JOIN THE LIEN i³ CHALLENGE

The Lien Centre for Social Innovation is offering S$1 million for innovative ideas that can be implemented to create positive social impact.

🌟 What is the Lien i³ Challenge?

Our focus is to inspire ideas and innovation and to facilitate solutions to support the social sector. With this Lien i³ Challenge, we hope to incentivise and help innovators implement new and practical ideas for the betterment of the community.

🌟 What are we looking for?

We are looking for ideas that meet three main criteria:

- **INNOVATIVE.** The idea should be creative and original in at least some aspects of its application.
- **IMPLEMENTABLE.** The idea should be practical and implementable. The award money is to implement the idea.
- **IMPACTFUL.** The idea when implemented will create positive and significant impact on the social sector and the community.

🌟 Who can apply?

This competition is open to any individual, group or organisation in any country, especially within Asia. However, the idea should primarily benefit a community within Asia.

🌟 How can you take part?

**STAGE 1 IDEA OUTLINE:** Deadline 31 March 2009

Applicants are required to submit a one or two-page proposal setting out the idea and its innovativeness, expected impact and the implementation requirements. Please also include timelines, resources and risks. Please obtain an application form at our website, www.lcsi.smu.edu.sg.

**STAGE 2 IDEA DEVELOPMENT:** Deadline 31 August 2009

Following the submission of the idea outlines, a panel of judges will shortlist about ten applications. These shortlisted applications will be provided with advice, directions and S$1,000 each to develop the ideas further for a final round of judging to be completed by October 2009.

**STAGE 3 IDEA IMPLEMENTATION:** From October 2009

After the final round of judging, one or more (up to ten) projects or programmes will be finally selected for implementation. It is intended that the full S$1 million will be awarded.

The application form, rules and regulations for this i³ Challenge and additional details can be found at www.lcsi.smu.edu.sg. For enquiries, please contact Sharifah at i3challenge@smu.edu.sg or +65 6828 0823.
APOPO - Building a Rats-based Detection Technology with the Capacity to Detect Landmines

Beneficiary countries: Thailand/Cambodia, Southeast Asia

The Organisation
APOPO is a Dutch acronym for Anti-Personnel mines Demining Product Development. APOPO is a social enterprise that researches, develops, and deploys detection rat technology for humanitarian purposes. APOPO is a registered charity in Belgium and is headquartered in Tanzania.

The Theory /Problem
Cross-border communities on the Thai-Cambodian border are the most heavily mined and most neglected areas in Southeast Asia. Yet, humanitarian mine action is a difficult, dangerous and expensive task.

The Innovative Idea
Rats are traditionally viewed as pests in most societies. APOPO turns this stereotype on its head by training rats to detect mines in a wide-scale effort to push forward demining efforts in post-conflict countries. The team will introduce a detection technology that uses rats to enhance humanitarian demining efforts. There are potential spin-offs for tuberculosis screening, detection of improvised explosive devices, screening of cargo for contraband, etc. The innovation also turns the normal perception of rats as pests on its head.

How it Works
Mine Detection Rats (MDRs), also affectionately called HeroRATs, are a sustainable landmine detection technology, adapted to low resources settings. Rats have a highly developed sense of smell. They can detect the smallest traces of explosives emitted by the mines. Rats are intelligent creatures that also love to perform repetitive tasks for a small food reward. They live up to 8 years, giving a good return of the initial nine months training investment. And it is key that these rats only weigh a maximum of 1.5 – 2 kilos, and therefore they are at minimal risk to set off a mine. Trained rats work either on a leash searching for mines in the open field, or assess samples in an evaluation cage. The latter system has many potential spin-off applications. APOPO has already successfully trained rats to screen for pulmonary tuberculosis, by training rats to detect the smell of bacteria in human sputum samples collected from hospitals. Four staff will be selected from the communities to undergo a three-month training curriculum at APOPO’s base at the Sokoine University of Agriculture in Tanzania. Upon their return, they will be assisted by a technical on-site officer. The three-year project will involve community mobilisation efforts, training, mine action planning, fundraising for year 1, implementation and evaluation for year 2 and continued mine release for year 3. Cost-saving compared with traditional methods of mine detection is estimated to be 70%.

Steps taken to implement project
APOPO has begun talks with partner organizations in Thailand, such as the Population and Community Development Association.
Immediate challenges to project

• The lack of funding is the key issue. Demining typically works with million dollar budgets. However, by using a cost-effective local technology a great deal of work can be done with less funding (i.e. US$500,000 or more). Since demining is an expensive task, financing is the key challenge.

• Funding from the Lien i3 Challenge is a great start towards capacity building and setting up a framework for mine-action. However, the funds are insufficient to start up a mine action programme, which is why APOPO is seeking to first continue fundraising to a level of US$500,000 before beginning implementation.

• We have also been joined in our efforts by partner organisations such as the General Chatichai Foundation, Peace Road Organisation, Thai Mine Action Centre (TMAC), the Population and Community Development Association (PDA) and the Thai Campaign to Ban Landmines (TCBL).

APOPO is a humanitarian organisation, serving vulnerable communities. The situation in Thailand is different as the Thai military controls mine action. There is a strong need to cooperate with the military to be successful, but APOPO’s ultimate goal first and foremost is to serve the communities impacted by landmines.

• APOPO’s strategy is to create a consortium with the Thai Mine Action Centre (TMAC) and other partners to guarantee that international standards are met. The Geneva International Centre for Humanitarian Demining (GICHD) is now a partner of the project.

Challenges that have arisen, which were not anticipated when drafting project proposal

• Gaining acceptance by TMAC is key to the success of the project, as it is a branch within the government responsible for mine clearance. APOPO is well on the way to establishing a fruitful relation with the TMAC.

• There is an absence of quality information on areas that are likely to be heavily mined. To remedy this situation, we are currently developing a non-technical survey. However, the survey will take at least six months to be completed. Mine clearance consists of various stages, of which a non-technical survey is the first step. This survey will provide a clear picture of the mine problem at the Thai-Cambodian border and will help to focus mine action in areas of high risk, while also highlighting areas that may have very little risk. It will reduce the scope of the mine problem in Thailand considerably. Our work will also help support TMAC and the Thai authorities in general in their efforts to tackle the mine problem. Standardised procedures for such non-technical surveys have been developed by the GICHD.

Plans for engaging with community

• APOPO’s short-term goal is to execute a non-technical survey. Thereafter a national Land Release strategy will be devised.

• GICHD will be assisting us in conducting this non-technical survey.

• The work will involve interacting with civilians, going through databases and working with local institutions to acquire quality information.

Community response to the project

• Thai partners will go to Tanzania to be trained on the use of rats, while the non-technical survey is being conducted.

• Community response and participation in the project will then be further developed. The initial phase of building trust and improving transparency is absolutely critical to community engagement.
GOONJ: Turning City Waste into Useful Materials

Beneficiary country: India

The Organisation
GOONJ enables the recycling of urban waste clothing and materials so that the poorest sections of society in India can make use of these resources. GOONJ has several initiatives including “Cloth for Work”, “School to School”, “RAHAT” for flood relief, “Not Just a Piece of Cloth” and others. GOONJ hopes to advance an ownership model in which the masses are involved in development work, so that the villagers become more resourceful and practical solutions can pave the way for education.

The Theory /Problem
Urban areas in India are facing a glut of waste: specifically that of unwanted cloth. Meanwhile villagers across various states face a shortage of basic needs such as winter clothing and school uniforms, as well as sanitary napkins for girls and women, leading to all manner of social and psychological problems associated with shame, status and immobility during a young woman's monthly cycle.

The Innovative Idea
GOONJ hopes to advance an ownership model in which the masses are involved in development work, so that the villagers become more resourceful and practical solutions can pave the way for education.

How it Works
While urban communities are trained to become more aware of the need to recycle waste into products/ materials that can be re-routed to rural communities, rural communities are encouraged to participate in rural development programmes, from road repair to river cleaning and plantation work, in exchange for cloth and sanitary napkins (Cloth-for-Work Programme and Napkins Programme) – a much needed resource for daily life.

Steps taken to implement the project
GOONJ has:
• Analysed areas where the project will be implemented;
• Searched and selected appropriate local, grassroots partners (non-governmental organisations) in the states where the project will be implemented;
• Outlined two programmes, “Cloth-for-Work” and “Napkins Programme” (sanitary napkins for women), which are already in the early implementation phase after initial trials and testing on the ground were conducted to assess cultural attitudes, taboos and resistance to such initiatives on the ground amongst rural communities.

Challenges that have arisen in implementing project
The immediate challenges are in two distinct areas i.e. the villages and the cities. In the villages, the challenges are:
• Communicating the significance of the work to partner groups. Most grassroots groups, even those that work closely with women, have initially been hesitant about the work, owing to the taboos, shame and silence associated with women,
menstruation and hygiene;
• Raising awareness about the project among grassroots organisations and engaging in capacity training for their staff.

In the cities the challenges are:

• Capacity-building to implement the project while sourcing for resources such as space, manpower, materials, etc.
• Securing a supply of materials from unreliable sources, requires forward planning to ensure that materials reach rural communities.
• Constantly needing new target audiences, new markets and new strategies for getting more materials from across the country.

**Challenges that have arisen, which were not anticipated when drafting project proposal**
None so far. Challenges may arise as the project moves further in its efforts to scale up.

**Community response and participation in the project (already underway)**
The following are some examples of the success of the Cloth-for-Work project in different parts of the country:

**In West Bengal:**
Following the Aila Cyclone that hit the Sunderbans area, GOONJ is working closely with local organisations in some of the affected islands. Three such organisations are:
• Mollarpur Naisubha
• Halderchak Chetna Welfare Society
• Nimpith Handicapped Welfare Society

GOONJ initiated the Cloth-for-Work programme in Matmulia, Swaska, Purbabijaybati and Hanarbati villages.

• About 100-150 people from each village participated in road repair and plantation work.
• People received cloth and other materials in return for taking on community work in their villages.

**In Orissa:**
• In Orbaer Singh Gram panchayat, thousands of villagers from more than 30 villages took on the work of restoring the Gheri Bandh plantation, to plant mango and coconut trees among other species.
• A widespread village sanitation drive was implemented which included cleaning the village pond and roads.
• The drive also included 200 children from 15 schools in the area.
• GOONJ initiated these projects with local partners.
**Green Earth Concepts: Barrett Steam Pump**

*Beneficiary country: Cambodia*

Green Earth Concepts is an NGO that incorporates environmental innovation with management based on social and economic sustainability. The organisation's goal is to assist communities to obtain funds for projects based on a vision shared and understood by all members. GEC's work is currently in Cambodia, where it hopes to improve the environment and bring about positive social impact by employing marginalised peoples in farming and paddy rice cultivation.

Green Earth Concepts hopes to alleviate the perennial problems of farming in countries such as Cambodia by introducing the Barrett Steam Pump System, which will enable farmers to control irrigation and water supply at a low cost through the solar generation of hot water, in a cooperative setting that will encourage farmers to pay for services and products by supplying harvested crops instead of financial payment.

**The Theory /Problem**

Lack of water supply for irrigation perpetuates poverty in rural areas.

**The Innovative Idea**

Offer a green and financially sustainable alternative to the fossil-fuel operated pumps that farmers currently use. Community water-management on 3 levels of the social chain, namely: in agriculture irrigation, in handling the business side of agricultural goods and sterilisation of drinking water.

**How it Works**

The system enables farmers in 4 selected communities to control irrigation and water supply at a low cost through solar generation of hot water. The system will be maintained in a cooperative set-up in which farmers will be encouraged to pay for services and products by supplying harvested crops instead of financial payment. Farming costs will be reduced by 5 to 10% and up to 40-60% of water will be saved compared to current usage.

**Steps taken to implement project**

Green Earth Concepts has:

- Registered its non-governmental organisation;
- Met with Walt Barrett, the inventor of the Barrett Steam Pump, to determine what steps need to be taken to implement the research and development phase of the project;
- Tested four prototypes using various renewable sources in northern United States;
- Arrived at a consensus with Mr Barrett that a detailed instructional video will be sent to Green Earth Concepts, demonstrating how to replicate pump manufacturing and testing based on Mr Barrett’s specifications;
- Identified a suitable location in Cambodia to establish a mechanical workshop to manufacture and assemble the pump;
- Begin independent R&D and testing of the Steam Pump before unveiling it in Cambodia.
Challenges that have arisen, which were not anticipated when drafting project proposal

- However, time spent on securing the grant and conducting R&D poses challenges with regard to introducing the pump as a solution for irrigation needs during the dry season in Cambodia (January to June).
- Paddy rice farming takes 3½ months to be floated progressively. “Floated progressively” means that water is pumped progressively to the paddy field within a particular period of time. Typically water in the paddy field has to be maintained at a certain level during a period of 3½ months. Pumping delivers water in cycles to maintain the appropriate water level for the rice to grow. As an example, it is reported that water is pumped at least 10 times when rice is being grown to maintain water at the right level. Currently, most of water is leaking into the ground and has evaporated. So it has to be re-filled progressively in cycles. While solar energy remains a prime energy source, we believe that other renewable energy sources should be explored to offer farmers pumping solutions throughout the 24-hour cycle.

Plans for engaging with community

GEC’s long-term goals are:
- To manufacture the pump for project implementation in the villages;
- Train women as entrepreneurs tasked with promoting the pumps that will be in operation, from home villages to farming communities;
- Women will also be trained at the village level to act as intermediaries in developing water management solutions, such as irrigation and safe water production, with input from the farmers.

Community response to the project

Farmers were provided with data from a survey on the following:
- pumps available in the market;
- what it costs to operate the pump;
- water flow needed for paddy rice farming;

Based on the survey data, the farmers are amenable to the project’s implementation.

Community contribution or participation in project

- The Pump is not physically present in the community yet.
- GEC will do demonstrations for farmers in order to get their input on how the project can be improved and how community needs can be met.
Habitat For Humanity: Interlocking Bricks

Beneficiary country: Batam, Indonesia

**Habitat for Humanity** (HFH) is a non-profit Christian housing organisation with a mission to eliminate poverty housing worldwide by building simple, decent houses with the help of the homeowner families themselves and volunteers.

**The Theory /Problem**
Housing charities in the region are challenged by the need to choose between the more expensive high-quality, eco-friendly bricks and the cheaper but poorer quality slab-bricks in the market, often choosing the latter for its lower price. How can we reconcile eco-friendly housing initiatives with meeting the financial constraints of the beneficiaries?

**The Innovative Idea**
The team proposes to implement a financially self-sustaining model that provides employment to the local population and to develop a resource centre that continues to contribute to low-cost construction in this region and beyond.

**How it Works**
A brick factory and research station will be set up. The team will begin initially by bringing in “Interlocking Brick” technology (a building method using bricks designed to lock into each other), which will use existing ideas from Habitat for Humanity's work in the Philippines for the benefit of Batam, Indonesia. Subsequently, the team will experiment with other resources such as using cow waste and mineral plastics as raw materials for building houses in the region.

**Steps taken to implement project**
- Habitat for Humanity Singapore has entered into discussions with local partners in Indonesia;
- Habitat is also further developing existing research on design by engaging relevant specialists in Chiang Mai and Bangkok.

**Immediate challenges for the project**
- Habitat will need to work to assure that its Indonesian counterparts buy into the idea and adopt the technology.

**Challenges that have arisen, which were not anticipated when drafting project proposal**
- There have emerged many more variations in the technology and approaches for implementation than anticipated. For example, Chiang Mai's model is different from the model in Cambodia.

**Plans for engaging with community**
- Habitat will engage its house partners on the ground once actual construction work begins towards the end of 2010.

**Community response to the project**
- Habitat's Indonesian counterparts believe that these new developments will enable them to build houses more efficiently and within shorter time-frames.
- The community has also provided feedback that Habitat's solution is innovative, particularly with regard to the possibility of
implementing multi-storey constructions.

Community contribution or participation in project
• Local partners suggested another building methodology for Habitat to look into, namely, the Integrated-Block method (which are blocks built around steel reinforcement rods), which Habitat will study for feasibility of implementation;
• Local partners are also revising their target upwards for the number of houses to be built.

International Bridges to Justice (IBJ): Criminal Defence Training
Beneficiary country: Various Asian countries

International Bridges to Justice (IBJ) is an independent, non-profit and non-governmental organisation founded in 2000 that strives to protect due process and achieve fair trials for the accused throughout the world. In countries where governmental commitment to human rights principles has, as of yet, failed to meet its practical goal, IBJ fills the gap between human rights legislation and domestic implementation.

Criminal justice systems across the world continue to be plagued by problems such as arbitrary detention, torture and an inadequate knowledge of the rights of defendants. IBJ hopes to establish a legal resource hub for criminal defenders and justice practitioners across Asia by taking a collaborative and proactive approach with Asian governments and fostering leadership and innovation in the area of criminal justice reform.

The Theory /Problem
Despite codified international criminal justice conventions, arbitrary detention, torture, and denial of access to legal counsel continue to be the norm in many parts of the developing world. There seems to be a gap between these societies' aspirations to redress such problems, evidenced by their de jure adoption of domestic legal reforms, and the de facto reality. Notwithstanding the willingness of criminal defence lawyers to commit their time and energy towards fulfilling the promise of progress, the lack of training and support for those lawyers hinders their efforts.

The Innovative Idea
IBJ is catalysing the evolution of the criminal justice system in Asia by building a comprehensive legal resources hub in Singapore. IBJ will take a collaborative and proactive approach with Asian governments, fostering leadership and innovation in the area of criminal justice reform. It will aspire towards a multidisciplinary training model across the region in collaboration with other legal and academic institutions.
How It Works
This hub will conduct in-person trainings and also offer online resources for practitioners' easy access. Participants in the trainings will include 11 practitioners in Asia who have been selected through a competition called JusticeMakers. They will receive funding, training, and a network of support to implement their access-to-justice initiatives, each of which have been designed to advance reforms in their respective justice systems.

The project is being implemented in three phases. Months 1-8 have focused on building the hub's operational infrastructure, including securing office space and staff, and the selection of the eleven JusticeMakers Fellows. Months 9-16 will see the 11 selected JusticeMakers Fellows paving the way for interaction with their local justice systems. At the same time, the online training platform will be evaluated. Months 17-24 will focus on the evaluation of the Fellows' projects and packaging of online courses.

Steps taken to implement project
Since receiving the Lien i3 award, IBJ successfully completed the 2010 Asia JusticeMakers Competition. The next step will be to fund and train the 11 selected legal rights entrepreneurs. Management and training of the class of 2010 JusticeMakers Fellows will take place in Singapore. Preparations for the competition included:

• upgrades to the website;
• creation of a competition partnership network spanning nearly two-dozen Asian countries;
• development of tools and resources to enable the partners to assist with promotion; and
• confirmation of judges/screeners for project evaluation.

The judges included:

• Daniel R. Fung – President of The Board of directors of International Bridges to Justice
• Karen Tse – CEO and Founder of International Bridges to Justice
• Subhas Anandan – Head of The Criminal Law Department at KhattarWong
• Persida V. Rueda-Acosta – Chief Public Attorney of the Philippines Public Attorney's Office
• Professor Howard Hunter – President and Professor of Law at Singapore Management University
• Philip Jeyaretnam S.C. – Partner in The Law Firm of Rodyk & Davidson LLP
• Hon. Wilhelmina M. Wright – Judge at The Minnesota Court of Appeals
• Sidharth Luthra – Senior Advocate in India
• Teri Ng – Retired Attorney, formerly Head of Microsoft’s Legal Department in China

There were 112 applicants from 22 countries: Afghanistan, Azerbaijan, Bangladesh, Cambodia, China, Georgia, India, Indonesia, Iran, Israel, Kazakhstan, Kyrgyzstan, Malaysia, Mongolia, Myanmar, Nepal, Pakistan, the Philippines, Sri Lanka, Thailand, the United Arab Emirates, and Vietnam. The winners were:

• Muhammad Waqas Abid (Pakistan)
• Oanh Hoang Ngo (Vietnam)
• H M. Harshi Chitrangi Perera (Sri Lanka)
• Ajeng Larasati (Indonesia)
• Rasselynn Jaye Garcia de la Cruz (the Philippines)
• Rasul Agagasan Jafarov (Azerbaijan)
• Nana Chapidze (Georgia)
• Yasmeen Shariff (Malaysia)
• Bijaya Chanda (India)
In concert with the JusticeMakers competition, IBJ has also launched the IBJ Legal Training Resource Centre. Through this website, lawyers worldwide can access, on-demand, a curriculum of interactive eLearning courses on criminal practice that IBJ is developing. These lessons, covering both general and country-specific subject areas, aim to empower defenders to safeguard the rights of the criminally accused more effectively.

Additionally, through JusticeMakers and the Legal Training Resource Centre, IBJ strives to connect criminal defence attorneys to one another, both as a network of support, and as resources for practical expertise. For instance, participants are invited to contribute their knowledge to the IBJ Defence Wiki, a collaboratively-edited site with a growing number of articles covering a diverse array of subjects relating to criminal defence. Lastly, IBJ is opening the Singapore Justice Training Centre. Initial activities have included:

- establishment of IBJ as a registered entity in Singapore;
- procurement of office space; and
- preparation for a two-week training summit that will include IBJ Fellows from around the world as well as the 2010 Asia JusticeMakers Fellows.

**Immediate challenges to project**

IBJ's desire to launch a JusticeMakers competition in Asia posed major challenges, given the continent's cultural diversity. In light of our inability to effectively communicate in every language spoken by the diverse populations of Asia, a decision was taken to conduct the application process solely in English. Unfortunately, this tended to exclude many legal-entrepreneurs working at the grassroots level. To some degree, a partnership network has been able to mitigate this challenge through translation services. Still, there were several countries where partners lacked the capacity for such services, or where partners were lacking altogether. This was particularly true in Myanmar, Vietnam, and Laos. Nonetheless, IBJ received applications from many such countries, including a successful application from Vietnam.

Language barriers also present challenges to the development of the Legal Training Resource Centre. This is partially mitigated by IBJ's chosen platform, MOODLE, a popular open-source learning management system that permits content management in multiple languages (English, French, Mandarin, and Khmer, to name a few). To satisfy the demand for training materials in several different languages and adaptable to differing justice systems, IBJ has adopted a two-track approach: (1) general courses developed primarily in English and translated into other languages wherever possible, covering legal concepts and best practices which lend themselves to application across jurisdictional borders; and (2) country-specific curricula which will be developed in conjunction with bar associations and other legal experts in those countries.

Negotiating the tension between a need for transparency in conducting the JusticeMakers competition and ensuring that its participants felt secure sharing their ideas for legal reform was a second challenge. From a strategic standpoint, IBJ wanted as much information as possible to be public, so that the wide availability of these ideas could provide a stimulus for collaboration. By listening to users' feedback, however, we came to understand that we needed better tools to ensure privacy options, both for users and their ideas.

Power outages among users and intermittent Internet access have also been challenges for IBJ's JusticeMakers and eLearning projects. To this end, IBJ is selectively targeting countries with stable power supplies and high rates of Internet penetration to...
advance its eLearning project. IBJ’s attempts to conduct outreach for the JusticeMakers competition by other, low-tech means (e.g. paper applications intended to be submitted by post), however, met with little success.

The shortage of financial resources continues to pose challenges in all aspects of IBJ’s operations. Despite having to work within budgetary constraints, IBJ staff in Singapore successfully procured a donation of temporary office space.

IBJ’s ability to compensate for financial shortfalls in the JusticeMakers competition is due to the goodwill that IBJ has built with key partners. The professional quality of the JusticeMakers website is largely due to the generosity of pro bono software developers. Promotional events in target countries were financed through partner contributions. Management of the competition has been executed mostly by volunteers in Geneva and Singapore.

**Challenges that have arisen, which were not anticipated when drafting project proposal**

IBJ met unexpected difficulty in recruiting JusticeMakers Fellowship applicants from criminal justice communities in countries surrounding Singapore. Relatively few applications were submitted from Laos, Myanmar, Malaysia, Thailand, and Vietnam. Even so, in the end, one Malaysian and one Vietnamese project each were among the successful applications.

**Community response to the project**

We received 112 applications from 22 countries. This was a significant improvement from the 64 applications for the 2008 pilot competition. Our work with partners was also very successful. Without the promise of pay, exposure, or any other benefit, legal aid groups and NGOs throughout Asia demonstrated a willingness to promote JusticeMakers as part of their existing mission. Fifty-six partners worldwide joined IBJ in their support of this year's competition.

**Community contribution or participation in project**

Lawyers, defenders, and humanitarian workers worldwide eagerly shared their experiences through the JusticeMakers Fellowship application process. Equally encouraging has been the response to IBJ's plan to use Singapore as a training hub. IBJ has held regular meetings with various stakeholders in Singapore, many of which have resulted in offers of additional support and introductions to key allies.
Mira: Intermediary for Micro-Philanthropy

Beneficiary country: Cambodia / Southeast Asia

Mira is a non-profit organisation dedicated to empowering every child to reach his or her full potential by making education universally accessible. The organisation uses online platforms to fund innovative social projects that benefit children around the world.

Lack of access, or financial means, continue to be the most significant reason for why up to 18 million children in Southeast Asia are not enrolled in schools. Mira's goal is to make education universally accessible by creating a personalised scholarship fund online that is self-managed and data-driven, enabling a collaborative sponsorship model that links funders to a particular student, with real-time updates from both parties.

The Theory /Problem
More than 18 million children in Southeast Asia who are of primary-school age are not enrolled in school. While reasons for this are not conclusive, available studies point to the minimal resources that are needed to incentivise them to remain in school e.g. U.S.$6 for uniforms in Kenya. However it appears that giving scholarships, rather than simply defraying costs, is a specific motivator. This also has a multiplier effect in encouraging friends of recipients.

The Innovative Idea
Similar to Kiva Microfunds and DonorsChoose (international micro-loan organisations), Mira is next in line to push for a donor model that is more personalised, self-managed and data-driven by leveraging on information flow through the web. Mira's concept facilitates an affordable and personalized scholarship fund, collaborative sponsorship between funders for a particular student and real-time updates from funders and candidates.

Implementation
Mira's base operations are in California, U.S. and Singapore. Starting with its first project sites in Cambodia, it focuses on four objectives for the year:
1. Recruiting site partners;
2. Improving online service based on funder needs;
3. Fund-raising and
4. Identifying corporate sponsorship opportunities. In the meantime, the website is going through the testing stage with a prototype ready by July 2010 and the full official release slated for January 2011.

Steps taken to implement project
• Since receiving the Lien i3 Award, Mira has been working on building its product – an innovative online system allowing
everyday donors to fund education-related projects in developing countries.

- Mira is also interviewing a myriad of NGOs to establish what needs exist on the ground.
- The initial model Mira intended to use was to raise funds student-by-student by posting profiles related to school costs online.
- After speaking to credible NGOs in Cambodia, the team realised there would be selection bias and other unforeseen issues.
- Another model was then implemented, which will work on a group or project basis with at least 5 children in each group.
- Mira’s core team members also undertook trips to the beneficiary country (Cambodia) to undertake a needs assessment of several NGOs evaluating their financial and operational credibility.

**Immediate challenges to project**

- The process of developing a product and bringing it to the market is the first challenge.
- Ensuring that the product Mira creates will be useful to NGOs on the ground is the second challenge.
- The process of working across two countries to address operational development has been challenging.
- Mira’s project is a platform or conduit for funders and NGOs to be matched. The challenge with this is that donors want accountability and transparency, as well as impact, while NGOs struggle to manage relationships, effectively present their projects and receive funding.
- Building a tool that will make this relationship more effective is also a challenge.
- Identifying genuine NGOs and making sure the work is legitimate requires a lot of time on the ground.

**Plans for engaging with community**

- The platform is designed to allow for NGOs to first enter the U.S. donor market and subsequently to expand worldwide. U.S. donors prefer to go through U.S.-based NGOs – a role that Mira fulfils because of its adherence to strict government regulations pertaining to philanthropic organisations.
- Mira is essentially a free tool for NGOs, who will not have to pay anything to use the service.
- Overheads are low and applying for funding via Mira should considerably shorten the donation process.
- In essence, the NGO community will be given the tools to become actively engaged in receiving donor funds for their education-centred projects.
- If NGOs have their own website, Mira can build tools for them to advertise their own website as well, so that the two sites are integrated.

**Community response to project**

- NGOs are keen for this to work because funding is a perennial problem.
- Many more donors are looking to donate online and we can also meet this need.
Shilpa Sayura Foundation: The Shilpa Sayura e-School

Beneficiary country: Sri Lanka

Shilpa Sayura is a non-profit organisation dedicated to using information and communication technology (ICT) and online tools to educate and empower Sri Lankans. The organisation uses e-Learning, develops the national curriculum, provides local language training, self-training programmes and tele-centres to reach out to the poorest with no access to educational resources.

The Theory /Problem
People in Sri Lanka's rural areas lack teachers, books and educational resources leading to unemployment and poverty. While the government provides free schooling, only 2.7% of the national budget is apportioned to education. It also does not meet the needs of an ethnically and linguistically diverse population. As a result, failure rates for the GCE O-level ranges from 50-70%, leading to early school drop-out and a lack of employment and higher education opportunities.

The team proposes to transform 600 existing telecentres that facilitate e-learning and self-learning of the national academic curriculum to a new domain of digital knowledge that develops rural education in Sri Lanka. The system facilitates better learning amongst rural youth. Research has also shown a positive impact on examination results amongst rural youth who use the e-learning centres. The system focuses on the weakest academic areas for students, which include Math, Science and English. It also expands the topics of study to include sustainable agriculture, renewable energy, health and environment.

The Innovative Idea
The project will bridge the gap in communicable curriculum and will motivate youth and adults to engage in learning using information and communication technology. This will be done in an open, participatory manner that sidesteps logistical constraints and reaches the grassroots.

How It Works
Months 1-6 focus on project formulation, equipment and software upgrade, as well as Tamil and Sinhala content synchronisation. Months 7-12 will focus on integration, testing and deployment in 50 centres. The project originated with the e-SDI Shilpa Sayura Project that was funded by the Sri Lankan government's Information and Communication Agency (ICTA) and implemented in 150 centres with 8000 lessons as its content base.

The team proposes to upgrade the existing curriculum by adding 14000 lessons with new subjects, video lectures and Tamil content. The system is provided free to Telecentres in a manner that enables e-learning in rural communities. For their part, Telecentres provide these learning tools at a subsidised rate, thus generating sufficient revenue to remain sustainable. The content creation and development process takes place on an on-going basis, taking into account changes to the national curriculum and community needs.
Steps taken to implement project

- With the Lien i3 Award, Shilpa Sayura has gone on to set up a new entity called “Shilpa Sayura Foundation”, mandated with streamlining and focusing its vision, as outlined above.
- The Foundation team conducted a needs assessment by visiting 100 telecentres and obtained feedback and operational data.
- The team has reviewed existing educational content at these telecentres and is in the midst of creating new content, as well as training content developers to use new technologies.

Immediate challenges to project

- The new social model symbolised by the formation of Shilpa Sayura Foundation has diverse key stakeholders living in areas that are geographically far apart. The Foundation has moved from a single office model to one which allows for a wider distribution of human resources. While working with new technologies allows for greater breadth and reach, this transition has been a challenge.
- From the feedback the team has received, there is a need to improve the current content base and create more interactive content.
- Technology used in the Shilpa Sayura project is being improved and needs to keep up with current methods of instruction.
- Although the focus has been on Telecentres, the team has found that there is potential in engaging Tamil communities who live in estates and in the post-conflict areas of northern and eastern Sri Lanka.
- Budget limitation for hardware has also been a problem.

Plans for engaging with community

- The Foundation has already been actively engaged with the community through Shilpa Sayura 1 and 2 – initiatives that focus on education in Sri Lanka.
- New content will be distributed in August 2010.
- Research is being carried out as a part of the implementation phase to obtain feedback from the community on the impact of the system and future needs.
- Telecentres are being identified to act as regional leaders as the project expands its scope.

Community response to the project

- The communities have responded by acknowledging that the current project is innovative.
- A survey we conducted among 150 telecentres found that over 9000 students have used Shilpa Sayura e-Learning. They would like the project to expand.
- As a result of the existing use of the Shilpa Sayura programme, telecentres have grown in popularity and their revenue has increased as a result.
- Some telecentres are now engaged in content development for Shilpa Sayura.
- The newly created content on Modern and Sustainable Agriculture has benefitted rural farmers, especially women engaged in agricultural work.
- There is a growing demand from telecentres island wide to replicate the project in their communities.

Community contribution or participation in project

- Revenue opportunities have been created for unemployed volunteers working in the telecentres, content developers, teachers and telecentre operators who provide local support services.
- The Shilpa Sayura Community contributes by creating content, implementing programmes and providing support.
- Students who use the content provide feedback, leading telecentres provide implementation support and some of the telecentres are coordinating creation of content with teachers.
• An open forum has been set up so that participants can discuss and contribute to Shilpa Sayura’s efforts towards developing content.
• The project is also providing opportunities for telecentres to derive micro revenue from the project, which has increased their participation and sustainability.

Ngee Ann Polytechnic Students: Intelligent Walking Aid

*Beneficiary country: Singapore / Asia*

Mainmunah Bte Nokman and Lim Yu Ling are graduates of Singapore’s Ngee Ann Polytechnic School of InfoComm Technology. They conceptualised the Intelligent Walking Aid as a tool that can “talk” to visually-handicapped users. The pair is currently working with the Singapore Association of the Visually Handicapped (SAVH) to produce an improved prototype that could be available commercially in about two years.

**The Theory / Problem**

It is a challenge for the visually handicapped to move about on their own and existing mobility training by the Singapore Association for the Visually Handicapped (SAVH) encourages the visually handicapped to memorise the routes they will be using every day, restricting their opportunities to venture into new places on their own.

**The Innovative Idea**

The team proposes to develop a system to allow the visually handicapped to navigate their way around with the help of a hearing aid that makes use of Radio Frequency Identification technology (RFID), assisted-GPS technology as well as digital compass. A stick device allows users to get information about their current location, directions to destinations and their orientation. The user will carry the walking stick and the mobile device. The RFID reader will pick up the RFID tags on the way and the mobile device will tell the user where he is heading. The idea will introduce a new use for RFID, which is normally used for item tracking and commerce. Braille buttons will also be integrated into the walking stick.

**How It Works**

The project has two phases of implementation, the first of which has been implemented at Ngee Ann Polytechnic’s School of InfoComm Technology. The second phase extends the system implementation to the whole of Ngee Ann Polytechnic. If the pilot proves successful, the team will implement the system in SAVH. The team intends to set up a social enterprise that makes use of technology to help the visually handicapped.

**Steps taken to implement project**

• The team has divided the phases of development according to a time frame of one year so that major milestones will be achieved by the 4th, 8th and 12th months.
• The team has changed its focus from commercialisation to more research and development.
• This shift was made based on feedback received from SAVH as well as testers of the product. This would allow the team to enhance the functions of the walking stick to better suit the user.
Immediate challenges to project
- As the team has set up what is a relatively new organisation, it does not have the proper environment to carry out research and development.
- The team’s alma mater, Ngee Ann Polytechnic has provided a suitable office area so that work can be carried out.

Challenges that have arisen, which were not anticipated when drafting project proposal
- Initially the team proposed to have the product as a separate piece of equipment.
- After receiving feedback from SAVH, the team realised that the visually handicapped community are reluctant to use an instrument that requires technological know-how and would prefer the project to be an add-on to their existing mobile phones.
- With new technology platforms being created all the time, the challenge is to consistently check programme codes to make sure there is compatibility with the old models of mobile phones.

Community response to the project
- The team began developing the project as a final year project at the School of InfoComm Technology in Ngee Ann Polytechnic.
- Lecturers supported the efforts and saw the potential for it to work in a more expanded form.
- The team also met with SAVH, which gave further input to ensure that the project would be more user-friendly and feasible for the visually handicapped.
- The community has generally responded to the initiative positively, by providing support and encouragement in these early phases of research and development.

Community contribution or participation in project
- SAVH has been involved from the early stages of the project to ensure that the final product will be suitable for the target audience, namely the visually handicapped community.