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GLOBAL READY INDONESIA

IMPLEMENTING A PILOT 3G WIRELESS BROADBAND
TECHNOLOGY TRAINING AND JOB CREATION
PROJECT IN INDONESIA

NOTES FROM THE FIELD NO. 5



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EXECUTIVE SUMMARY

Qualcomm, one of America's largest technology companies, selected SRA International, Inc. (SRA) to establish technology training centers in disadvantaged, underserved and lower-income communities in Indonesia. Qualcomm provides this support through its corporate social responsibility (CSR) program, Wireless Reach.

The goal of this CSR project is to demonstrate the value of Qualcomm's wireless 3G/HSPA technology in connecting disadvantaged communities with quality training and broadband Internet services. SRA's Global Ready Project, part of the Wireless Reach program, has taken place between March 2009 and May 2010.

SRA helped identify the two pilot locations on the island of Sumatra in Indonesia; competitively selected a private sector Indonesian technology training operator, PalComTech; identified and helped secure other key public and private sector support; and designed and managed SRA's unique pre-paid training voucher program to stimulate initial interest and long-term demand in the two pilots' service offerings. PalComTech operated the two pilot training facilities, Technomatics, which received discounted rates from Indosat, a major telecom operator.

As a result of these efforts by project partners, more than 1,000 trainees successfully completed the pre-paid voucher program. Results from an in-depth monitoring and evaluation (M&E) study conducted in January 2010, show several success stories where trainees were promoted to better jobs or found better jobs in Indonesia's rapidly expanding knowledge economy.

Through SRA's efforts, the initiative is a fully fledged, commercially successful operation that maintains its focus on social development. As such, the initiative is expected to offer sustainable services to the underserved for years to come.

The Global Ready Project delivered several ground-breaking results and impacts, including:

- Leveraging the success of technology training/professional development in a larger urban area to reach new underserved and economically disadvantaged customers in the mid- to lower-tier market through more affordable information technology (IT) and professional development training. There are arguably millions of such customers in this market segment who are hungry for IT/professional development skills.
- Establishing a technical approach and business model to replicate the pilot approach across Indonesia. For example, the operator intends to establish two new centers with the company's own investment.
- Developing a high quality and yet affordable curriculum to meet the needs of economically disadvantaged students.
- Significantly enhancing social and economic development in South Sumatra by providing disadvantaged people and underserved communities with leading-edge technology-based skills.
- Enhancing market penetration of 3G broadband (3G/HSPA) through the pilot and strengthening partnerships with Indosat to replicate the project regionally and nationally.
- Successfully showed the use of reliable and affordable 3G/HSPA broadband Internet access provided by Indosat to the multi-user training environment, which may be applied to other fields such as Internet cafés, schools and institutional users.

OVERVIEW OF PILOT FINDINGS

Benefits of the Pilot Program

The project has benefited from an aggressive marketing campaign using pre-paid vouchers. For example, all 1,000 vouchers were distributed and used, with more than 95 percent of the students successfully completing the basic training program and being certified. All customers are defined as economically disadvantaged and constitute a strong customer base because acquiring computer skills leads to gainful employment and further demand for training.

PalComTech now plans to charge full tuition starting in March 2010. PalComTech envisions 80 percent of all voucher holders will pay full fees for additional courses.

The voucher program has also attracted the interest of other partners. For example, the Provincial Education Office for South Sumatra is impressed with the pre-paid voucher program and plans to add funds to the program in 2010. Additional funding will establish a 10 percent set aside for disadvantaged trainees in perpetuity. Moreover, USAID/Indonesia is considering a grant request to offer voucher funds to small businesses and entrepreneurs, especially women.

Outcomes of the Training Program

Initial key findings from the post training surveys of the trainees and training partners include:

- 100 percent of voucher holders are satisfied with the training program (as per their responses to the survey distributed by SRA to all of the 1,000 voucher holders in January 2010).
- Students report being more confident and now able to find a better job. Some students are now planning to open new small businesses such as computer technician and repair shops.
- Roughly 10 percent of trainees intend to start a new technology related business in the near future.
- About 60 teachers have attended the courses. They report improving their performance in the classroom. Teachers are now able to use Word for writing papers, Excel for calculating results, PowerPoint for media presentations, etc.
- Local businesses are interested in using the centers for corporate training programs.

SRA's findings show the program's positive impact on trainees. Participants are now empowered with basic computer and Internet literacy skills required to participate actively in the global knowledge economy. Other findings show a growing demand for additional training subjects and extended instruction time. Demand for services is high and open to diversification.

Appendix A contains more detailed survey data related to the voucher holders' assessment of the training courses.

LESSONS LEARNED

Lesson 1: Be Flexible in Program Design

The initial project design focused on establishing a franchise network of cyber cafés. Yet when the SRA Team conducted an in-depth assessment in May 2009, it became clear that a different approach would better suit the information and communications technology (ICT) infrastructure, optimal business models, and enhance strategies for partnerships. A key assessment finding was the need to *revise project design objectives to establish IT training centers instead of Internet cafés.*

Although Internet cafés are popular in Indonesia and exist in large and smaller cities, their users focus mainly on services related to Web browsing and gaming. IT training centers are usually stand-alone businesses.

SRA's May 2009 assessment revealed that the number of Internet cafés had proliferated, driven in part by the Internet Service Provider (ISP) Speedy, part of Telekom Indonesia. Speedy charges substantially lower prices than other competitors for broadband access - likely well below market price – and promotes a fierce struggle among the cyber cafés mainly over Internet access prices for users. This competition only produces marginal revenues for many if not most Internet cafés.

As a result, the original Global Ready business case for using 3G to run an Internet café was weak. An Internet café would likely not be able to gain customers by charging a sustainable price for Internet and once project subsidies ended, the Internet cafés would likely fold – given the price sensitivity of Internet use, particularly if it was the main source of revenue. The development case for focusing on Internet cafés was also weak, Internet cafés existed even in the smaller towns where Global Ready would operate: it would be difficult for an Internet café to distinguish itself from competitors.

Instead, based on best practices from successful public access ICT projects elsewhere, the SRA Team determined that establishing IT training centers represented the most sustainable and developmentally-sound approach. From a business case perspective, experiences from other countries show that training services generate some of the highest margins and are able to constantly evolve to meet customers' new needs and new technologies. Indeed, SRA's assessment also showed that well established IT companies in Indonesia are highly profitable and growing their businesses. There is a significant unmet demand by many types of end users, e.g., students, adults, and the unemployed, to gain IT literacy skills. These skills are likely to grow given Indonesia's emergence from an agricultural-based economy to an information-based economy. As borne out by the project's results, end users are eager to receive training and certificates from accredited IT training centers to use for employment and professional development. And the technology training companies that participated in the assessment generally showed an impressive level of marketing and operations knowledge and well grounded, innovative training content and ancillary services for students.

Prospective Global Ready Project partners also seemed to agree that a focus on IT training was a sound approach. Technology training companies, which were the subject of the assessment, indicated an enthusiasm to expand their businesses. Even cyber café owners lamented the dearth of skilled IT users.

Finally, the developmental impact focusing on IT training centers is strong. Qualcomm, for example, will be able to show how its 3G technology enables basic IT literacy to spread as well as the uptake of more advanced services such as Web 2.0 applications, IT for business and project management, and IT equipment installation and repair.

Lesson 2: Competitive Tenders can Produce Added Value

A key component of the project design was the competitive tender for interested Indonesian technology training companies. Based in Palembang, South Sumatra, PalComTech submitted the winning proposal and was selected by SRA to be the pilot operator. As a local provider of high quality technology training services in Indonesia, PalComTech quickly grasped the growing demand for IT skills and was tapping into Indonesia's transformation from an agricultural-based economy to one based on services and information. As part of this trend, Indonesia's fast growing middle class is an avid consumer of mobile and fixed communication technologies and of social and professional technology applications.¹

The critical element of establishing a good partnership was that *PalComTech had already developed its own business plan and saw new technology training centers as part of its own internal organic growth strategy*. This was not a case of a donor prescribing solutions to an unwilling partner.

After selecting PalComTech, the Global Ready Project established two pilot centers (Technomatics) in Kenten Perumnas and Simpang Patal, a suburb of Palembang and a peri-urban community outside Palembang, respectively. Both centers provide underserved and disadvantaged communities with 3G/HSPA wireless broadband and, due to the success of the pilot, PalComTech plans to establish two new centers in 2011.

Lesson 3: Cater the Product to the Market

The two pilot Technomatics developed by SRA offer a scaled-down version of PalComTech's offerings at its main campus. Tech training to end users is the core service. The training services are comprised of short "express" courses involving basic IT orientation (basic computer "driver's license") for several weeks as well as year-long intensive courses involving multiple facets of IT literacy. This includes basic IT skills, web design, use of Web 2.0 technologies, business skills training and information technology network management, orientation on Open Source, as well as proprietary software and graphics.

Each Technomatic center has 50 computers as opposed to several hundred computers located at PalComTech's main campus and the courses are streamlined, but do not compromise quality. The tuition averages \$400/year as opposed to \$800/year offered at the main campus.

¹ PalComTech is a technology training institute based in Palembang, the provincial capital of Southern Sumatra. PalComTech has five years of experience serving thousands of customers at its six training branches throughout the province of Southern Sumatra. PalComTech has extensive experience and background knowledge on how to manage IT training to help shape the future for its student customers. In 2009, Indosat selected PalComTech as its "Best Customer" in Southern Sumatra. PalComTech currently uses a dedicated line and DSL-based connectivity provided by Indosat. However, per its proposal, PalComTech wished to show the power of 3G broadband and indicated its commitment to using the 3G connectivity beyond the pilot project if 3G technology proved successful.

The centers provide basic IT skills such as Internet browsing, word processing, basic web design, and basic computer and network maintenance and repair, and transcription courses.²

End users are generally disadvantaged high school seniors and adults (underemployed or unemployed). There is a strong emphasis on using pre-paid vouchers (microstipends) to provide training. Stipends are offered on a sliding scale with an incremental scale of pricing starting from 25 to 100 percent payment for services by the end of the pilot.

Lesson 4: A Business Model for Sustainable Development

The pilot used several sustainability strategies that included:

- Operating the centers as businesses while maintaining their focus on social development.
- Following a business model designed to leverage core training capacities of PalComTech and adherence to quality.
- Using pre-paid vouchers³ (microstipends) to catalyze market demand and ensure strong co-investment from PalComTech, Indosat and the municipality.

Another key goal of the pilot was to show a business case for scaling and replicating the model. The proposed theory of meeting *unrealized demand*⁴ for services in the underserved communities was proven. The only barriers to project scaling and replication rest with the availability of investment funds to establish multiple training facilities throughout Indonesia; and, for Qualcomm Wireless Reach, the ability of its partners to provide reliable and affordable 3G broadband.

“Interest in technical training is growing. This is because such courses can be shorter and offer students immediate entry into jobs in Indonesia.” - ASEAN

Qualcomm’s Business Model

Value Proposition

Technology is a key driver for economic development in Indonesia. The need for knowledge economy workers is increasing demand for technology training services and is hatching a new industry to meet employer demand.

Competitive Advantage

- First to market
- Convenient locations
- Affordable services

² Depending on market demand and as proposed by the technology training company/implementing partner, more sophisticated courses may be offered such as database management, network architecture, and network maintenance. Other services may eventually be added such as mobile phone applications and sales support, laptop sales, and business consulting.

³ In implementing similar types of public IT access and training projects, SRA has found that the vouchers have been instrumental in generating new user demand as well as a steady stream of repeat customers.

⁴ SRA’s theory was that disadvantaged/underserved populations in the developing world are willing and able to find money to pay for affordable, quality training services once they receive a subsidized incentive via the pre-paid voucher model. This has been true of many other voucher programs, but not all.

Competitive Strategy

- Offer quick, practical training needed in Indonesia's fast-growing professional services market
- High quality courses at low cost

Innovation

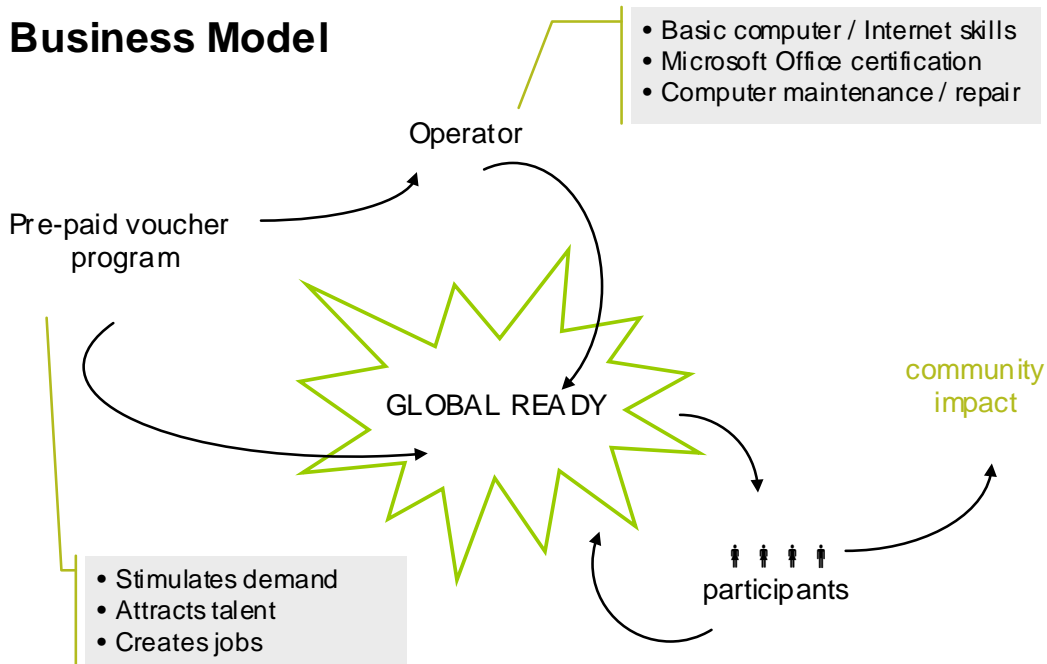
- Theory of unrealized demand
- Pre-paid vouchers for disadvantaged
- Affordable, fast, practical training
- Plans to add professional development courses
- Building an e-learning platform

Community Impact

- 1,000 pre-paid vouchers distributed
- 95 percent certified in basic computer skills
- 20 percent receive on-the-job promotion
- 10 percent starting technology-related enterprise
- Provincial education office adopts voucher program



Business Model



Lesson 5: Plan on Scaling and Replicating from the Outset

Starting with a concept for sustainability is a key step toward scaling and replication. The pilot project was able to show sustainability through a documented backlog of interested customers ready to pay full tuition starting March 2010. Initial estimates show that each new Technomatic can add roughly 1,000 new trainees per center who are able to pay full tuition per year.

As the pilot Technomatics continue to grow, PalComTech is planning to invest in new services and expand to two new locations in Palembang. This rapidly growing city of more than two million inhabitants has a substantial level of underserved areas where the solution is needed.

Going forward, it is likely that PalComTech will rent buildings rather than buy them so as to avoid overhead. PalComTech may also invite investors to join the program and offer them an equity stake since few lending resources exist in Sumatra and business loans have a high interest rate.

After setting up additional learning centers in Palembang, PalComTech plans to replicate its efforts throughout Sumatra after the second or third year when the pilot Technomatics approach breaks even in Palembang. Yet PalComTech will keep the Technomatics centers small to bring offered services directly to users and keep their commute short.

PalComTech is also keeping a keen eye on expansion since capital markets are weak and expansion loans onerous to find and repay. Moreover, there are not enough qualified trainers, though this can be seen as an opportunity as well. It is estimated that each Technomatic needs three to five qualified instructors to begin operations. Yet training existing instructors to meet new demands is a constant challenge. PalComTech recognizes that they need to develop a Training-of-Trainers (TOT) program to qualify more than 30 instructors per year to meet expected growth. In this rubric, PalComTech plans to create a cycle where students become instructors and instructors become managers.

The power grid's reliability, which affects current Technomatic operations, is also a major constraint to expansion. Although one Technomatic center was connected to the main power supply, the other used generators for its power - including air conditioning. This Technomatic reported higher costs, as well as significantly hotter room temperatures. PalComTech will need to explore effective ways of providing power to new Technomatics.

Lesson 6: Use Core Local Partner and the "Common Customer" to Leverage Other Partnerships

Several valuable lessons have emerged on leveraging partnerships:

- Focusing on the "Common Customer," i.e., the students, is the key to building partnerships. In this equation, the students in underserved communities access new ICTs and become catalysts for creating knowledge-based economies, creating jobs and improving health, education and local governance. Indosat expands its market share for its full range of services and enhances its national reputation as a socially responsible corporation. PalComTech establishes a sustainable business and the opportunity to enhance community development. Qualcomm can showcase its 3G/HSPA technologies for a shared learning environment.

- Build on collaboration with pilot partners. The initiative is now seeking to improve synergy with Indosat, Microsoft and Cisco to receive discounts on Internet connectivity, software and training content.
- Continue to seek out new partnership opportunities. Given the growing demand for training services throughout Indonesia, SRA suggests that the operator seek additional resources from donors until workable business loans can be identified and secured locally. USAID is interested in training small business owners and disadvantaged entrepreneurs, especially women, and has requested a proposal from PalComTech and SRA to meet this growing demand.

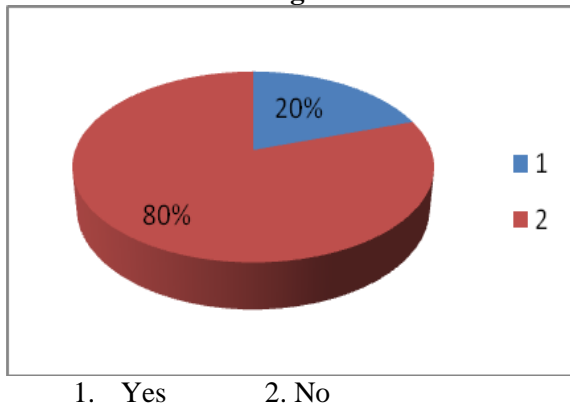
APPENDIX A – PILOT PROJECT OUTCOMES

The M&E findings show the opportunity to grow the value of technology training and the unmet demand for professional development courses related to basic English conversation, business accounting, marketing, management and planning skills. This is a growing area for Technomatics and a key priority for other donors such as the World Bank and USAID in Indonesia.

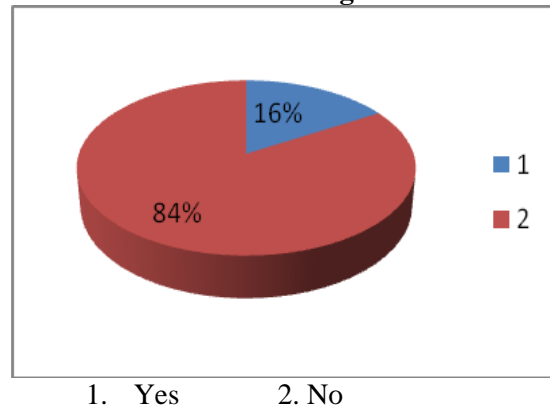
The pilot has made a significant impact on the potential employability of the participants. Most of the participants can now use computers and the Internet to effectively manage information.

The following is a synthesis of key survey data:

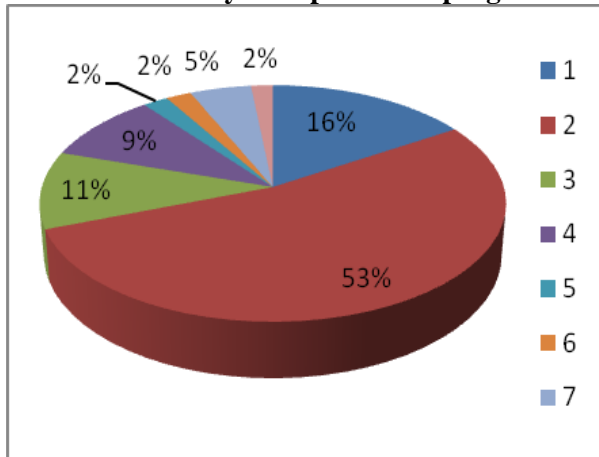
Did you know how to use the computers and the Internet before coming to the Technomatic?



Were you able to advance your career without this training?

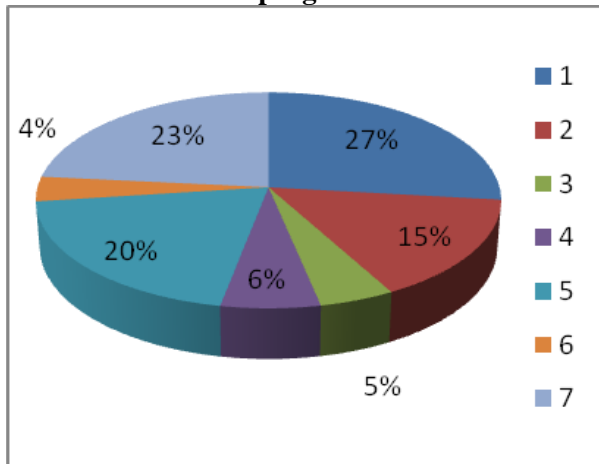


How would you improve this program?



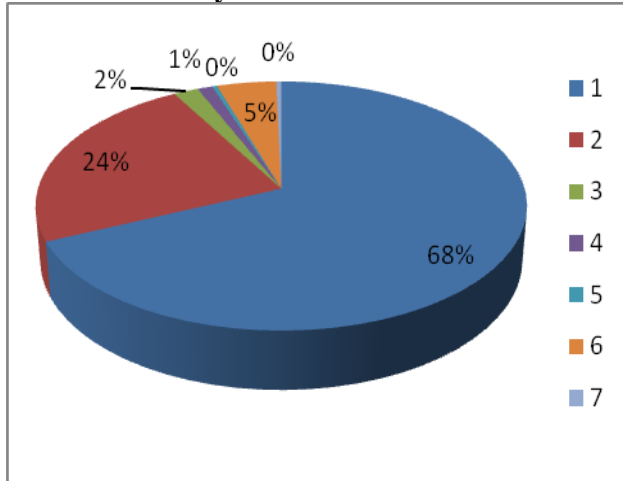
1. Add more software application trainings to the program
2. Add subjects and provide additional hours for instruction
3. Link graduates to specific job opportunities
4. Offer other services like phone cards and photocopies
5. Offer additional resources/tools for the instructor
6. Increase community awareness of the program offerings
7. Provide more space for technical classes (e.g. networking, systems management, cyber security, etc)

What will you do with the skills you learned in the program?



1. Improve my communication skills using email and MS Office software
2. Apply for a better job
3. Start a new business
4. Repair computers
5. Improve my teaching performance
6. Find more resources for my classroom
7. Use better and easier computations in my workplace

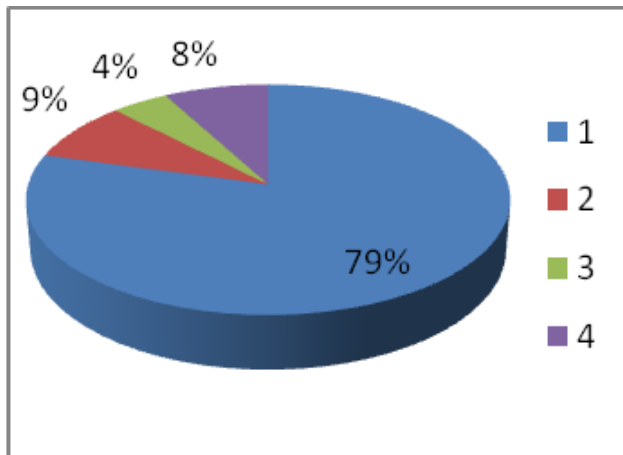
Would you return to the Technomatic as a full paying customer? If yes, what other courses would you want to take there?



NOTE: Most voucher holders said they would be interested in returning to the Technomatic and paying the full tuition for the following courses

1. Understanding the Internet and search engines to manage information
2. Programming in Java, C#, etc
1. Computer networking and system administration
2. One year certificate programs in software applications with high commercial demand
3. Laptop and mobile phone repair skills
4. Linux and open source programming skills

Other comments



1. I feel more confident about using computers and the Internet thanks to the program
2. This program should be expanded to more remote areas; possibly through distance learning
3. This is a good start in learning how to use information technology as a career
4. This program has empowered me to consider starting a tech based business

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