



kopernik

Annual Report 2011

spreading **technology** - improving lives

Letter from **the Co-Founders**

Dear Friends of Kopernik,

It's been just two years since we launched Kopernik and during this time we have directly reached 63,000 people in 11 countries with life-changing technology. The demand for the products and services we offer is bigger than we anticipated and we have only just begun to realize our potential for big and bold impact.

Over the past two years we have witnessed a tremendous increase in the range of technology designed for the developing world and there are more and more people and institutions involved in solving some of the biggest challenges facing the world today. This is indeed a great development.

When we first started Kopernik we were so excited about all the different technology that had the potential to truly improve people's lives. However, we soon realized that the technology itself is only one part of the equation. Technology, if it doesn't reach those who need it, is not going to have any impact. And without effective distribution mechanisms, the technology has no chance of reaching those it was intended for.

We quickly learned that distribution in the last-mile is very complex. Reaching a capital city in a developing country is one thing, but how do you reach those remote communities that are unreachable by road or isolated by heavy rains for months on end? These are places where there are no couriers, no postal system, no shipping agents and no technology stores. And the further and more remote you get, the more expensive a product becomes – because transportation is so expensive. And yet, people in these areas are typically poorer than their city counterparts and more in need of these products. How do we make the technology accessible by the very poor in many last-mile locations where there are often no sophisticated financial services such as micro-finance? And what if the products that traveled these great distances don't perform as expected or break? What can people do about it?

These are the difficult issues that we are addressing at Kopernik. It's still early days but we're seeing encouraging patterns. We already know that partnering with local civil society organizations that are trusted by their communities, understand the local needs and have existing networks in our target last-mile communities is an effective way of distributing life-changing technology.

We have learned that there is no one right way of distributing technology. It varies by location and the socio-economic status of the end users. And it's our local partners that are the ones who know best what's going to work within their specific context. That means that we need to be open to working with a range of distribution methods, including consignment, through sales agents, village entrepreneurs, rental schemes or direct distribution by our local partners.

Central to our philosophy at Kopernik is that we view the poor communities we work with as our customers and we want them to be satisfied. This means constantly asking for their feedback and rating of the technology, which we then publicly share – be it good or bad - on our website – Amazon.com style. This way, Kopernik is creating a vibrant technology marketplace for the developing world, where promising innovations will be further promoted, by virtue of customer satisfaction.

We're only two and have a lot to learn, but we're constantly striving to figure out how to best solve the fundamental distribution challenges in the last mile and get many more technologies to people who need them. We are excited to share our achievements with you in this, our second Annual Report.

We hope you'll continue on this journey with us in the coming year and wish you all a very happy, healthy and prosperous 2012.

With gratitude,

Ewa and Toshi

Ewa Wojkowska and Toshi Nakamura
Kopernik Co-Founders

Our Achievements in 2011

This year we reached **43,000 people in 9 countries through 23 projects**. That brings our total reach to **63,000 people in 11 countries through 41 projects** since our launch in February 2010.

We have distributed a **wide range of technology** including solar lights, solar powered hearing aids, obstetric kits, Q Drums, water filters, drip irrigation kits and clean cook stoves to communities across the developing world.



We rolled out a **consignment model of technology distribution and established an ongoing partnership with PEKKA** (an organization that empowers women who are heads of their households) in East and West Nusa Tenggara, Indonesia. Kopernik and PEKKA have trained women heads-of-households to become technology agents. The women now pick the technologies most needed in their villages, Kopernik provides technology – water purifiers, stoves and solar lights - to them on consignment and the women sell them in their communities earning a commission from each sale.



We **launched our new-look website** in English and Japanese with a greater variety of features and information.

After the devastating earthquake and tsunami, Kopernik **immediately responded to the needs of the victims of the disaster** by providing nearly 2,500 solar lights, solar-powered hearing aids and solar battery chargers.

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We **secured further corporate and foundation support** from partners ExxonMobil, Daiwa Securities, Russell Investments Japan, ETIC, Winroader and IDEA International. We also embarked on **new corporate and foundation partnerships** with Worldwide Support for Development, Ahimsa Brands, Nikko Asset Management and Silver Spring Networks.

There was **increasing recognition among our peers**. Co-founder Toshi spoke on a panel at the **Clinton Global Initiative** alongside Chelsea Clinton and Geena Davis about the link between technology and women's empowerment. Additionally, both Toshi and Ewa spoke at **TEDx** events in Japan, Indonesia and Poland. Major stories about Kopernik's work appeared in the **Huffington Post, CNN, NHK** and other outlets.



We **instituted evaluations of our work** by partnering with leading academic institutions such as **Columbia University** and the **Thunderbird School of Global Management**.



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Notes from the Field

Empowering Indonesian women with technology and business opportunity

By Cindy Nawilis, Kopernik Project Officer, Indonesia

In the villages of the Indonesian province of Lombok, Kopernik is providing single women heads of households with an opportunity to improve their lives. The women now have the chance for additional income by earning commission from selling fuel efficient cook-stoves to their community. Here at Kopernik, we call these women “technology agents”.



A technology agent in Lombok

The technology agent program is a very effective means of distributing technology to last-mile communities that is being rolled out in different parts of Indonesia with our partner organization PEKKA - an Indonesian NGO that empowers marginalized women heads of households in 19 provinces across the country. Many of the PEKKA members are widowed or neglected wives who are left with the task of raising a family on their own in a society that almost never values women as the head of a household. Most of them are poor (some with income less than one US dollar per day) and work as farm laborers or small traders selling vegetables, fruit, and snack foods.

About 50 PEKKA members in Lombok have now become technology agents selling the fuel efficient cookstoves (initially received on consignment from Kopernik) within their communities. The technology agents received training at the beginning of the program to learn about product maintenance, sales, and basic accounting. While initially the agents were going door-to-door to promote and demonstrate the stoves to neighbors, friends, and family, now they prefer to “socialize” the product

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in groups. Two or three agents invite many women to a gathering at a predetermined time and place and demonstrate the stoves to all attendees at once. The agents report that this “socialization” method works much better, as they have very little to do other than demonstrating how the stove works—the attendees usually do the talking among themselves about the benefits of the stove compared to the ones they have now. And most of the time, they convince themselves that it’s a worthwhile purchase without any push!



Example of a typical group socialization

400 cookstoves have been sold to date since the partnership began a few months ago. Additional earnings from the sales have allowed the women to purchase schoolbooks for their children, more household items, and in some cases, an extra item of clothing that they’ve been wanting. Each sale also benefits one of the three PEKKA cooperatives in which the agents are members. The cooperatives will use some of the funds collected from sales to help to cover transportation and other operational costs of the technology agent program, and some to be pooled into the cooperative’s savings and loans activity. In essence, the technology agent program brings both individual and collective benefits for PEKKA.

As users of the biomass stoves themselves, the agents have said on many occasions that the stove has made their lives easier. Because of it, they can save a considerable amount of money by not spending it on kerosene (if they had used kerosene stoves before). And if they do use wood as fuel, they are happy that the new stove is very economical on wood consumption. They report that with the biomass stove, one bundle of wood can last for a little over a week of cooking twice a day; this is a significant improvement from the typically-used traditional clay stove, with which one bundle of wood lasts only three days of cooking twice a day.

Wood is even more quickly wasted when using the three-stone cooking fire method, which many women in the Lombok region still use.



Learning how to use the clean cook stove correctly during the technology agent training

Additionally, biomass stove users can now spend more time doing other chores while cooking food, because the stove doesn't require them to always keep watch while the fire is burning. Many also like that the stove produces almost no smoke so that they can cook inside the house. And it keeps their pots and pans cleaner than previous methods of cooking. Some have even jokingly nicknamed the biomass stove the "garbage stove" because scraps, pellets, and pieces of nearly anything found around the house – including coconut shells and corn husks - can be used as fuel so long as they are dry.

The agents often thank the Kopernik team for believing in them and bringing them useful technologies (and they always ask for more). We like to thank them in response for being such inspirational women!

Kickstarting a technology agent program with technology fairs

By Lincoln Rajali Sihotang, Kopernik Project Officer, Indonesia

After a long day of travel through beautiful countryside, passing stunning coastlines and volcanoes, we finally arrive in Larantuka, Flores Island in Eastern Indonesia to hold our first technology fair in the province. Kopernik and local partners host technology fairs at the beginning of a partnership to introduce a range of technology to the local partner and their respective communities.



A stunning view in East Flores

Flores is an amazing island with an extraordinary landscape and a rich culture, but it is also located in East Nusa Tenggara (*Nusa Tenggara Timur/NTT*), one of the poorest provinces in Indonesia.

Following the success of our partnership with PEKKA (Women Headed Household Empowerment Organization) in Lombok, West Nusa Tenggara, we extended the partnership to PEKKA in NTT. Just like in Lombok, the members of PEKKA NTT are all women who are heads of their households. Spreading out across seven sub-districts of East Flores, the majority of the women live on remote islands that have limited access to basic facilities such as clean water and electricity.

We launched the new partnership with four technology fairs in different parts of East Flores. Twelve products ranging from solar lights to a bicycle powered corn sheller and paddy thresher were presented and demonstrated to hundreds of PEKKA members so that they could choose and decide which technologies were useful for them and their communities. I am always excited to present our technologies to new communities because I know how much of a difference these technologies can make in the women's lives.



Nengah and Lincoln from Kopernik demonstrating the bicycle-powered paddy thresher in Kelubagolit, East Flores



The women from Demon Pagong are amazed to see the d.light s10 solar light during a tech fair.

One of my favorite technologies is the d.light s250 solar light because it can create such tangible improvements in people's lives. One of the women I met during the tech fair is a weaver. She said that she only had light at home that depended on a neighborhood generator, which when operational provided light only between 18.00 and 22.00. She also had a kerosene lantern but she said that the fumes from

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the kerosene made her feel dizzy and the quality of the light the lantern provided was not good. She was very happy when we introduced the d.light s250 solar light. Once she has the light, she said, she will be able to weave longer at night, which will mean an increase in her income. She will no longer have to rely on the neighborhood generator or expensive, dirty and dangerous kerosene for lighting.

There are more stories of daily problems that I have heard from these women but the tech fairs we conducted have introduced some simple solutions to them. Recently we have received an order of more than 1,500 products from PEKKA NTT and we have developed a locally appropriate payment scheme that will enable the women to purchase these technologies. We are currently preparing the first shipment of the products and I can't wait to see how these technologies will improve the social and economic conditions of the women and their families. It is a privilege for me to be in charge of this partnership. What else could be more rewarding than working and helping people at the same time on such beautiful islands?

Drip is the new dry

By Annie O'Brien, Kopernik Fellow, India

Working in Hariyamunda was a unique experience given the number of helpers we had. About 15 children of Dripteck system owners eagerly took turns running the drip tape between markers to cut into laterals (which they did in record time, too!). They also were happy to demonstrate how the drip tape packaging materials make perfect frisbees, bangles, wheels and wings, or show how the tank stands double as forts.



Drip irrigation systems have arrived!

I have regularly recounted the advantages of drip irrigation – reduced weeds, increased crop yields, efficient use of water sources – in my blog and in conversations with interested customers. And it's time for the farmers to reap these benefits for themselves. Farmers reported in the baseline surveys that they would start planting with the drip irrigation systems between end December and early February. That means we are just about to embark on the first drip irrigation season in Kechla!



Installing the drip irrigation system

I will be sure to update the Kopernik blog with the results from the inaugural drip season. The post-harvest surveys will allow us to understand the impact of the drip irrigation technology on the crops along with the farmers' experiences using it. We are confident one drip season is all it will take to convince farmers of the efficacy of this technology. Such a revolution in dry season farming practices will prove that in Kechla, drip certainly is the new dry.

Perfecting Do-It-Yourself Charcoal Making in Kenya

By Cindy Nawilis, Project Officer Indonesia and Takuro Haraguchi, Kopernik Fellow, Kenya

Kopernik Fellow Takuro Haraguchi returned to Kenya to check on the situation of the Do-It-Yourself (DIY) charcoal project. DIY technologies, like the technology to produce biomass charcoal briquettes originally designed by MIT's D-Lab, are an important part of Kopernik's wide range of simple solutions.

However, as Takuro soon discovers, many unforeseen challenges exist at the local level that prevent villagers from fully benefitting from the DIY charcoal project. Acquiring agricultural waste materials to produce the briquettes is difficult and dependent on the amount available during harvest seasons. Furthermore, many of the technology users simply cannot afford the high cost of a metal drum to carbonize those materials into charcoal.

To tackle these issues, Takuro offers solutions that utilize locally available materials at lower costs. His solutions include partnering with a local sugar factory to acquire sugarcane bagasse for the necessary agricultural waste materials and using pots and mud brick ovens (pictured below) as alternatives for plastic drums, with which making charcoal become a much more feasible and less costly task.



Customized pots for making charcoal out of agricultural waste materials



A workshop held by Takuro on how to build an oven suited for making charcoal

Major Lessons

There is **no one 'correct' distribution** mechanism: Depending on the type of technology, people's socio-economic status and purchasing power, time of the year and geographic characteristics, the most appropriate mechanism for technology distribution will vary.

Partnering with local civil society organizations that are trusted by their communities, understand the needs and have existing networks in our target last-mile communities is an effective way of distributing life-changing technology.

Technology can break therefore systematic **maintenance** and **after-sales service** is necessary to sustain the benefit of technology. This year we started to provide training on maintenance and repairs and to work with technology providers to provide a clear returns and warranty policy to our technology seekers. We will continue to strengthen our operations in this regard.

Local sourcing of technology is best where possible: Certain technology is only available from a few sources, but there are an increasing number of products which are manufactured in developing countries. To strengthen the local economy, provide better access to repair services and save on costly shipping and import costs, we strive to identify and purchase locally available technologies where possible.

While we already knew it to be true, we were yet again reminded of the importance of **responding to real demand and not being donor driven**. While it is tempting to say yes to donor funds to support the distribution of a particular technology in a specific area without having received a specific request from a local partner we know that these projects tend to be less successful.

The people behind Kopernik

Staff



Toshi Nakamura
Co-Founder and CEO



Ewa Wojkowska
Co-Founder and COO



Jordi Tablada
Software Engineer



Lincoln Rajali
Project Officer



Cindy Nawilis
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David Madden
Lisa Witter

PR and media recognition in 2011

			
			
			
			
			
			

Thank you to **our partners**

			Daiwa Securities Group
		ExxonMobil	
	GOTO Accounting & Tax		HOLLYWOOD BEAUTY SALON the First Beauty Salon in Japan est.1925
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Financial Summary: 1 Jan 2011 – 31 Dec 2011

Revenue	USD
<i>Ear marked</i>	
Individual	66,939
Corporations	181,064
Foundations and government	35,000
Tech seeker repayment	27,316
<u>Subtotal</u>	<u>310,319</u>
<i>Non ear marked</i>	
Individual	100,533
Corporations	135,398
Foundations and government	40,961
<u>Subtotal</u>	<u>276,892</u>
<i>Others</i>	
Honorarium and consulting	10,965
Sample sales	26,312
Miscellaneous	6,811
<u>Subtotal</u>	<u>44,088</u>
Revenue Total	<u>631,299</u>
Expenses	
<i>Ear marked</i>	
<u>Project expenses</u>	<u>243,858</u>
<i>Non ear marked</i>	
Salaries and personnel cost	103,476
Public Relations	10,764
Office and Administration	39,911
Web/Internet/Communications	18,179
Travel	37,523
Bank/Paypal fee	7,225
Legal and Accounting	6,188
<u>Subtotal</u>	<u>223,266</u>
<i>Other expenses</i>	
Product sample cost	15,159
Others	4,497
<u>Subtotal</u>	<u>19,655</u>
Expense Total	<u>486,779</u>
Changes in Net Asset	<u>144,520</u>

Kopernik's Organizational Culture

1. OUR CLIENTS – THE MOST MARGINALIZED PEOPLE – FIRST.

- Kopernik exists to improve poor people's lives. Everything else is secondary.
- We will respond to people's actual needs and demands – we will never be supply driven.
- In addition to technology – we will provide access to new opportunities and skills for our clients.
- We aim to empower rather than create dependency.
- We will source locally whenever possible and appropriate.

2. VALUE ALL OUR SUPPORTERS AND PARTNERS

- We will always have regular and open communication with our all of our supporters and partners.
- We will make sure that our donors' good intentions don't go to waste. We will be fully transparent about our activities so that they will know where and how their funds are spent.

3. THE MOST PROFESSIONAL AND ETHICAL TEAM

- We produce the highest quality and complete outputs on time, all the time.
- No excuses – we get things done. We value action. Talk is cheap.
- We are always honest and ethical.
- We are accountable for every cent.

4. CHALLENGE THE STATUS QUO IN A CONSTRUCTIVE MANNER AND CONTINUE TO INNOVATE

- We are always thinking of ways to improve the way we operate.
- If we see a problem, rather than complaining about it we will come up with a better way to do things and take the lead in implementing it.
- We learn from our own and other organizations' experiences.
- We acknowledge when things go wrong and learn from it.
- We always evaluate the performance of our projects, technologies and internal processes and make improvements where necessary.

5. SUPPORTIVE AND POSITIVE TEAM – NO JERKS OR ASSHOLES ALLOWED

- Every member of the Kopernik team has a positive attitude and is supportive and respectful of one another.
- Though we all work independently, we will always communicate with the rest of the team on what we do to ensure that everyone is kept up to date on one another's progress.
- Sharing is caring. We will always share knowledge with each other because we believe in cooperation and team work.
- We come to work with a smile.
- We never raise our voices, we don't talk down to each other, we don't talk behind people's backs, we don't send rude emails or text messages.