs in organizing a large group of people in diverse locations. The poorer segments of the society are contactable by mobile phones. The tool saves up to 98% of resources, enabling NPOs to reach out to mass numbers of members, beneficiaries, supporters, donors, buyers and suppliers. NPO staff/key volunteers access ECHO using the Internet to organise the replies, and to ensure effective supervision and follow-up.

Under this project, eHomemakers researched on the telephony set-up to deploy ECHO to Indonesia, developed an appropriate app for the software to enable the cross-boundary deployment, solve technical glitches encountered, fully test the infrastructure set-up for Indonesia before the final roll-out to Homenet Indonesia. Air Putih, a NGO focused on Information and Communication Technologies (ICTs), hosts the SMS modems to eliminate the need to rent SMS gateways from all the Internet Service Providers in Indonesia, thus minimizing the telephony deployment costs to Homenet Indonesia.

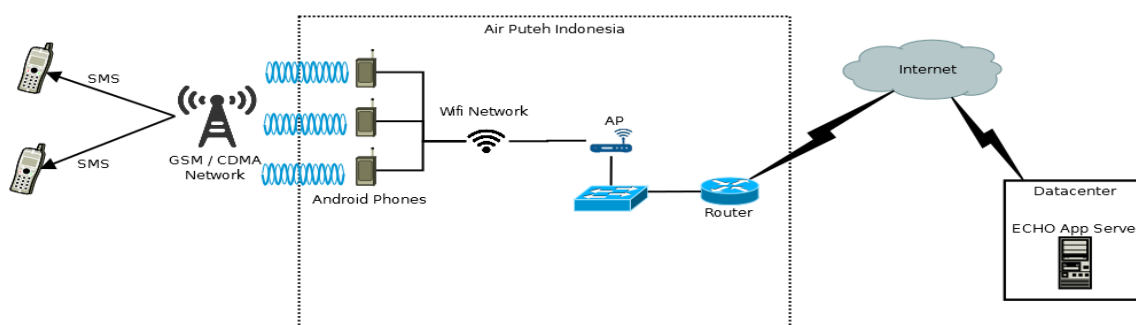


Figure 1 Network topology: how ECO works

To properly utilize the new ICT enablement, Homenet Indonesia, under the guidance and immense support both financial and managerial from Rotary Club Jakarta Metropolitan and UnLtd-Indonesia, initiated the first phase of a business centre for homeworkers' products. This project trained Homenet Indonesia to be an ECHO user. The Homenet Indonesia staff working at the business centre will use ECHO to organize skill training and quality

¹ ECHO app information and download <http://www.echoapp.org>

control sessions, raw material sourcing, production, deliveries and marketing. The staff of five out of existing ten chapters were also trained in computer skills and office ICT including using email and SMS for work. 300 women homeworkers at poverty level were briefed about the usage of mobile phones and ECHO while those who could afford to join a mobile phone micro-loan scheme were trained to use mobile phones, send revert messages back to Homenet Indonesia so that ECHO can summarize their replies for quicker follow-ups, thus saving Homenet Indonesia staff time and resources. Eventually, the efficient communication will enable Internet marketing of Homenet Indonesia members' goods (around 10,000 members). Homenet Indonesia staff was supported by the Rotary Club Jakarta Metropolitan and UnLtd-Indonesia to help set up marketing partnership to test market the products, and establish Standard Operating Procedures (+SOPs) for social business operations.

Background and Justification

Tips: The reader should be reminded of the **context** your organization is working, and where the project has been developed in.

This section provides a window to **understand the challenges** faced by the community you are working with.

Include a detailed description about the situation **before the project start**, describing any relevant aspects that make the project relevant in such a particular scenario.

The reader should be provided with a clear description about the problem(s) to be addressed through this project and the motivation from your organization and team members to get involved and offer a solution.

Many NPOs in developing countries in Asia Pacific have not adopted ICT or barely use communication and computer technologies in their work (Jovan Kurbalija, 2012). As a result, activity coordination is still reliant on travelling to face-to-face meetings, long phone calls, snail mail, typing office documents and organizing information in tedious cumbersome ways. They organize activities, which take the staff many more hours than needed had they adopted ICT management tools such as using free web-based management applications, email with documents, and computer applications. The inefficiencies this creates, leads to a permanent situation of 'fire-fighting' in all endeavors, thus adding stress to staff and resulted in high staff turnover. In our experience, most NPO management staff is older than 40 years old and they find it difficult to learn how they can work with a computer and benefit from ICTs in the workplace.

In the face of increasingly hard economic times, public donations and grants are getting scarce while caseloads for NPOs have increased. Adopting technologies to save staff/volunteer time and office resources is no longer an organizational survival strategy to refuse. By adopting ECHO (and also integrate more ICT solutions in the office), NPOs can survive and achieve their social mission better, faster and with increased impact.

Development History of ECHO

In 2004-2006, Canada's International Development Research Center (IDRC) provided an action research grant to eHomemakers to lead a regional research, "Homeworkers and ICT in South-East Asia"² in partnership with the ASEAN Foundation in Jakarta. The findings revealed that women homeworkers have limited access to information technology and are unaware of the opportunities ICT can bring and the larger market that can be accessed. Their market and distribution chains are very limited to the ones that exist nearby them, causing them to be exploited by middlemen and sub-contractors. Their work was considered low value even though the products could fetch high prices.

Faced with the challenges and demands of domestic and productive work, homeworkers with eHomemakers discovered the benefits of using a pilot integrated platform called DWMA which reduced their communication and

² Regional report: Homeworkers and ICT in South-East Asia, 2006.

<http://www.ehomemakers.net/en/gallery/Microsoft%20Word%20-%20Regional-%20report-l-final.pdf>

travel costs to meet production orders. However, none of the poor homeworkers in the research had the financial ability to acquire home computers or access the Internet to further their reach for new markets or useful information. Mobile phones were their most affordable tool, offering opportunities for micro-business usage and the potential to achieve a higher income through Fair Wages to alleviate poverty.

The research recommended Malaysia and Indonesia to organize homeworkers and strengthen the informal sector like what Thailand has done under its OTOP program while urging Thailand and Indonesia to provide opportunity for homeworkers to access ICT in the form of an integrated platform like DWMA so that Fair Wages can be enabled for poverty alleviation. The findings and recommendations were presented at the Third Global Knowledge Conference (GK3) in 2007 whereby eHomemakers was encouraged by international ICT4D activists to develop the software fully.

DWMA was redeveloped into a full-fledged integrated platform in 2008-2011 when eHomemakers received two small development grants in stages from a Malaysian government incubator, Cradle, and deployed it to other NGOs. In 2012, DWMA, rebranded as ECHO, won the ISIF Asia award under 'Code of the Common Good'.

Homenet Indonesia and ICT Enablement

eHomemakers and Homenet Indonesia are members of Homenet Indonesia South-East Asia which consists of labor right NGOs and social enterprises for homeworkers. Since 2006, eHomemakers had received positive intention at international Homenet Indonesia meetings about Homenet Indonesia's interest in reaping the benefit from ICT, and then ECHO. The long years of expressed interest had propelled eHomemakers to keep the idea of ECHO deployment to Indonesia alive.

The plan was finally possible when eHomemakers secured a grant from ISIF Asia and complementary funds and technical assistance were raised from Rotary Jakarta Metropolitan and UnLtd-Indonesia to help support the implementation of ECHO on the Indonesian side. They also helped provide some advise on how to initiate a 'business center', which was to be the main reason for the use of ECHO by Homenet Indonesia.

Members of Homenet Indonesia are poor women with low education or literacy level involved in production work inside their houses/dwellings instead of working in factories. They get the jobs from sub-contractors, middlemen or brokers. In the absence of phone, it is difficult to contact them for trainings or any assistance activities. It costs Homenet Indonesia resources such as staff time to walk or use a motorbike to contact these homeworkers for briefing activities. These women do various jobs like sewing, knitting, weaving, batik, embroidering, line embroidering, packaging, electronic assembling, shoemaking, bag making, making machine components, food processing, typing, data tabulation, making toys, and others. They are in the rural and urban areas, struggling to earn a livelihood³. In the globalized era where items can be manufactured anywhere regardless of country of origin, their numbers have increased tremendously over the decades. The poor are getting poorer against the backdrop of a corporate culture, which seeks profit relentlessly. More than 40% of the populations in East Java earn income as homeworkers.

There are ten Homenet Indonesia branches with more than 10,000 members working only for the women homeworkers (self employed and sub contracted/putting-out system) in eight provinces (East Java, Central of Java, Yogyakarta, West Java, Jakarta, Palembang, Bali and West Nusa Tenggara/Mataram). The project was able to extend the ECHO briefing and training to five Homenet Indonesia branches. One of the problems is costly and tedious communication between the chapters and the members. Using ECHO enables Homenet Indonesia to contact its members instantly. The project trained those Homenet members that have access to mobile phones to use SMS to work with ECHO giving them a new understanding about their access to Internet, as their poverty does not bar them from reaping the benefits of the Internet, as the ECHO platform provides Internet access and enables them to work, earn income and mutually empower each other through efficient and organized communication.

³ The ASEAN Foundation (2006). Final report: Homeworkers and ICTs – Indonesia. Retrieved from <http://www.ehomemakers.net/en/gallery/Indonesia-I-%20Fin-Rep.pdf>

Project objectives

Tips: Please include here the **original objectives** as listed on the Grant Agreement.

If any objectives were modified, added or removed during the reported period this should be explained/justified.

The ISIF Asia supported project was complemented with funds from the Rotary Jakarta Metropolitan and technical assistance from UnLtd-Indonesia. Homenet Indonesia saw the benefits of using ECHO for their “business centre” development, and used this to justify the ECHO deployment to serve the needs of Homenet Indonesia members to better manage scale and grow. The project aim is to lift poverty with increased income through the establishment of a business centre and an online system to better manage workload using mobile phones (ECHO). For that to work, Homenet Indonesia a selected group of members was to receive training on how to use mobile phones and use ECHO to accept orders by and revert order confirmation by SMS. Members selected had to have the capability to join a mobile phone micro-loan program and actively use the system.

The original objectives of the project were:

- To deploy ECHO in Indonesia to prove that integrated platform can be used for the betterment of homemakers’ welfare all over the world.
- To train/brief three Homenet staff for 6 days in eHomemakers office on ECHO so that they become the trainers for their members and know how to use ECHO for activity organizing, production chain organizing, sales/marketing.
- To train 200 members in 5 branches on reverting to ECHO for activity/training attendance, participation in production chains and marketing activities, acceptance of goods-in-kind from donors and others. Total: 1200 members.
- To demonstrate to the Indonesian non-profit sector that the benefit of Internet can extended through an integrated platform so that they will join in the ECHO network for Indonesia and together they can use ECHO to mutually support each others’ activities.
- To enable Homenet Indonesia to save funds so that it can convince subcontractors to also use ECHO to organize their orders to homeworkers, thus subcontractors can afford to pay Fair Wages which will entitle them to sell to fair trade shops in the west.

The objectives changed as follows:

- a. To technically enhance some features in ECHO to make it more user friendly for non-English admin organization users.
- b. To research technical viability to deploy ECHO to NPOs in Indonesia.
- c. To deploy ECHO to Homenet Indonesia to prove that integrated platform can be used for the betterment of homemakers’ welfare all over the world.
- d. To train three Homenet Indonesia staff for 3 days in eHomemakers office so that they become the trainers for their members and know how to use ECHO for activity organizing, production chain organizing, sales/marketing.
- e. To train 300 members in 5 branches on reverting to ECHO for activity/training attendance, participation in production chains and marketing activities, acceptance of goods-in-kind from donors and others.
- f. To enable Homenet Indonesia to save funds and staff resources eventually so that it can convince subcontractors to also use ECHO to organize their orders to homeworkers, thus subcontractors can afford to pay Fair Wages which will entitle them to sell to fair trade shops in the west.

The original project was designed to be implemented in 6 months. However, due to the complexities in the field, the project was extended to 12 months.

Users and uses

Tips: Discuss with your project team who would be the future users and how they would use the findings throughout the project lifecycle. The uses identified should relate to the theory of change that you have discussed with your project team. The discussion about theory of change, users and uses, will be a very important input to your communication strategy: depending on who the user is and of what use will be the findings, a communication strategy can be developed. For example, if the users of the findings are policy makers and the use is to influence a change in the regulatory framework, which communication approach will work the best?

Who will be the user of these findings?

What are the more relevant things the project team wants to learn about or evaluate through the lifecycle of this project?

During the course of the project, the team identified the following users and uses of the project findings as follows:

- i. In-country telecommunication infrastructure development/monitoring agencies and Regulators who can see the role of telcos in a new light – help the country to develop by enabling NPO sector to use technology at a lower cost through unprecedented cooperation amongst all the telcos in the country to give complimentary SMS gateways to allow ECHO to send SMS instantly.
- ii. Policy makers (government, international assistance agencies, bilateral and multilateral agencies) who want to improve the performance of the non-profit sector through ICT, and those who are involved in ICT4D. They can see that the adoption of a cloud-based integrated platform -- innovated from an NPO's poverty alleviation solution of Fair Trade enablement for the base of the pyramid -- is an excellent way for economic empowerment by cutting down middlemen, increasing the organizational efficiency (which is much needed but long neglected in the name of 'under staff') and transforming NPOs which used to survive on grants and donations into entities with marketing units that act like social enterprises (with organizational mission of "give me a cup of tea and I will create another cup of tea from this for myself").
- iii. Funding agencies and donors (private, institutional) to see the funding of technology adoption for NPOs as a necessary seed funding to garner multiplier effects that can't be initiated with other forms of interventions.
- iv. Senior management and board of directors for NPOs (and their donors/funders) to overhaul their fundraising paradigm with the new view, "funds saved are funds raised".
- v. In-country technology development agencies which incubate commercial tech start-ups by evaluating their success with revenue earned and profit made before incubating them to upscale. These agencies will realize that the findings are proofs that social impact and non-monetary deliverables should be key criteria to evaluate the success of technologies for the NPO sector.
- vi. Ministries of 'women's development' and institutions interested in 'women and technology' to look at eHomemakers' story in innovating, developing, implementing and rolling out ECHO to Homenet Indonesia as a real life case for 'gender in technology'.
- vii. Environmental agencies wanting to initiate lower carbon footprints amongst NPOs – to endorse the low carbon-foot print impact through ECHO in NPO's endeavours.

The project team wants to learn how to evaluate the above better through the lifecycle of this project so that we can convince sceptics about ECHO and its impacts.

Indicators

Tips: Indicators help to measure project's progress.

Indicators help the objectives that were set by the project team to be affordable, tangible, and measurable.

They help to verify the success and rewrite the course in case we are not achieving it.

An indicator could be quantitative (percentage, amount) or qualitative (perception, opinion).

The ISIF Asia secretariat suggests the SMART approach to indicators:

- S** **Specific**
M **Measurable**
A **Achievable (acceptable, applicable, appropriate, attainable or agreed upon)**
R **Relevant (reliable, realistic)**
T **Time-bound**

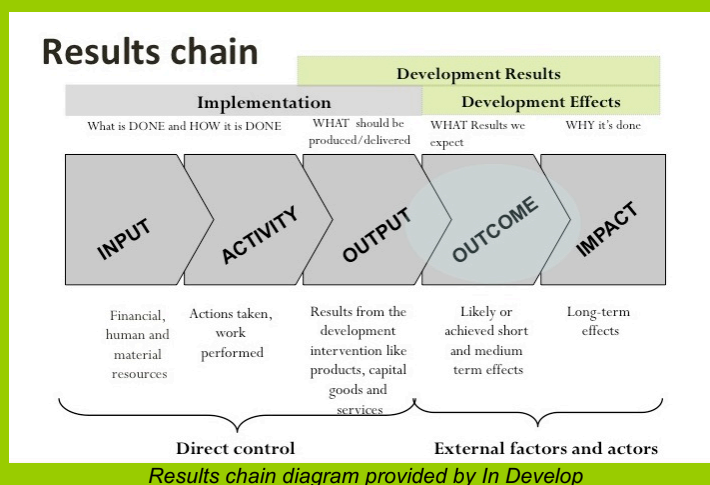
Baseline	Indicators	Progress	Assessment	Course of action
<p>Women</p> <p>1. Poor women do not own mobile phones and know how to use mobile phones, contact with ICT was almost minimal or non-existent.</p> <p>2. Each poor woman earn at most 2 million rupiah (192AUD) a month on various subcontracted home-based handicraft work, and relying on mosques for food donations.</p>	<p>A) Access indicators Women: 1. Number of women owning mobile phones (in relation to Homenet Indonesia's micro loan) 2. No of women trained to use mobile phones to call. 3. No of women trained to send and receive SMS on mobile phones.</p> <p>B) Costs saving indicators 1. No of women using mobile phones for micro business. 2. No of women using it to work with other women producers.</p> <p>C) Income indicators (1 year after training) 1) Increased income (or sales) for Homenet Indonesia members who use Echo facility by (.....)% /month within (.....) months. 2) % of women who can afford to pay for own mobile phones bill? (Related to above) 3) Ability for a woman and family to have 3 rice meals a day. 4) Ability for woman to send children to school instead of working at home with the women to earn income.</p>	<p>Women/Homenet Indonesia</p> <p>1. Project Lead and Rotary Club Jakarta Metropolitan contacted 5 Indonesian Telecom/MobileService Providers and government related bodies to get donations or discounts for low cost mobile phones and SMS tariffs.</p> <p>2. Only 1 MobileService Provider responded, indicating willingness to sell older yet unused model of mobile phones for 50% of the cost (reserved usually for their employees) and also to provide SMS at 50% of the SMS tariffs including free phones if 2 year contracts were signed.</p> <p>4. The Mobile Service Provider signed an MOU with Homenet Indonesia in August and gave Homenet Indonesia a corporate account manager. Old model unused mobile phones were bought using Rotary funds in July and 30 Android phones in September, and these were personally transported from Jakarta to Malang by flight and distributed to Homenet Indonesia women in October with signature of receipts, oversaw by Homenet. Each woman has to pay back 50,000 rupiah to a revolving fund so that Homenet Indonesia can purchase more mobile phones for the rest of its members.</p> <p>5. eHomemakers drew guidelines of criteria of mobile phones recipients in June for Homenet Indonesia which were accepted by its board and partners. Criteria include women who already make batik as sub-contractors for middlemen, this so that they can pay back the mobile phones loan to the revolving funds.</p>	<p>Access Indicators</p> <p>1. 102 women were given phones on a on micro-loan scheme for mobile phones.</p> <p>Even though all the phones were tested before purchasing them (for a small fee of \$5 each), some 40 phones were not working due to technical difficulties identified after the phones were actually used.</p> <p>2. 182 trained to use mobile phones and send SMS.</p> <p>B) Costs saving indicators 1) The last ECHO training was conducted just before project end, unable to determine cost savings for women.</p> <p>C) Income indicators Unable to forge steady production yet as business centre is still in the conceptualization pilot phase.</p>	<p>Homenet Indonesia will meet with account manager at the Mobile service provider and see how they can take advantage of the free phones offered for new 2 years contract accounts. Phones purchased at less than \$5 each with Rotary Club funds, were bought at as is unused condition so are not refundable.</p> <p>Business center moving forward: See "Recommendation section"</p>
<p>Staff/organization</p> <p>1. 1 donated laptop to Homenet Indonesia's headquarters 2. One dial-up Internet connection</p>	<p>Access indicators</p> <p>1. No. of computers in Homenet Indonesia headquarters and chapter offices.</p>	<p>Staff computer training conducted for 10 days in the month of June 2014, and another 5 days in July 2014.</p> <p>Funds from partners for Internet</p>	<p>1. 3 computers in Homenet Indonesia headquarters and 3 in chapter offices, 2 for school.</p> <p>2. 3 chapter offices now have broadband connection besides</p>	<p>Homenet Indonesia to have more hand phone training from its incubation partners on inculcation of an e-work culture reduces paper work in office and to instil</p>

<p>with limited bandwidth in headquarters</p> <p>3. Only 20 staff out of 50 in 10 chapters own mobile phones</p> <p>4. 3 staff in headquarters using one gmail address to work with external parties.</p> <p>5. 1 staff that had heard of free online app for photo/video storage document sharing platform and online workspace but had never used them.</p>	<p>2. No. of chapter with Internet connection.</p> <p>3. No. of staff with mobile phones.</p> <p>4. No. email address assigned to staff.</p> <p>5. No. of staff trained in keyboarding and computer operation.</p> <p>6. No. of staff trained in office work with email.</p> <p>7. No. of staff trained in using ECHO.</p> <p>8. No. of staff trained in project management software.</p> <p><u>Staff (6 months after training)</u></p> <p>1. No. of staff using computer to do office work.</p> <p>2. No. of work email send and receive by staff</p> <p>3. Timely reply by staff to email.</p>	<p>connection came is as Homenet Indonesia saw the importance of working with email.</p> <p>Secured donation of 8 used desktops (without monitors) from ASEAN Foundation.</p>	<p>headquarters.</p> <p>3. 20 staff with mobile phones.</p> <p>4. 4 work email addresses set for 4 staff with own responsibility to protect password, but the Executive Director is given all the passwords to keep for organizational memory.</p> <p>5, 6, 7, 8 = .10 staff trained in July for 3 days in keyboarding; another 10 in Aug; 20 staff in total trained in free project management software in Nov, 9 staff actively use them to work.</p>	<p>productivity notion in all staff. Overcome staff resistance by hiring younger staff.</p>
<p><u>ECHO</u></p> <p>No one in Homenet Indonesia has used any cloud platform. Only the Executive Director had heard of ECHO through international conferences.</p>	<p><u>ECHO</u></p> <p>1. No of SMS send through ECHO?</p> <p>2. No of revert from women to Staff's organizing SMS?</p> <p>(Indicator for training, if staff sends out 10 SMS to 300 women, and only 2 women revert to 1 SMS, the rest the women with low engagement rate, training will need to be changed after reasons are identified.)</p> <p>3.No of summary reports used by staff per month to follow-up (for every message sent, if women revert to each message about an activity,</p> <p>Staff will have one summary report. And if the staff follow-up with this, it shows active usage.)</p> <p>4. No of SMS send to women for social business purposes?</p> <p>5. No of SMS send to women for training and non-business oriented purposes (i.e., the Homenet Indonesia as NGO doing its normal labor right activities)</p> <p><u>Organization/Staff</u></p> <p>1. % of funds saved due to efficiency)</p> <p>2. Carbon footprint reduced</p> <p><u>ECHO</u></p> <p>1. Zero bounced rate of SMS from Indonesian Internet Service Providers due to ECHO (exclude Indonesian Internet Service Provider problems)</p>	<p>Unable to determine due to delayed training at project end.</p>	<p>Unable to determine due to reasons stated.</p>	<p>With help of Air Putih and other partners, Homenet Indonesia to overcome Internet hurdles and staff resistance to paper less office culture and that it uses ECHO more for its social work and business centre activities.</p>

Project implementation: understanding the chain that leads to results

Tips: This is the most important section of the report. Here, the reader will **understand the processes and operational issues** of your project and how they contribute to the achievement of the objectives and the theory of change behind the project implementation.

Is possible that the project team's understanding of the development problems to be addressed with this project will have evolved or **changed** from those described when the project was originally submitted and approved. If that is the case, please share what motivated the change and what course of action has the project team identified.



Narrative - project implementation

Problem Statement

ECHO is used by Malaysian NPOs in poverty alleviation whereby members of the supply chain, ie, the individual poor persons/villages/poor households, are in diverse locations, especially in areas where there is no landline or Internet. Mobile phone is the cheapest communication tool for the target groups. The unique feature of this system is the use of an integrated platform with email and worksheets (for administrator), SMS (for target groups who are financially struggling and rely on donations to live) as an alternative communication channel.

eHomemakers is able to reach urban poor users and NPO caseloads who had no digital access previously. ECHO administrators are able to use email and the integrated platform to receive/send orders, attendance reverts via email or SMS answers ('yes', 'no', 'false' without leaving the office to meet their members or engaging them in long phone calls or receiving reverts through expensive and time consuming postal mails. The women can receive/send answers to administrators' messages without them leaving the house, so that they can stay at home to fulfil product/service requirement until physical delivery is needed. They can also manage household, children and sick dependants at the same time. In short, work-life balance is no longer a trendy middle class lifestyle objective but a way to live with dignity.



2.a. ECHO Campaign and Social Entrepreneur, Malang Regency



2.b. Training to grassroots women



2.c. ICT Training and ECHO campaign



2.d. Social Entrepreneur Training held in eHomemakers

Figure 2: Images of project activities

The project will bring into the “ICT4D community” the sectors of Indonesian society, which do not have the financial means to access the Internet and mobile phone directly. Members of Homenet Indonesia are homeworkers who get piece –meal work (payment is given to each output only) or contract jobs from sub-contractors, middlemen or brokers. They are very poor women with low education and low skills except for the home-based work they have been trained to do by sub-contractors.

Homenet Indonesia’s access and staff capacity remind eHomemakers about the ICT situation 17 years ago when eHomemakers was founded in Malaysia at the beginning of a national ICT development movement. Malaysia was a second tier economic tiger than, the ICT development was fast paced; the constant changes were very frustrating to NPOs like eHomemakers (with few resources except a few dedicated volunteers), which were trying to adopt new technologies.

Homenet Indonesia’s grassroots access hurdles and user problems are similar to the hurdles of eHomemakers’s low-income members’. The business centre set-up problems are similar to those faced by eHomemakers when setting up the ecobasket project⁴ 12 years ago when there was no funding except pure passion. Homenet Indonesia’s lack of e-culture in the office is also similar to many of the Malaysian NGOs’ office culture.

⁴ Ecobaskets www.justmarketing.info

Two Major Categories of Project Activities:

i) Technical deployment and training:

- a) **Technical research:** The technical development grant (March 2014- Feb 2015) was extended to eHomemakers to roll out ECHO to Indonesia by enhancing ten features to make it more user friendly for non-English admin organizational users. The technical team then researched on the best (low-cost maintenance and low technical skills required) modify the telephony set-up to suit the Indonesian telecommunication structures. A mobile app was developed to allow android phones to act as SMS modems to overcome the problem of having to rent SMS gateways from all Internet Service Providers in the country so that the deployment is at the least cost to NGOs. The organization Air Putih is hosting the android phones for free for 2 months as the best host environment possible under the resource constraints. An Indonesian ECHO site for Homenet Indonesia was temporarily built.
- b) **Training of Homenet Indonesia staff:** Due to the lack of fluency in English language communication as well as lack of exposure to technological trends, Homenet Indonesia staff found it difficult to understand the integrated concept, seeing ECHO as a phone service instead of an intelligent software. The minimum level of ICT readiness at the start of the project meant that its staff required tremendous amount of time from eHomemakers to explain repeatedly the technical and productivity concepts, Standard Operating Procedures, such as password protection to ensure no internal leakage of SMS credit, as well as the importance of internalizing ICT culture in its offices. eHomemakers team prepared various training materials (FAQs, a comprehensive but simplified user manual for Homenet Indonesia staff, slides and 'step-by-step' videos with simple concepts for Homenet Indonesia's decision-makers. Supporting videos are in English as there is a lack of resources to translate and voice-over dub the videos. Three Homenet Indonesia headquarters staff were trained in Kuala Lumpur in May 2015 for 8 days to use ECHO and social enterprise development, as well as strategic use of free online management tools for its projects. Online training was also conducted in October, November 2014 and Jan 2015 to Air Putih, which in turn trained Homenet Indonesia headquarters staff in Bahasa Indonesia so that they can train and orientate the Homenet Indonesia members.
- c) **'Socialization' of the grassroots:** Briefing more than 300 Homenet Indonesia members about ICT, benefits of mobile phones and ECHO in relation to the new business centre, were conducted by Homenet Indonesia between June- September, 2014 by its headquarter staff who were on site visits to 5 chapters and its chapter field coordinators. This exercise, the 'socialization' of members in relation to new concepts introduced to them, was taken very seriously by Homenet Indonesia, as its charter requires it to inform members of all new development and to get their agreement to participate before Homenet Indonesia could proceed with any change introduction. ILO (Homenet Indonesia's traditional backer) as well as ISIF Asia also wants beneficiaries to be informed and involved in decision-making.
- d) **Training of Homenet Indonesia members to use mobile phones and to revert ECHO SMS:** These were conducted by Homenet Indonesia in Jan and Feb 2015. The project extended the usage of ECHO to 3 branches of Homenet Indonesia only, because of the Internet stability and the reliability of mobile phone signals in the areas.

ii) Business Centre set-up and incubation:

These are supplementary activities, not supported by the ISIF Asia grant, nevertheless, they are essential to provide a usage context for ECHO such as achieving Fair Wages by cutting down production organizing costs.

The two key local partners have been more than counterparts to Homenet Indonesia's business centre, they have been hands-on and very dedicated in the centre development.

- a) The Rotary Club Jakarta Metropolitan signed MOU with Homenet Indonesia on March 27, 2014 for one-year collaboration and a committed funding of about \$10,500 (some additional funds were raised at a fundraiser and these have been used to buy phones). Funds originally were committed to purchase a batch of 300,000 SMS, phones, personnel for the business centre, etc for Homenet Indonesia but due the unanticipated delays and travel involved, these funds were then used to purchase phones and to reimburse UnLtd Indonesia for time and travel just to manage the ECHO implementation and training of Homenet Indonesia. Rotary Club Jakarta Metropolitan representative was also instrumental to bring in other partners for Homenet Indonesia, which helped leverage, the limited resources for this project. In July 2014, Rotary Club Jakarta Metropolitan and UnLtd Indonesia put together an unprecedented and impressive 'meeting-of-minds' to promote Homenet Indonesia's hosted at the Deputy United States Ambassador's residence for more than 90 women and men representatives from various organizations, corporates and multilateral agencies. Rotary Club Jakarta Metropolitan and UnLtd Indonesia was also key to the forming of marketing partnership with Batik Fractal and other business partners for Homenet Indonesia. Rotary Club Jakarta Metropolitan also facilitated the Project Leader's visit to Jakarta to meet Homenet Indonesia's potential partners to lend weight to Homenet Indonesia's social mission.
- b) UnLtd-Indonesia has provided technical assistance to develop the business centre and help with ECHO deployment. The social entrepreneurship incubator project manager has mentored Homenet Indonesia staff in the set-up of the centre, trained staff to improve on project management and communication ability, diagnosed reasons for hurdles and formed solutions to solve problems. UnLtd-Indonesia acted as the focal point for all partners to train Homenet Indonesia to coordinate resources and form new partnerships, facilitated implementation of ECHO including report-writing and translating Homenet Indonesia's reports into English. UnLtd-Indonesia has provided invaluable onsite assistance to Homenet Indonesia staff, without which, the project would have experienced even longer delays.

Other local partners for Homenet Indonesia

- c) The breakthrough corporate partnership was the established with a local Mobile Services Provider, which provided discounted price of 30 android phones, 300 feature phones which was supposed to be available only to their employees at 50,000 Rp each (older model which were unused), and a corporate account for Homenet offering 50% discounted price for SMS and free phones if they signed a 2 year contract. This partnership is very essential as the homemaker beneficiaries are poor and they couldn't afford items with normal costs while Homenet Indonesia needs very low cost SMS to coordinate many members.
- d) Batik Fractal provided supports in social enterprise management training, assistance/consultation in product and design development besides marketing for exhibition events such as the Indian Women Association (IWA) Bazaar promoted Homenet Indonesia's products by providing free booth rental at IWA Bazaar. The ASEAN Foundation donated 8 computers and the chance to get free legal software for office operation, and women homeworkers' school.

Technical Summary of ECHO Deployment for Homenet Indonesia:

ECHO now involves 3 components -- the application server (Web server), the Android phones acting as the SMS gateways, and the target recipient's mobile phones to receive and reply SMS.

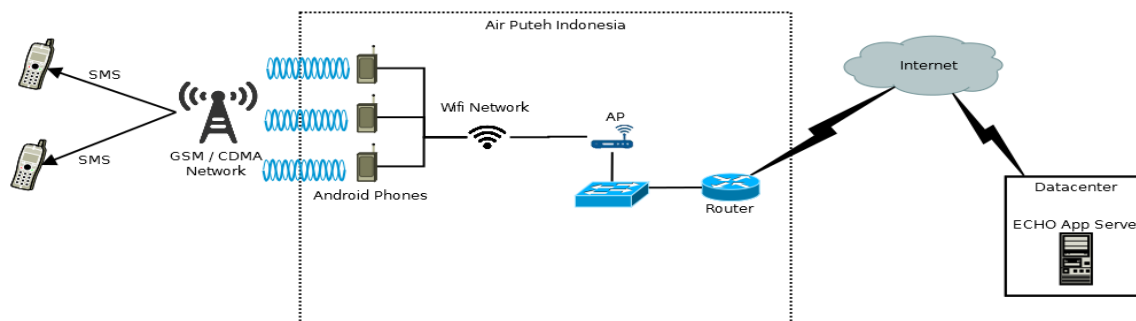


Figure 3. How ECHO works

The main application server sits in Malaysia, while the Android phones are deployed in Air Putih's office in Jakarta, Indonesia.

a. Enhancements Added to ECHO

At the beginning of the project, a survey was conducted among the Malaysian NGOs using ECHO for a wish list of more user-friendly features for organizational users especially older management personnel with limited knowledge about ICT and want to monitor office communication. Nine features were identified besides the desire for it to be user-friendly for the visually challenged.

1. Individual users cannot view other user's messages in Inbox, Outbox and Report.
2. Allow super admin to view all messages.
3. Allow sending to mobile number without creating entry in address book.
4. Display message delivery status.
5. Send email notification when there is SMS error.
6. eHomemakers Admin can manage all domain users, SMS, address book and other settings.
7. All pages in ECHO to conform to accessibility for the blind, by allowing voice dictation software to work.
8. Changed layout and links to allow tab navigation (without using mouse).
9. Menus and headers to include skip buttons to allow blind users to navigate the site faster.
10. All the forms (data, summary etc.) and site navigation to be friendly to the visually-impaired according to international standard.

Very important to highlight that the accessibility feature was added by eHomemakers in May during the training of 3 Homenet Indonesia staff in Kuala Lumpur upon realization that Indonesia has the 3rd highest level of blindness in the world and that the most deprived homeworkers are those who are physically handicapped. eHomemakers decided to be inclusive for all, and took extra resources to fundraise to include this feature. Young people who are visually challenged can be trained to use such platforms so that they can work for NPOs or be part of a production chain. They are also empowered to manage others and coordinate activities.

b. Android Phone as SMS Gateway

To send SMS quicker (instead of an average 0.04 sec to send one SMS through a SIM card), Homenet Indonesia will need to obtain SMS gateways from all the Internet Service Providers in Indonesia. Telcos typically won't give SMS gateways for free and it is also not legal to run an independent SMS gateway without regulatory

approval even working directly with the telco. It is too costly to rent even one gateway when the SMS volume is lower than 10 million messages per month. In addition, getting free SMS gateways will require lobbying of the government to get Internet Service Providers to include Homenet Indonesia in their corporate social responsibility programs, but that was out of the scope of the project at hand. To circumvent this and remain within the legal framework of Indonesia, we developed an application, applicable to both CDMA and GSM cellular operators in Indonesia, for mobile phones to serve as SMS sending modem.

During development, the app was tested by sending a few SMS at a time. During the final stages of development, we tested by sending large numbers of SMS to test the speed using Android phones from an Indonesian Internet Service Provider. The sending failed. Further investigation revealed that the Android operating system was blocking outgoing SMSs with a confirmation screen asking if it was the user's intention to send those SMSs. After much investigation, it was found that the Android phones had a built-in limiting ability for only a number of SMS per minute, and if any application tried to send above the limit, it would ask the user to confirm before allowing the SMS to be sent. This is to protect the Android user from malware that sends large number of SMS without the user's knowledge. After more research, a means to bypass the limitation was found but that required rooting the phone (shutting down its auto-blocking functions) and changing the system's database record.

c. Telco and Android Phone

In the process of selecting the correct Android phone for the deployment, we purchased phones, which had both GSM and CDMA. The local mobile Service Providers that Homenet Indonesia was working with were using CDMA standard, instead of GSM like the Internet Service Providers in Malaysia. Having phones that ran both standards allows Homenet Indonesia to migrate to another GSM provider if needed. It took several months to determine that it was cheaper to use the Android phones as SMS gateways than hosting ECHO server with the mobile service provider. This costs assessment and the Android phone app that blocked the SMS initially, caused a delay in final deployment. Once the android phones were purchased and the apps were unblocked, the ECHO could then be deployed.

The number of android phones was set at 20 for Homenet Indonesia. So if Homenet Indonesia sends 3000 SMS to 3000 members at one go with one SIM card, it will take 120 seconds (2 min) to send. If it sends 5000 SMS, it will take 200 seconds (3.33 min) to send. If there are 20 android phones, 3000 messages will take 6 seconds to send while 5000 SMS will take about 10 seconds to send. As such, the android phones act as SMS gateways for the eleven Internet Service Providers in Indonesia, sending SMS in 'an instant'.

d. Initial Tests

Initial tests of the Android phone application were done remotely with the help of staff of the Mobile Service Provider by using a SIM card and their Android phones for this deployment. Initial tests were unstable with some messages being sent and some lost, but there was no error message or anything out of normal observed on the phones. Research Lead flew to Jakarta to run live debug tests on the phones and found that it was caused by the default setting in the phones requiring confirmation SMS for every outgoing SMS sent. Disabling the confirmation SMS by rooting the phone (shutting its auto-blocking functions) meant that everything went smoothly and all outgoing SMS were sent without any problem. The technical team successfully tested sending/receiving ECHO SMS with 5 Hewlett-Packard models after the rooting exercise.

e. WiFi and Mobile Phone Signal Coverage

Investigation conducted with several Internet Service Providers revealed that many places in Jakarta had a problem of getting broadband Internet into building and where this could be done. It was very expensive. To use the ECHO SMS gateway, it required both strong cell signal strength as well as broadband Wi-Fi within the building to connect Android phone to the Internet. So, while signal strength tests were conducted by Research

Lead at a few possible sites for hosting the Android phones, we also needed a building which also had good broadband service. While the host partner Air Putih had strong cell signal at their office, they had limited Internet broadband in their office due to the high costs. As such Wifi was often very congested, making it a less than ideal as host location for the Android phones. The cell signals and Wi-Fi network at the ASEAN Foundation's office and at several private hosting companies were also tested, but ASEAN Foundation had good broadband Internet but bad cell signal (because of the concrete walls and its location to the nearest cell tower).

The final location to place the Android SMS gateway phones must have good cell signal reception and a good fixed broadband making it a very stable and good Wi-Fi connection. Price comparison, management reliability and commitment to corporate social responsibility was also conducted on several possible commercial hosts but no host that fit these requirements and who had the CSR budget to host could be found. A highly reliable, low-cost and social mission oriented host will ensure that Homenet Indonesia can eventually sustain the usage of ECHO with revenue earned from the business centre.

It was hard as commercial hosting venues were not able to offer free or discounted hosting as their CSR budgets were already taken, and the project as Homenet Indonesia is an NGO with limited fundings. The search was intense between June-July by Rotary Club Jakarta Metropolitan (on behalf of Homenet Indonesia as it is headquartered in Malang and its staff does not have the knowledge on technical hosting) until she found Air Putih. It took another two months to iron out which university campus of AP's sub-offices has the most reliable Internet connection and its hosting role before an MOU was signed.

f. Phone Setup

Twenty Android phones were decided by calculating the amount of time needed to send SMS by each phone simultaneously in anticipation of Homenet Indonesia's uses. Android phone setup was done by Pak Agung, the Project Lead from Air Putih following the step-by-step setup documentation sent by eHomemakers. After the setup, Technical team sent SMS through ECHO to Pak Agung's number. There was no problem during the setup stage.

g. Training and Trial Run

During the training, SMS was not sent out. After some investigation, it was found that Air Putih had turned off all Android phones hosted at its office due to the "2-months trial period" which had expired. Simply turning on the phones solved the issue.

Trial runs also revealed that the word '*insyaallah*' must be programmed into the revert platform as homeworkers are used to incorporate this word in every answer.

h. Further Trial Runs

In one of the trial runs by Homenet Indonesia, SMS failed to be sent again. Pak Agung conducted troubleshooting and found that the SIM cards used for the Android phones had unpaid bills and was blocked by the Internet Service Provider. The Internet Service Provider unblocked the lines after Homenet Indonesia paid the bills.

Input	Project objectives and related activities	Outputs	Outcomes	Timeline	Status	Assessment
1. Project personnel as per budget 2. eHomemakers's sourcing of private donors for extra funds for blind friendly research and relevant	Technical research, programming and testing of 9 new features, UAT acceptance. Appointing a special consultant to take on the intensive online research	10 features enhanced; User Manual in English, translated into Bahasa. Devised a list of FAQ for Homenet Indonesia staff in ECHO	More user friendly to non-English users, and decision-makers in NPOs who need to monitor their subordinates or chapters' communication to	March - September	Completed	N/A

programming 3. Translation of User Manual in into Bahasa by UnLtd-Indonesia staff	on international standard for blind-friendly navigation and training of Technical team to understand the software used and the unusual user perspective	management in English (not translated).	others, and to promote efficient communication coordination through a common platform.			
1. Personnel as per budget in grant. 2. eHomemakers's own funding contribution for 2 visits to Indonesia-one by Project Coordinator and one by Programming Leader	Research technical viability to deploy ECHO to NPOs in Indonesia Local host for android phones, Air Putih, identified in Jakarta	A new topology for the telephony network was produced. An app was developed to allow android phone to serve as sending modems. See Section, "Technical Summary of ECHO Deployment for Homenet Indonesia"	N/A	April 1, 2014 for research	Hosting of android phones completed October 10, 24 (with UnLtd-Indonesia, Air Putih),2014 Project Leader visited Jakarta July 15-19. Program Leader visited to sort out hosting in June 23-27	N/A
1. Personnel as per budget in grant. 2. Additional trainers for extra days supported by eHomemakers's own funding contribution 3. Extra expenses from complementary funders 4. UnLtd-Indonesia contributed their staff time and additional, funding to travel to Malang three times and these were deducted from the Rotary Funds thus limiting the continued support for the SMS.	1. Train three Homenet Indonesia staff at eHomemakers offices in Kuala Lumpur 2. UnLtd-Indonesia mentoring Homenet Indonesia in activity planning, social business operation and coordinating with AP to help with ECHO implementation	8 days (instead of 3 days) to become trainers for Homenet Indonesia office, operate a social business, basic IT skills in relation to project management	Internal learning from questions asked; ICT-based dissemination activities in the form of flicker for photos of Homenet Indonesia activities in June.	May1, 2014 planning of TOT	May 13-21, 2014 – Training of Trainers	TOT: Training conducted by eHomemakers team, extra trainers for 4 full days in on: social entrepreneurship; ICT enablement for NPOs; project management using Google doc; business and NGOs. Two-field visits to see product-based NGO and an ardent NGO user of ECHO. One staff was more fluent in English than the other two, she had to translate the overall concept to the other two. Gannt chart= UnLtd-Indonesia observed that Homenet Indonesia staff had difficulty conceptualization activity planning which is not 'training based'.
Personnel as per grant budget to Homenet Indonesia	Briefed 300 members in 5 branches	Homenet Indonesia's socialization exercise on ICT and business center. After testing the Internet connection and transportation logistics (to facilitate bulk sending of goods together to Jakarta or ports so that transportation costs are cheaper), 5 selected chapters were confirmed as follows: - Malang Municipality - Malang Regency - Batu Municipality - Mojokerto Municipality - Probolinggo (these funds were again taken from the Rotary Funds)	More open to changes introduced by ICT as they showed up to listen even tough they did not earn any money during the training. See 'Project Outcome' Section: Medium term effect on Homenet Indonesia members.	April 1- Planning by Homenet Indonesia started	June- July	Homenet Indonesia observed that older women were less interested in ICT.
Personnel as per grant budget to Homenet Indonesia	Train grassroots women in 3 chapters reverting to ECHO for activity/training attendance, participation in production chains and marketing activities, acceptance of goods-in-kind from donors and others.	182 women on micro-loan of mobile phones. Women in Probolinggo couldn't practice SMS sending, as the Internet Service Provider selected didn't have stable signal.	Learnt how to use mobile phone, how to revert SMS messages to Homenet Indonesia on business activities. Overall: more open to use of ICT in personal life.	Planning started in October for selection of women for micro-loan of mobile phones	Jan, Feb 2015	Homenet Indonesia observed that older women found it hard to revert SMS due to literacy level, too slow to type on phone, so they prefer calling.

<p>1. Personnel as per grant budget. 2. UnLtd-Indonesia staff</p>	<p>Writing progress report and final report to ISIF Asia</p>	<p>UnLtd-Indonesia assisted Homenet Indonesia to write the reports, reports sent by Homenet Indonesia to eHomemakers, translated by UnLtd-Indonesia staff, see 'Appendix 1 and 2'</p>	<p>Record activities, diagnose issues, and reflection to move forward</p>	<p>June for interim report; January for final report</p>	<p>Interim report completed in November; final report in March</p>	<p>A complex process of analysis and reflection about ICT4D issues</p>
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Hurdles Encountered:

- A) **ECHO technical implementation:** The technical team at eHomemakers is used to solving problems arisen from constrained resources. In-depth technical research was conducted before the deployment, as a result, there was no technical problem encountered in the telephony deployment and set-up for ECHO. Minor technical glitches faced during the project period stemmed from human errors. There should be no unexpected problems for the continued usage of ECHO except for SMS confirmation due to time lags in Indonesia.
- B) **Project Management:** Homenet Indonesia’s local partners and eHomemakers’s management resources assigned to the project were challenged to different degrees due to the inter-linkages of project issues within the context of the informal sector. Homenet Indonesia and its local partners had tried their best within the existing time frame and resources to overcome hurdles encountered to prepare for ECHO training and the simultaneous initiation of a non-profit ‘business center’ which will use ECHO to achieve Fair Wages and timely marketing activities. Communication delays led to domino effects in implementation delays. Without the many partners brought onto this project, it would have been hard to leverage the limited resources from ISIF to launch this project in Indonesia. Delays however were mainly caused by lack of communication primarily from Homenet Indonesia and technical deployment given bandwidth and legal limitations. The project teams also had to deal with ways to keep staff at the grassroots level without much exposure to technology motivated and engaged, without jeopardizing existing relationships with their supporting organizations in the field.
- C) **Communication difficulties:** The biggest obstacle was timely and accurate communication to all partners by all partners and amongst all partners, based on a clash or organizational cultures and practices, as Homenet Indonesia, has operated in a horizontal, rights-based approach for years by using ‘socialization’ as an organizational communication technique while the other partners in this project emphasize output/time frame and impact/time frame. Based on Homenet Indonesia’s practices, it was required to seek approval from its internal decision making process on major decisions before any party could take action on a particular activity. Activity delays, report delays, and misunderstanding from miscommunication stemmed from the following:
- There was no funding for the partners to meet face-to-face and all were based in different locations, a follows: Kuala Lumpur, Malaysia (eHomemakers headquarters); Penang, Malaysia (Programming team from Infonal); Greater Jakarta, Indonesia (Rotary Club Jakarta Metropolitan, UnLtd-Indonesia, Air Putih, local Internet Service Provider, marketing partners); Malang, Indonesia (Homenet Indonesia headquarters) and its chapters in 5 different regions. Phone/Skype connection between Malaysia and Indonesia was not that reliable so the project communication was conducted mostly by email.
 - As English is not the main language for all the organizations involved, it added a level of difficulty, at times, generating misunderstandings among partners. In Homenet Indonesia, only one staff is fluent in English speaking and writing, so there was much delay in partner communication especially between eHomemakers and Homenet Indonesia as written communication needed translation from Bahasa Indonesia to English and viceversa. Further more, Homenet Indonesia used old-fashioned English words related to labour rights organizing. For example, when Homenet Indonesia wrote 'evacuation needs' in

its April email to eHomemakers, it meant ‘needs assessment of its homeworkers’ as per its labour rights old-fashioned concept, and not referring to actually evacuating families from volcano eruption and floods like what was required a few months earlier. This misunderstanding caused eHomemakers not to pursue any project activities to give Homenet Indonesia time to sort out these natural disaster problems when there wasn’t anything actually requiring additional time. Another example is when eHomemakers asked Homenet Indonesia for an excel sheet with mobile numbers of Homenet Indonesia members, Homenet Indonesia staff interpreted it as getting mobile numbers from all the 10,000 members (as it has always executed activities for all members) not realizing that only the mobile numbers of 300 women selected for the project were needed.

- Using email as a standard practice in a work environment is not that common to most NPOs in either Malaysia or Indonesia due to lack of Internet access as limited access –or knowledge about how to better use- to computers and smart phones. Best practices for replying, processing and archiving email communications were not in place at Homenet Indonesia, as a highly entrenched manual-based work culture dominated the workplace. Technical problems, in particular during June to October 2014, due to IP blocking, server host problems, and spam filtering added additional complexity to maintain fluid email communication.

D) **Local infrastructure and connectivity:** A study by Merlina Lym in 2011⁵ indicated that the number of broadband connections in Indonesia has more than doubled since 2008 but remain prohibitively expensive or otherwise unavailable to many Indonesians. Mobile phone use has reached 88.85%, which can be considered as high-teledensity but with great inequalities in the distribution of telecommunications infrastructure between urban (35% to 11%) and rural areas (0.25%), as well as between Greater Jakarta and other cities in Java such as Malang. Given Indonesia’s archipelagic and mountainous geography, cable infrastructure is costly and therefore mostly confined to urban areas (particularly in Java and Bali) while wireless connectivity has difficulties due to lack of line of sight.

The real speed at the Homenet Indonesia office connection was just 512MB even though it subscribes to 1GB, making it a slow and tedious process. The Internet bandwidth promised by Internet Service Providers in Indonesia under paid subscriptions was in reality a shared bandwidth hence it becomes less than what subscribers were able to access, somewhere between 40% to 60% (according to Air Putih), just like in many other developing countries including Malaysia. This hampered ECHO testing when technical team realized that bandwidth was a constraint for staffs to access ECHO. Air Putih reported that it couldn’t solve the Internet access problem for the 5 chapters in Malang unless they increased their Internet broadband subscriptions, which was not a viable option due to limited financial resources. Homenet Indonesia’s Internet access problem in Malang contributed to the delays in project implementation. These problems may have not been fully understood by all partners at all times, and as a result, there was doubts about their organizational capability.

In October 2014 that Air Putih reported that Malang, where Homenet Indonesia headquarters is located, has unstable mobile signal coverage, latency in sending and receiving the SMS (average of 5 mins to 12 hours). It sometimes takes more than two days to receive an SMS sent through any Internet Service Provider. It was in November that Air Putih discovered that the telephony signals at some of the branches such as Probolinggo are weak or non-existence for some Internet Service Provider providers (due to distance from the nearest cell tower).

Homenet Indonesia’s hardware and Internet access problems were also heavily related to lack of funds at both the organization and members level. Although donation of equipment was secured, it took more than 3

⁵ Merlyna Lim (2011). @ Crossroads: Democratization and Corporatization of Media In Indonesia. Participatory Media Lab, Arizona State University and Ford Foundation. Pg 7, 9, 11, 12, 13.

months to replace its 6-year old computer, as it was too slow to access Internet properly. Discounted mobile phones and SMS were also sought, as Homenet Indonesia couldn't obtain these complementary resources on its own due to the lack of networking with IT-based companies and its distance from Jakarta where most of the corporate decision-makers are located.

- E) **Natural disasters:** Floods and other natural disasters occurred in the Malang area in the first six months of 2014. Homenet Indonesia members in Jakarta, Tangerang, Semarang and Surabaya suffered serious flooding, while those in Yogyakarta suffered from the impact of the Merapi volcano eruption between February and April 2014. Homenet Indonesia staff were heavily involved in clean up during the early months of the project, they didn't start to collect database to select the 300 women for training until July.
- F) **Informal sector context:** A regional research from the ASEAN Foundation conducted in 2006 led by eHomemakers⁶ outlined that homeworkers in Indonesia exist individually or in loose groups with no formal work registration with the authorities, not organized under labour organizations. Homenet Indonesia reported that some of their members found it difficult to take the one-time work order to participate in the bazaar (as planned during this project), as it might jeopardize their ongoing long-term arrangements with other subcontractors. Therefore, Homenet Indonesia was forced to accept products from other non-member homeworkers, which impacted on the selection of participants for the marketing exercises, affected working relationships and implementation activities on the ground. Homenet Indonesia had never embarked on social entrepreneurial activities before. Through the activities associated with the bazaar, it realized that its members need intensive facilitation in business knowledge management in a continuous and holistic way (not partial and fragmented) and that time is needed to learn the implications of following production guidelines, monitoring and quality control as mechanisms to strengthen Homenet Indonesia membership and empower homeworkers to break from the middlemen. With the work to establish the Homenet Indonesia business center, this is even more important, for accountability and transparency.
- G) **Resistance to change:** As part of the umbrella project, Homenet Indonesia was undergoing a tremendous transformation from a traditional labour rights NGO into a social enterprise with productivity. Resistance came from staff as well as from members. Staff resistance to new ideas like ECHO adoption, usage of email and computer attachment for communication with external parties existed although its management had conducted the 'socialization exercise' to all staff at the on-set of the project. Old mentality such as relationship orientation for work instead of task orientation is hard to change. Homenet Indonesia required two months to go through the 5 chapters selected and socialize the umbrella project objectives and activities in which the ECHO deployment fit in. Such initiative is extremely essential to grassroots changes as pointed out by Colin Latchem⁷, which conducted ICT4D projects in ASEAN during 2006. However, the introduction of a business centre that only caters to 300 members instead of benefitting all 10000 members since its start, plus the use of technology they never heard of before, understandably generated resistance, fear and confusion, which added additional pressures to the project implementation. Resistance also came from older homeworkers rejecting the use of SMS due to low literacy levels and preferring to use voice (placing calls at higher costs). Consequently, Homenet Indonesia staff resume using traditional communication media such as group meetings at the School of Home-Based Women Workers, and coordination mechanisms through the field coordinators, to organize activities as such communication activities meet no resistance from any one. Other example of resistance to change was the time (over 6 months) and accompaniment it took to actually internalize the importance of protecting SMS credit through administrator's email access. A transition period was given to address those problems, but the additional time generated friction among

⁶ The ASEAN Foundation (2006). Final report: Homeworkers and ICTs – Indonesia. Retrieved from <http://www.ehomemakers.net/en/gallery/Indonesia-I-%20Fin-Rep.pdf>

⁷ Colin Latchem (2006). "Information and Communication Technology for Social Development" in 'Researching and Evaluating Information and Communication Technology for Social Development', edited by Jon Baggaley, ASEAN Foundation. Pg6, 14.

project partners as too much time was invested talking about change instead of than making necessary changes.

H) **Limitations to use online monitoring and mentoring:** Online monitoring and mentoring only worked to a certain extent, due to the difficulties described in the communications difficulties listed in the C section above. Site visits not included in the ISIF Asia approved budget were required so that Homenet Indonesia could operate the new business centre better plus organizing production-using ECHO, to allow ICT enablement. Similarly, UnLtd-Indonesia which was incubating the business centre, also reported difficulties to conduct mentoring and monitoring activities online but found it costly to send staff to Malang regularly.

Project outputs, communication and dissemination activities

Tips: Take into account that the reader of your report has not being involved in project implementation, so readers do not have any further knowledge besides the information you are providing here.

This section of the report will allow you document the communication and dissemination efforts that the project team has conducted, which might be part of a specific communication strategy design as part of the project, or in place for the organization as a whole. When possible, please provide information about strategies in place and the rationale behind them.

Lessons can be learned from many aspects of project implementation, covering a wide variety of aspects such as technical, social, cultural and economical. Taking the rationale behind the project and its objectives can serve as a framework to draw your conclusions. Lessons can be identified by project partners, beneficiaries and general staff from the organization. A project diary and other activity records can serve as a tool to reflect during project team meetings and immediately after project activities are conducted.

Outputs are immediate, visible, concrete developmental change that is the tangible consequence of project activities, under direct control of the project team.

Example of possible outputs to report are:

- *New products and Services (software, online platforms, applications);*
- *Information sharing and dissemination (publications, conferences, multimedia, social media);*
- *Knowledge creation (new knowledge embodied in forms other than publications or reports, such as new technologies, new methodologies, new curricula, new policies);*
- *Training (short-term training, internships or fellowships, training seminars and workshops) and*
- *Research Capacity (research skills; research management capacity and capacity to link research to utilization of research results).*

Project outputs	Status	Assessment	Dissemination efforts
10 technical features enhanced for user-friendliness	Completed in May 2014	- 9 features completed UAT in June 2014, ready to be used by Homenet Indonesia. - Blind-friendly feature-UAT was completed in September.	User manual in English; translated into Bahasa, uploaded into a google doc space for Homenet Indonesia.
A Bahasa homepage for Homenet Indonesia	Completed in June 2014	Blind-friendly navigation. No technical problems reported by Air Putih.	8 videos on 8 modules of ECHO functions - 'how to do...step-by step guide) in English, uploaded into eHomemakers you-tube for Homenet Indonesia (private setting)
Group briefings, one-to-one briefings (socialization exercise to Homenet Indonesia members) to 300 women in 5 chapters.	Completed by Homenet Indonesia May- August	Grassroots acceptance of changes to come. As a result, interest was generated in the donor/support community in Jakarta.	- Homenet Indonesia developed a PowerPoint to explain ICT and ECHO to members. - Rotary Club Jakarta Metropolitan organized on July 15 2014, a session on, "Lifting Poverty through Social business and ICT" at the Deputy Ambassador of the US's residence. Rotary Club Jakarta Metropolitan, eHomemakers's Executive Director and Homenet Indonesia' Executive Director spoke. Out of the 120 organizations and companies invited, 92 senior manager officials attended and participated in conversations about how to support Homenet Indonesia together.

			http://unltd-indonesia.org/2014/07/
8 day training in Kuala Lumpur for 3 staff of Homenet Indonesia Follow-up PowerPoint and video presentations	Training Completed in May 2014. Follow-up materials completed between October and November 2014	8 days intense training on: social entrepreneurship; how ECHO reduces resource usage; project management using free online software; using ECHO features. Language difficulties limited the capacity of Homenet Indonesia staff to internalized information. Translation was done by one staff for the other two. During the training, the team identified the need to prepare an additional follow-up module to provide additional clarifications and reinforce concepts needs for accurate operation of the system covering the following topics: better emailing skills for cross-border collaboration; protection of password for the Administrator to protect SMS leakage; importance of one email per key staff especially the Administrator's; importance of a secure computer for Administrator.	Training information was presented in documents, power points and charts related to topics given by all trainers. - Collection of 16 Flickr albums documenting project activities https://www.flickr.com/photos/homenetindonesia/albums - Establish Homenet Indonesia blog homenet-indonesia.blogspot.com - Facebook: https://www.facebook.com/pekerjarumahanindonesia?ref=hl - Twitter .#PekerjaRumahan #Homenetna
3 ECHO "Training of trainers" 1h online using Team Viewer and Skype	One in November, December 2014; one in Jan 2015.	eHomemakers trainer improved training skills by learning to use Team Viewer. Language barriers and unreliable Internet connectivity made it difficult to have fluid communication. Air Putih and UnLtd-Indonesia continued sessions in Bahasa plus several other one-on-one sessions upon request.	N/A
Air Putih supported 3 computer usage trainings to 20 Homenet Indonesia staff	Completed in June, July and August	Training completed and achieved its objectives with good attendance from 10 field coordinators and all headquarters staff.	Homenet Indonesia Head of IT prepared training document for the staff in Bahasa. As a result, Homenet Indonesia staff is able to disseminate information online.
2 group trainings were conducted by Homenet Indonesia to 182 women with mobile phones	One in Jan, one in Feb 2015	Only women with mobile phones learnt how to revert messages back to Homenet Indonesia in relation to the business centre's activities.	Homenet Indonesia printed a "mini manual to revert ECHO messages" for the members in Bahasa.
4 one year agreements signed between all partners.	Completed in March, May, July and September	- Rotary Club Jakarta Metropolitan with Homenet Indonesia in March 2014 - eHomemakers-Homenet Indonesia on ECHO in May; - eHomemakers-UnLtd-Indonesia-Homenet Indonesia on business centre incubation for Homenet Indonesia in July; - eHomemakers-Air Putih-UnLtd-Indonesia in September on hosting of android phones and IT training of Homenet Indonesia. All agreements have been abided by Homenet Indonesia's partners except for monthly reporting progress due to language and staffing constraints. Homenet Indonesia's partners have put in more than 100% of their agreed commitment to Homenet Indonesia.	N/A

Project outcomes

Tips: This section should be completed **ONLY** for the final report.

ISIF Asia expects you to report about the **outcomes** of the project as defined in the table below, based on the project implementation section of this report. Project team is encouraged to discuss the questions provided below to guide the reflection:

Can you identify and describe the relationships between the activities implemented and the social, economical, cultural and/or political benefits of your project implementation?

Outcomes can be defined as:

- Medium-term effects
- Effect of a series of achieved outputs
- Should capture the changes for the beneficiaries
- Take place during the life of project/strategy
- Influence but not direct control

Technical

1. 10 user-friendly features were programmed into ECHO especially for non-English users.
2. Innovative telephony topology for ECHO was produced, and hosted by Air Putih, to reduce hosting costs.

Project team does not expect immediate ECHO outcome from Homenet Indonesia in the next six months after the project due to its circumstances in the informal sector and its resource constraints. The low baseline ICT status at the beginning of the project allowed small indirect achievements during project period.

Medium-term effects for Homenet Indonesia as an organization

1. Beginning of an ICT work culture in the Homenet Indonesia office
 - a. Four staff at Homenet Indonesia headquarters who can run ECHO at the office: Ali Maksum, Cecilia Susiloretno, Rangga Ratno Amiwirantyo, Taufan Teguh Buana.
 - b. Taufan has been appointed as ECHO Administrator with one computer for usage, and not shared by other staff so as to protect the SMS credit.
 - c. With eight donated computers and mobile phones through the Internet Service Provider partnership, 20 staff and field coordinators can now revert messages to ECHO besides using the basic functions of word processing, data management, and project management software.
 - d. Four email addresses for the four staff above were set up and are being used to contact external parties although the work culture is still quite paper-based.
 - e. Digital assets such as online photo storage and social marketing platforms such as Facebook and blogs are now available and one staff is updating them even though more timely coordination is needed.
 - f. 11 staff can use email and some online project management software. Nine are actively using these for work in office.
2. Beginning of cost reduction
 - a. Homenet Indonesia has not conducted cost efficiency analysis on ECHO usage yet as it has not separated the phone bill between ECHO usage for business center and that of other Homenet Indonesia activities. It will need assistance to evaluate the activities in comparison to ECHO usage.

- b. Because of the trainings given by eHomemakers and UnLtd-Indonesia, Homenet Indonesia has reduced the phonebill in headquarters as its staff now uses email and social media (Facebook, Twitter, Whatsapp) to communicate and coordinate small groups of staff and members. The Internet connection is good enough to access these channels but unstable when it accesses ECHO due to higher bandwidth requirement.
- c. Homenet Indonesia staff and members are now using SMS to communicate & coordinate without phone calls, both for business or non-business purposes. Increased usage of SMS will instill staff habit to use ECHO.

Medium-terms effects for Homenet Indonesia members

1. Beginning of an ICT culture in work and personal life
 - a. 300 women who went through the project briefings are now more receptive to the use of Internet, mobile phones and other technology devices through the business center and ECHO, that might help improve their welfare. They no longer see these as hugely unattainable personally due to illiteracy and older age. There is now a 'presence' of technology in their lives even if they don't own mobile phones due to poverty, they know the labor organization, which they belong to, Homenet Indonesia, is committed to use some form of technology to help them. Their belief in Homenet Indonesia's labor right commitment to them is a base for any ICT project progress in the medium term.
 - b. 182 women home workers can use mobile phones and revert messages from ECHO while 42 women own mobile phones (in relation to Homenet Indonesia's micro loan program).

Unexpected Outcome

eHomemakers as an organization has internalized the lessons learnt about grassroots innovation through this pilot project. Identifying the list of project management hurdles for this report meant several weeks of intense reflection, research and in-depth analysis which led to the:

- a. Review of eHomemakers's history in developing an ICT tool for the grassroots and for NPOs in poverty alleviation.
- b. Further research on ICT4D issues globally for a better understanding about ICT intervention for the digital divide groups.
- c. Dissecting of project issues from different perspectives, weighing the pros and cons, analyzing the multi-factorial contribution to a result in order to draw lessons learnt.

Project management and sustainability

Tips: Please comment on the general project **administration, staffing, procurement, etc.** specially those aspects contributing to the fulfilment of the project objectives as well as those that have delay project implementation.

Indicate **how the project team has strengthened its capacity** and work towards sustainability with the support provided by ISIF Asia? (new equipment, training, improved administrative skills, lessons learned from the project). Has the organization increased its research or administrative skills of the team involved? Has the project allowed for a particular contribution to capacity building of women or marginalized social groups? Special attention should be paid to the expected or unexpected impact on marginalized social groups.

Have you done **anything different** to provide administrative support for this project **besides your "business as usual"** processes and procedures? Has the project inspired change inside your organization?

Sustainability is to be examined not only in terms of staff retention and financial stability of the organization supporting the project but about the communities' appropriation of benefits

perceived from project implementation.

The ISIF Asia Secretariat is very interested to learn if this project has generated opportunities for future development (new funding from partnerships, sponsorships, investment or other funding mechanisms), please provide details.

Please explain if the ISIF Asia grant has helped to consolidate your organization and how. If any of the project activities will continue after the end of the ISIF Asia grant, please describe how your organization is planning to support future developments.

Lessons Learnt

- 1. When working with organizations that are not yet connected to the Internet (on the other side of the digital divide) budget and planning should cover a longer project (one year will not be enough) and more time and resources must be invested in the readiness assessment and basic ICT preparation:** eHomemakers project team assumed that it was easy for Homenet Indonesia to get basic hardware like used computers for staff and mobile phones for members at the start of the project, but in actual fact it needed more time to obtain hardware as it didn't have the networking ability and negotiation skills to deal with business entities. It is an NGO, which is used to funding from international NGOs for labour right trainings and so it has no experience dealing with companies on the ground of 'corporate social responsibility'. When this hurdle was realized by the fourth month, eHomemakers had to step in to find hardware with the key local partners and provide assistance for more training than originally envisioned in the project. Every time we thought we solved an access problem, we faced skill and knowledge problem. Something else would pop up to our surprise even though there were senior management people from the partners who acted as mentors. Project period was supposed to be eight months, but it was extended to 12 months due to delays on the ground. Before starting an ICT-project for such grassroots organization, more time and resources must be invested in the readiness assessment and basic ICT preparation (such as email training and the required organizational time to internalize email work culture so as to partner efficiently with another organization overseas and others in another city by using mainly email).
- 2. The importance of readiness assessments vs the need to act:** If one has to wait for an organization to change its manual work culture to be more paperless, the kind of ICT-enabled Fair Wage business centre envisioned by Homenet Indonesia may never happen as it will take a long time for staff attitude to change. Staff turnover is often high in NPOs so how long does one need to wait to do something to try to find a solution? Should one just spend any available resources to support an organization until it has fully internalized the necessary ICT practices in the workspace before any ICT interventions? Or should one enable the ICT intervention first, so that the staff and members can use it for the intended business organizing even if the ICT practices are not put in practice consistently by all? Further more, in the NPO world, there is a lack of funds for readiness assessment and basic preparation of project partners. So NPOs are faced with the chicken and egg situation – implement a project to overcome some basic hurdles or overcome the basic hurdles first (which could mean years of such preparation) before introducing the seeds necessary to affect some form of ICT adoption? Implementing reform can be painful exercise for any organization, let alone one with no such experience and facing severe internal lack of resources.
- 3. Key mover in roll out is critical** – Homenet Indonesia, which is based in Malang, couldn't afford to station a staff in Jakarta for partnership building. Securing the help of Rotary Club Jakarta Metropolitan was the biggest success in the initial start-up of the project as their representative, Laina Green, was so committed that she spent considerable time between March and October 2014 to engage partners in Indonesia such as UnLtd-Indonesia to support Homenet Indonesia's business center, and Air Putih to accompany them in basic ICT adoption. It was Laina who met with potential partners in Jakarta after intense email discussions between eHomemakers, potential partners and her. Because of Laina, Rotary Club Jakarta Metropolitan is solidly behind Homenet Indonesia. They too want to see Homenet Indonesia succeed in their work towards

poverty alleviation. eHomemakers has not seen such dedicated partnership and incubation of an NGO in its 17 years of non-profit journey.

4. **Partnerships are key to position interventions in the “bigger picture” but collaboration is a challenging balancing act:** Although at the beginning partners agree on what is required of them and what the project is set up to achieve, true partnership building places high demands on already overstretched organizations (a grassroots organization may be unable to cope with new kinds of reporting to its partners and delivering unfamiliar milestones or that its main personnel have personal circumstances that hinder progress). Partners may want to give up, seeing the involvement as a failure when they can't see impact within the agreed time frame and budget. Focus and management of expectations is key. The definition of a project is based on short-term and focused interventions and it is unrealistic to expect it will change mentality in just a few months. What is relevant is to ensure that what was done during the project lifecycle has led to positive changes in the community, no matter how small, and that some form of sustainability is explored to continue the process and achieve the desired changes. Even if the project ends up working with a smaller group of women, a small success will breed other small successes, then lead to bigger successes when time and resources permits. “ICT are being used to contribute to poverty reduction by building the leadership capacity of poor women, increasing their participation in the media and decision-making, strengthening their livelihoods and helping to secure greater social services⁸”.
5. **There is not such thing as a “good time”:** Dealing with partner's organizational changes means dealing with essential complementary activities. For example, eHomemakers thought that it would be easy after the technical deployment was completed to just follow up with trainings for Homenet Indonesia staff and members. But as time went on, it became evident that if the business centre activities were not built in parallel with the ECHO platform use, Homenet Indonesia may lose its local partners, which are critical to the development of the project. eHomemakers allocated its own resources to assist in the business centre in whatever way we could.
6. **The difference between personal use and strategic use of ICT:** Personal hardware ownership doesn't equate to proper let alone strategic use of ICT in the workplace. For organizations to make the most out of the digital world they live in, it is necessary to adopt best practices such as processing email on time and in full, and in appropriate manner. Staff's slow response to adopt basic ICT skills may deter partners from renewing their pledges when agreements expire.

Sustainability

1. MoU signed on May 21 2014 between eHomemakers will extend ECHO use until May 30 2016 to Homenet Indonesia, giving Homenet Indonesia more time to forge impact of ECHO with its business centre and to prove to its local partners its genuine intention in poverty alleviation through ICT, according to their cultural and accepted interactions.
2. If the forecasted sales from the business centre go on, Homenet Indonesia will be able to pay for SMS credit without any external funding support through either grants or donations, as a Internet Service Provider already gives 50% discount on SMS.
3. Much of the telecommunications infrastructure challenges are out of the control of Homenet Indonesia, pending Internet Service Providers to deliver on promised bandwidth and signals.

⁸ Namrata Bali, Self-Employed Women's Association, SEWA, recommended stakeholders to evaluate impact of ICT4D projects in non-quantifiable parameters (Gerolf Weigel, 2004)

4. Homenet Indonesia office is challenged to improve its administration and operational practices to include the use of IT-based project management applications and ECHO. Homenet Indonesia understands that it has many things to learn and achieve in order to utilize ECHO for daily operations and institutional development. It has asked for support from all partners to help build and establish a system to ensure the sustainability of the business centre. Homenet Indonesia's senior management realizes that the project management hurdles are barriers to strong partnerships, and consider making standard operational procedures integral part of its operational management.
5. Homenet Indonesia will have to convince its local partners that the business centre needs to be implemented in stages to meet the needs of its members who live in distinct locations (urban and rural), with varied types of jobs, and with children and elderly. One major hurdle they encountered in the marketing exercise with the Indian Women's Association Bazaar was the selection of producers as described in a previous section of this report. Although Homenet Indonesia was involved in a mapping exercise several years ago through Homenet Indonesia South East Asia, it does not have complete data on all its members. As a result, it was not able to select producers causing misunderstandings and generating additional tensions. The next stage will be to find resources to complete mapping of its members for the business centre. While doing so, it can conduct the kind of intense mentoring it deems fit for the members so that they can participate in the establishment of the business centre. There are also many preparations and activities that will be required including better-equipped facilities, adequate hardware, and a more efficient decision-making system with staff both in Homenet Indonesia's headquarter and its chapters.
6. The sustainability will also depend on how well it manages the local partnership when the MOUs expire. Homenet Indonesia will have to re-negotiate with the existing partners on the basis of what this project outlined. If the partners decide not to continue with Homenet Indonesia, eHomemakers will take the lead to design an exit strategy that will not leave the infrastructure at Air Putih and Homenet Indonesia's pilot business centre in a lurch, but that it will allow Homenet Indonesia some space, relevant support to manage change (no matter how small), referral to other partners who have the resources to incubate a grassroots organization dealing with the informal sector. It is anticipated that Homenet Indonesia will have to focus on smaller achievements (which may include using ECHO on a small scale to organize its traditional training activities) so that it realizes the benefit of enhanced productivity. This will provide them with some space to nurture a culture more focused on productivity to enable growth of a full-fledge business centre one day.
7. The sustainability of the business centre also depends on Homenet Indonesia staffs, which has been trained by UnLtd-Indonesia. The business centre faith depends on the business know-how they manage to instil into it. Its ability to retain staff trained for ICT and project management in relation to technology adoption will be crucial, as Homenet Indonesia doesn't have funds to retrain staff. To sustain its centre, it will need to:
 - a. Have all the local partners' continued backing (from additional funding to contacts).
 - b. Educate all existing and future partners about the homeworkers' situation and informal sector's hurdles to have realistic expectations, to see positive changes one step at a time, and to look at garnering social profit in a longer-term perspective.
 - c. Take initiative to conduct frequent coordination meetings with local partners to build a common understanding of attainable deliverables. This will hopefully close the gap between the planning and the implementation of Homenet Indonesia social business programs.

Impact

Tips: This section of the report does not refer to the project activities, but about the “**bigger picture**”. It will be desirable if the project team can reflect on the **impact that the project has contributed to as part of other actions implemented by your organization and/or your partners.**

Impact refers to the influence the project may had on the way people does things through the use or adoption of the project outputs; changes in the context the project was implemented; changes in the community the project has been working with; and/or changes inside the organizations that have participated in the implementation or the relationships established through the project's implementation.

Impact is often impossible to measure in the short term and is rarely attributable to a single activity. Impact can be linked to a vision or long-term development goal that your organization might be working towards.

It can be identified as a logical consequence of achieving a combination of outputs and outcomes.

Impact is usually measurable after the project life and is outside the direct control of the project team and the organization.

The following list was acknowledged by Homenet Indonesia, as part of the preparatory process for this report. These acknowledgements represent the impact the project has had in their organization. It is the beginning of a commitment to use ICT to better members' lives:

1. The growing awareness the cost savings of using SMS rather than phone calls. Staff and literate members are more comfortable to communicate through SMS than before.
2. The use of ECHO for Homenet Indonesia's organizational development is very needed. The project was a wake-up call to realize how much the organization needs to learn in order to cope with ICT in the workplace and business practices. Homenet Indonesia and its members need more time to increase the capacity and grow the habit of using ICT, as they recognize is beneficial to the organization and its members even though there are hurdles to overcome in the short and medium term.
3. Homenet Indonesia requires a renewed commitment and assistance from its partners while it obtains baseline data on homeworkers so that the business centre can function with the intended ECHO use. Rotary and Unltd have indicated they will not continue to support this project due to budgetary and resource constraints.
4. Through the learning that Homenet Indonesia key personnel have had about IT-based project management skills, they have discovered tools to support business development, such as online photo storage for products. They have developed a basic system for communication and campaign which uses free Google applications.
5. Communication and coordination between Homenet Indonesia secretariat and its members become less expensive and faster with the use of free ICT applications and SMS.
6. Homenet Indonesia now utilizes social media and SMS to advocate to networks for greater reach with less cost and more effectiveness. Campaigns on issues of women homeworkers are distributed through social media to inform partners about cases, problems, and the needs of women homeworkers in Indonesia.
7. Homenet Indonesia participated in a one-day exhibition organized by Indian Women Association in Jakarta. Lessons learned from it will be used to further establish the business centre properly.

The exposure of this project reverberates throughout the entire Homenet Indonesia organization due to all the socialization activities that occurred internally during the project lifecycle (between staff, among staff, mentoring from partners). Homenet Indonesia staff have begun to change their mindset on two fronts: to see their work as social entrepreneurship instead of working in a grant-reliant NGO; to adopt ICT technologies in the workplace, committed to efficiency through communication automation and online organizing of members who are in diverse locations. Whatever happens in the future, Homenet Indonesia is going to adopt ICT, one form or another. It will

not pull back and the advancement will be in leaps and bounds depending on resources it can master around it. The change momentum has been initiated.

A factor contributing to the low use of ICTs in Indonesia is the limited knowledge and use of English. Indonesians use Bahasa, the national language, at work and in daily life, as a result, the lack of English proficiency dis-incentivize many to access information online. The project has increased the realization amongst some staff that they need to improve English so that they can use the Internet to gather more information and learn.

There is tremendous pressure on Homenet Indonesia to get the business centre moving as soon as possible and this deals with organizing homeworkers to produce quality products for sales, changing discourse from a labour rights NGO to efficiency and productivity. Some beneficiaries had tasted earnings through sales in the recent Indian Women's Association Bazaar, more interested in the continuation of the social enterprise instead of only being members of the 'old' NGO. Homenet Indonesia realizes that it has more control than before to achieve 'fair wages' (under fair trade principles) for its members instead of just organizing demonstrations against exploitative businesses. Its dream to get businesses to pay fair wages was dashed many times, as it did not have any support from donors. This project finally makes the dream more like a reality than a dream.

Homenet Indonesia, after more than 20 years existence, believes that it will be able to achieve one of its objectives, the setting up and running its own business centre, to eventually become like Self Employed Women's Association (SEWA)⁹ in India with several subsidiaries. ECHO becomes the tool to achieve this as it can mass organize its members efficiently. Homenet Indonesia can now speak of this vision because of their engagement in this pilot project. Before this, it was a dream hidden behind all the problems, which consumed homeworkers.

In fair trade, at least 25% has to be paid to makers/growers, but typically, for e.g. in handicraft trade (like many homeworkers business in Indonesia), there are middlemen who make high profit, they don't pay fair trade wage to producers. In order for any NGO to pay fair trade wage to producers, it has to cut administration and logistics costs of raw materials purchase or marketing costs to be able to pay workers more than 25%. That is when ECHO can make a difference with cuts of up to 98% of organizing costs. To illustrate, for example, staff receive an Internet order of product A, send ECHO message to 100 makers, each one reverts how many she can make, staff knows if she gets the right number for the order and revert back immediately, staff gets the total number in 1 min without doing much. Without ECHO, she has to call on phone, do one-to-one SMS or face-to-face meeting, the admin costs become very high, NGO can't take on fair trade wages at all, unless it has a solution like ECHO.

With fair trade, the poor will become wealthier as they get paid better. Homenet Indonesia has always wanted to help the women in selling their goods but they did not know how to craft social enterprise kind of system for their NGO, let alone using ICT for that. This project finally paved the way for poverty alleviation through fair trade, enabled by an ICT tool.

Some examples of how the project has raised members interest in ICT and productivity are:

- Five women from three chapters are interested to use ECHO to help them promote the products in their community. These women, under 40 years-old, can learn faster how to use the Internet when there are resources for them.
- A village chief in Malang district was interested in ECHO as it will enable him to gain direct input from his people with very efficient cost.
- Poor women homeworkers who did not have communication access to other Homenet Indonesia members are now assisted with mobile phones.

⁹ <http://www.sewa.org>

Overall Assessment

Tips: This section of the report is extremely valuable for the ISIF Asia secretariat as it provides evidence about the role and relevance of ISIF Asia contributions in the Asia Pacific region.

Tips: Briefly provide your own views on the value and importance of the project relative to the proposed innovation, investment of time, effort and funding involved. Include the strengths and weaknesses of the project and the steps taken to strengthen the credibility and reliability.

This is your opportunity to conduct a team reflection about the value of the project for the organization. The following questions might help you to prepare a substantive overall assessment.

1. To what extent the project meet its objectives?
2. What were the most important findings and outputs of the project? What will be done with them?
3. What contribution to development did the project make?
4. Were certain aspects of project design, management and implementation particularly important to the degree of success of the project?
5. To what extent the project help build up the research capacity of your institution or of the individuals involved?
6. What lessons can be derived that would be useful in improving future performance?

The project has met all its objectives stipulated, as eHomemakers's commitment was more than what initially planned, especially to support capacity building activities. The project team could not measure any immediate impact after project completion as the last training was conducted just before the end of the project period. The most important findings are below:

Adoption of ICT by NPOs must start with acquiring basic knowledge such as ability to choose basic hardware needed by the beneficiaries. In its haste for ICT enablement, a grassroots organization may not realize that it will be dealing with tremendous organizational changes, bigger than it anticipated during the proposal period. NGO staff may resist the changes even after trainings are imparted.

Indonesia is one of the fastest growing economies in the world; it is understandable that Internet Service Providers change frequencies and bandwidths in a rapid pace for access improvement. So the risk in technology development in such growing economies will be that the hardware and parameters for software selected might not be supported in the future, even during the project lifecycle.

Difficulties of managing a project with several partners across the sea and with social cultural differences. The only way for such project to survive is to have all the key stakeholders believing in this – when one door closes, another door will open. And 'never never never never never never never give up'.

Helping digital divide organizations and individuals is never easy. The Project team takes comfort by reminding itself about the Chinese proverb, 'the beginning of everything is the hardest'. It is expected that a short-term project for a grassroots organization and members with very little access to ICT prior to the project will encounter a number of project management hurdles at the grassroots level. It proves to the project team that ICT4D projects of such nature needs 5-10 years to measure impact at the grassroots level. Funders and partners must look at the small deliverables achieved (whether it is the planting of an idea inside an ICT-proof organizational culture or the first time ownership of an old hardware that is no longer functioning due to rapid changes in Internet Service Provider structures) even if they are not directly related to project outcomes.

The project proves that ICT tool innovated by grassroots women can be up-scaled and rolled out to another country despite tremendous hurdles especially the lack of funding. Women can innovate appropriate technologies even if they are not programmers, and that bottom-up innovation is the best for the NPO sector.

Technology's benefits are maximized if the related uses and the human attitude towards technology usage/maintenance/prevention of abuses are developed properly prior to training the users.

Development of functional uses and appropriate human attitude for technology takes time. Setbacks are common as the organization and beneficiaries in the digital divides face many constraints. The most serious constraint is the lack of funds for purchasing proper equipment, paying for communication costs and expensive access fees. The more disadvantaged the users, the more serious are the access problems and the longer time it takes to change their attitude. Overcoming the setbacks delay a project.

ECHO is only a tool to productiveness, the human capability and attitude towards intelligent software is the base of the operational flow and the continuity. Homenet Indonesia's ability to continue to change attitudes from its members and staff, especially the older ones will determine if its business centre can get off the ground to truly use ECHO to enable fair wages and eventually to lift poverty.

Multi-stakeholder partnership between 'NGO (Homenet Indonesia)—NPO (e.g. Rotary, UnLtd-Indonesia, ASEAN Foundation, eHomemakers)- Internet Service Provider - corporate (eg, software company)-individual movers (e.g., Rotary Club Jakarta Metropolitane in Jakarta)-poor women' is critically essential for such roll-out due to the fact that the enablement of low-technology organizational users and its poor members can only be done stage by stage. Rinalia Abdullah, Global Knowledge Partnership Executive Director (Gerolf Weigel, 2004) noted that "such partnerships are effective instruments for achieving development goals when different stakeholders pull their resources and assets to solve problems. What is needed is better understanding among stakeholders about each other's strengths and weaknesses. Process must be in place to facilitate negotiations and collaborations among stakeholders for optional outcome."

Recommendations

Tips: Include any recommendations in this section that you and your project team, the organizations supporting the project and the community you worked with, would like to make to other practitioners or researchers on the field facing similar problems or implementing similar solutions.

Please take a minute to share recommendations with the ISIF Asia secretariat that might help to improve the support provided.

Based on the lessons learnt, the following are recommended:

Project partners will be better off looking for bigger grants under longer time allocations, as a 15 month to 24 months timeline with a higher grant amount is more realistic for such a project. If this is followed by a smaller grant project for staffing at the grassroots organization to helm ECHO and the related ICT enablement the organization needs, it will make it easier for the associated project (such as a business center) to come into fruition.

For ICT4D projects where the most deprived are involved, the road can be very long as there are many other social economic enablement required to reach the ultimate project objectives. Taking a long-term view by all partners will be necessary. Immediate output may not be possible and one will have to change an out-put based paradigm to see the immediate project 'success' as social profit in the form of 'opportunity created when none existed before' instead of quantifiable items. While the journey can be difficult, creating opportunities for the most deprived can drive eventual social economic success when there is passion and commitment by all partners for a longer term.

According to Colin Latchem¹⁰ many ICT-based social development projects are experimental, new to the providers as well as the end-users. A number of stakeholders - individual or groups, including end-users - are interested in influencing the project, achieving the outcomes and ensuring the projects' viability.

Organizations supporting such projects need to be accountable to these stakeholders and to undertake further research ensuring that:

¹⁰ Colin Latchem (2006). "Information and Communication Technology for Social Development" in 'Researching and Evaluating Information and Communication Technology for Social Development', edited by Jon Baggaley, ASEAN Foundation. Pg6, 14.

- The projects have been appropriately resources, managed, implemented, provided and evaluated and delivered;
- End-users needs and circumstances have been correctly defined;
- The goals, targets and performance indicators have been met;
- Problems have been resolved.

We recommend ISIF to connect the project partners to other funders to realize the impact of ECHO and the roll-out to other chapters in Homenet Indonesia, thus reaching out to 10,000 poor Indonesian women, some of them are blind, and an estimated 5,000 live around natural disaster areas. If such opportunity exists for funding sources, we recommend funds to be allocated for:

- Homenet Indonesia needs expertise in 3 areas and will benefit from hiring 3 staff, as follows: 1) a qualified business manager to work with external parties and understands ICT strategic use for organizational management to be able manage the setting up of a new business center with organizational changes; 2) to hire for at least one month, an experienced ICT/business manager to mentor staff to ensure best practices and operational procedures are implemented fully; 3) and a dedicated staff to manage the micro-loan program.
- Training to use ECHO for emergency rescue and natural disaster management.
- Purchase mobile phones for more of its members.

In the case partnerships are not renewed, Homenet Indonesia will require to secure funding for:

- Pay one staff to be administrator and coordinate the message sending and receiving.
- Pay for SMS so income earned through the business center is crucial for sustainability.
- Pay for hosting of the android phones by AP.

Bibliography

Tips: Include complete bibliographic references to all sources (printed, on-line, quotes, etc) used to prepare the different sections of this report. The APA style guide offers examples about how to reference a variety of sources. <http://www.apastyle.org/learn/quick-guide-on-references.aspx> (as accessed on 3/7/2013).

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