Librii

A New Model Library for Developing Markets

EXECUTIVE SUMMARY

Opportunity
Today, one billion people live in Africa, yet less than 10% of the population has access to broadband Internet and the wealth of information it provides. There is a large opportunity to achieve significant social impact in the African market by opening the flow of information, namely through increasing access to affordable high speed Internet.

Concept
Librii plans to deploy a network of low-cost, digital libraries designed specifically for developing markets. By adapting the successful Carnegie Library model of community development and empowerment, Librii will give individuals and communities in Africa the ability to solve their educational, informational, and economic challenges. Librii is a registered 501(c)3 in the United States.

Team
The Librii team is staffed of dedicated professionals from architecture, technology, engineering and non-profit sectors. The Librii Board of Directors is:
- Julia Austin - Blade Network, LLC, Boston
- Dan Brown - Harvard Business School, Boston
- David Dewane - Librii, Washington D.C.
- Josiah Eyison - iSpace, Ghana
- Jeff Frey - MD Anderson, Houston
- Jerry Gehm - Gensler, Houston
- Traey Hatch - Sherman Foundation, Houston

Funding needed
$450,000 will yield a pilot library, the hiring and training of local staff, and the first year’s operational budget.

Implementation
Librii plans to open its first library in Accra, Ghana by the end of 2014.

“Given that the Internet has become an indispensable tool for realizing a range of human rights, combating inequality, and accelerating development and human progress, ensuring universal access to the Internet should be a priority for all states.” United Nations Human Rights Council

What problems does this project address? Population and Connectivity.

The map above charts two sets of data. **RED** represents human population and the **BLACK** lines represent connections between Facebook friends. By overlaying this data, the map presents a clear visualization of the “digital divide,” that is, the population currently without access to the Internet. This map also contradicts the common assumption in advanced economies that the Internet connects everyone on Earth instantaneously. In fact, most - 61% of global population - are still offline.

Population and Internet Usage Facts

- **5.9 BILLION** = Population of Less Developed Regions of the World (Source: United Nations)
- **1.2 BILLION** = Population of More Developed Regions of the World (Source: United Nations)
- **1.1 BILLION** = Population of Africa (Source: United Nations)
- **35%** = Percentage of Africans ages 15 - 35 (Source: African Union Commission)
- **21%** = Percentage of Africans with basic access to Internet (Source: Internet World Stats)
- **19%** = Mobile broadband penetration Africa (Source: International Telecommunications Union)
- **.05%** = Fixed broadband penetration Africa (Source: International Telecommunications Union)
Opportunity

The Good News
Africa's digital infrastructure is growing quickly (see map at right). Almost 20% of the population will be online by end 2014, up from 10% in 2010 (source: International Telecommunications Union). Africa is the fastest growing cell phone market in the world and now has 650M mobile subscribers - more than either the United States or the European Union (source: World Bank). This rapid growth, made possible by the leap-frogging of hard line infrastructure favor of wireless technology, has led to widespread benefits in the educational, health, and economic sectors.

Importance of Fixed Connection
While rates of wireless access skyrocket, growth in fixed connections remains stagnant. "Fixed" connections are the broadband subscriptions (typically 100MB/sec) we have in our homes, workplaces, and universities. In the African market, a staggering 0.05% of the population has access to such connections.

Mobile Internet access is an important step, but its impact has a ceiling. Imagine trying to perform 100% of your job off your phone. Imagine trying to write an academic paper, build a website, or craft a Wikipedia article on your phone. Accessing the web exclusively through a mobile device is the difference between consuming knowledge and producing knowledge - and the current reality for 99.5% of the people in the African market.

Leveraging the Point of Connection
How can we look at the communities where the fiber is available and maximize the potential of the connection? What is an institution or an entity that provides access to the most people at the least cost? Our answer is the library. Upon reflection, there are a variety of reasons that the library is more of a compelling, long-term solution than an Internet café (see chart at lower right).

The Need is Now
The need for the African market to increase its access to fixed broadband is immediate. Inaction will stall the potential for progress as population and urbanization continue to increase. Broadening access will open pathways for individuals and communities to unlock the full potential of the Internet, and in turn make strides in solving their own immediate, compelling, and local challenges.
Librii Concept

Carnegie Model
Between 1899 and 1929 Carnegie build roughly 2,500 libraries and in the process revolutionized the library as an institution (on average, that equates to opening one library every five days for 30 years). This enormous project was executed using the stunningly simple “Carnegie Formula” (see table at right). The benefits of Carnegie’s efforts are impossible to quantify, but it’s easy to suggest that the libraries played a significant supporting role in the modernization of America.

Carnegie’s motive was simple: he wanted to provide industrious and ambitious individuals with tools of self-empowerment. What if we were going to build another generation of Carnegie libraries? Who are the industrious and ambitious people most in need?

Librii
Librii is a network of libraries that picks up where the Carnegie model left off; libraries updated physically and economically to thrive in developing markets. Librii offers users precious digital resources, including powerful computers, up-to-date software, and the fastest available Internet connection. Additionally, Librii is a physical space, with a book collection, which is locally curated to ensure the content is fresh and relevant. As a library, Librii offers educational and training programs to help users build skills of competence.

Revenue Generating Model
The single greatest challenge with libraries in developing markets is funding. Governments in this market have yet to demonstrate a sustainable funding commitment to public libraries, as a result those that exist lack quality content and are underused. Philanthropy can pay up-front construction, but cannot provide long-term operations costs. The most significant untapped source of support are the users themselves. Therefore, Librii has developed a revenue-generating business model based on a balance of free and paid services.
Librii Benefits

Primary Stakeholders: Local Users
Librii users will benefit by acquiring access to resources currently in high demand. The digital and physical resources Librii provides will be of the broadest range and highest quality practical. Trained Librii staff will be on hand to provide guidance to how to best leverage the resources available on the web. Librii will also provide additional opportunities, in the form of rolling competitions, which will generate local content and build skills of competence.

Secondary Stakeholders: Librii Supporters
Librii’s model is built on series of key performance indicators. Librii supporters will be regularly briefed on the company’s goals, performance, and corresponding operational changes. We have developed a fundamental framework for measuring the success of our offerings - thereby measuring the return/impact generated by our supporters’ contributions.

Strategic Partners
Librii has already established relationships with a number of organizations in our pilot community in Accra, Ghana. These partners stand to immediately benefit from content produced by Librii’s users:

- CHILDREN’S BOOKS: teaching children’s literature composition, word processing, and desktop publishing to allow local authors to create locally-sourced children’s books which will be distributed in nearby rural villages by Street Library.
- ENTREPRENEURIAL SKILLS: utilizing iSpace, a collaborative workspace for entrepreneurs and technology start-ups in Accra.

Partnership, Not Aid
Librii is fundamentally a cause-based organization, but our approach to this market is decidedly more shrewd than that of the typical NGO. In order for the library to function, we must generate revenue that comes from the users. We want these libraries to be infused with a communal energy and clearly communicating to the users that they support the library we believe will make the enterprise stronger.

Outputs

<table>
<thead>
<tr>
<th># total users per month</th>
<th># new user-created content items</th>
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</thead>
<tbody>
<tr>
<td># new users per month</td>
<td># participants in skills trainings</td>
</tr>
<tr>
<td># hours logged</td>
<td># participants in competitions</td>
</tr>
<tr>
<td>$ revenue generated by user fees</td>
<td>Customer &amp; employee satisfaction</td>
</tr>
</tbody>
</table>

Impacts

# of participants who go on to attain jobs in their designated field following Librii trainings and competitions
Income of participants above the average in the community
Levels of educational attainment of Librii users above the average in the community
Career paths of employees after working on projects, measuring Librii’s ability to offer gainful employment through the projects
Community satisfaction surveys
Increased research studies produced in Accra due to Librii data, and research skills training
Increased levels of economic growth and development for the community as a whole

Reporting

Social and Economic Performance Report – updating Librii supporters on the company’s ongoing impact through multiple channels (online, circulated via email).
Goals & Vision

What does success look like for this venture?
Success for Librii’s pilot would mean one operational library in Accra with its KPI’s being met (see chart at right). Our financial goal is to break even within six months. By this time, Librii users will have published new books, created new websites, contributed new Wikipedia entries, written and sold new apps, and their work will become a source of pride for their community. The Librii management team and local staff will be executing with a common sense of purpose and feeling joint responsibility for the library’s continued progress.

Scaling Narrow and Deep
Librii’s growth strategy begins with expanding within Accra. The city currently has a population of 2.2 million (source: Wikipedia) with a metro-regional population of 4 million (figures that multiple sources suggest will double by 2050). Our objective is to expand to five libraries in Accra within the first three years, all of which will be monitored by one management team.

Broader Expansion
Once our model is tested and demonstrated in multiple locations, Librii will seek to expand operations to ten countries throughout the region. Rapidly, Librii could start having a massive impact. By year five, we envision:

- 100 Librii locations in 10 countries
- Serving 50,000 users per day
- 17.5 million users annually – at this point Librii would be in league with the busiest library system in the world, Toronto, with 18.5 million annual users

Highest Emotional Ground
Librii’s greatest aspiration is to give each individual the power to act, speak, or think, as they want in spite of the challenges of limited resources. Individuals who utilize Librii to the fullest are afforded the freedom to flourish, to better themselves, and to express themselves.

“Successful” Pilot (figures per month)

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<table>
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<tr>
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<tbody>
<tr>
<td>2,500 total users</td>
<td>200 user-created content items</td>
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<tr>
<td>250 new user registrations</td>
<td>100 participants in skills trainings</td>
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<tr>
<td>5,000 hours web browsing</td>
<td>100 participants in competitions</td>
</tr>
<tr>
<td>$10,000 revenue</td>
<td>HIGH Customer &amp; employee satisfaction</td>
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</table>

When KPIs are met in our pilot (green), Librii will scale to five libraries in Accra.

Librii’s goal is to expand to ten countries in Africa within the next five years.
## Budget & Implementation

### PRE-LAUNCH
- **US Fundraising**: $5,000
- **Move Prototype to Ghana** *(Property Rent, Shipment, Tariffs, Registration)*: $162,700
- **Information Technology** *(Hardware and Software)*: $22,000
- **Librii Management Salaries** *(1 employee @ 100% time for 6 months)*: $20,000
- **Contingency (10%)*: $20,970
- **Total w/ Contingency Needed to Move to Ghana**: $230,670

### LAUNCH
- **Prototype Arrival and Setup** *(Construction, Utilities, Team Travel)*: $20,600
- **Operating Costs in Ghana** *(Utilities w/Setup, Data, Maintenance)*: $15,000
- **Staff Salaries**: $45,000
- **Contingency (10%)*: $8,060
- **Total w/ Contingency Needed to Launch and Operate for 6 month**: $88,660

### POST-LAUNCH
- **Operations Costs** *(Utilities, Data, Maintenance)*: $7,850
- **Information Technology**: $19,096
- **Librii Management Salaries** *(2 employees @ 100% & 50% time for 6 months)*: $45,000
- **Employee Benefits** *(Education Fund, Living Expenses)*: $36,667
- **Fundraising**: $5,400
- **Contingency (10%)*: $11,401
- **Total w/ Contingency Needed to Operate from 6 months to 1 year**: $125,415

### TOTAL
- **(Minimum)**: $404,313
- **(5% Contingency)**: $424,528
- **(10% Contingency)**: $444,744
## Capital Campaign

<table>
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<tr>
<th>Funding Level</th>
<th>No. Gifts Required</th>
<th>Donation Equivalent</th>
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<tbody>
<tr>
<td>$75,000</td>
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<td>Land acquisition in Accra for Librii library</td>
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<tr>
<td>$50,000</td>
<td>1</td>
<td>Salaries for local Librii staff (one manager and six full time employees) for one year</td>
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<tr>
<td>$35,000</td>
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<td>Education and Benefit Fund for Local Librii Staff</td>
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<tr>
<td>$25,000</td>
<td>2</td>
<td>Librii Computers and Software</td>
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<tr>
<td>$20,000</td>
<td>3</td>
<td>Librii IT operations costs for one year</td>
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<tr>
<td>$10,000</td>
<td>8</td>
<td>Local Librii manager salary for one year</td>
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<tr>
<td>$5,000</td>
<td>10</td>
<td>One full time Librii librarian salary for one year</td>
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<tr>
<td>$3,000</td>
<td>12</td>
<td>3,000 hours of Subsidized Internet Use</td>
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<tr>
<td>$1,000</td>
<td>14</td>
<td>One month of IT training sessions</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>$450,000</strong></td>
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<tr>
<td><strong>No. Gifts</strong></td>
<td><strong>52</strong></td>
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</tbody>
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Librii Press

Stanford Social Innovation Review
“Libraries as Laboratories”
http://www.ssireview.org/articles/entry/libraries_as_laboratories

Alessandro Benetton’s Blog
“Librii: Philanthropy and Enterprise, Living Side by Side in Africa”

Canadian Library Association
“International Collaborations: Librarians Without Borders and Librii in Ghana”
http://www.clalibrary.ca/felicithe/2013/6/felichere6_Vol_50_WEB.pdf

Al Jazeera
“Africa ‘leapfrogs’ to wider Internet access”

TED Blog
“A library revolution, started in part by Jane McGonigal’s TED Talk”
http://blog.ted.com/2013/05/21/a-library-revolution-started-in-part-by-jane-mcgonigal-s-ted-talk/

The Guardian
“Web-connected libraries for Africa: the dream of digital knowledge for all”
http://www.guardian.co.uk/books/2013/may/19/library-internet-access-africa-container-librii

Blog Del Diseño (Spain),
“Spaces to increase Internet Use in Africa”

Linking for Learning (Australia),
“Librii - new model of library for developing countries”

Fast Company Inc.,
“Librii: A New Kind Of Digital Library For The Developing World”

WHAT’S NEXT
NEW APPROACHES TO SOCIAL CHANGE / BY SUZIE BOSS

TECHNOLOGY & DESIGN

Libraries as Laboratories
by Suzie Boss

By the time Andrew Carnegie completed his signature philanthropic effort in the early 20th century, more than 2,000 libraries had been built in the distinctive Carnegie style—graceful architecture outside, open stacks (where patrons could easily browse book collections) inside. A century later, a library designed for the digital age is about to open in Accra, Ghana. And Carnegie wouldn’t recognize it.

Called Librii, it challenges nearly every aspect of the traditional library. The first Librii branch, scheduled to be ready in early 2014, will use repurposed shipping containers in its construction. It won’t even have books on its shelves; instead, it won’t have many shelves. Instead, users will generate content on their own using print-on-demand technology and multimedia tools.

Librii will charge for some services, such as Internet access and skills training, while providing other resources for free. Generating a revenue stream means that each Librii franchise will operate more like a social enterprise than like a traditional public library. Locally hired staff members will include both an entrepreneur to run the business and a professional librarian to curate content. (The umbrella organization for Librii has applied for nonprofit status.)

David Dewane, founder and CEO of Librii, came up with the idea as he was finishing graduate studies at the Rice University School of Architecture. “I asked myself: What would it mean to undertake another Carnegie-scale project? Where would those libraries go? Who would they benefit? What would they look like?” he recalls.

Dewane, an American who lives in Washington, D.C., had the chance to think through those questions when he participated in an online game called Evoke. Developed by the World Bank Institute, the game immersed players from around the world in solving serious challenges from the not-so-distant future—a water shortage, say, or a pandemic. (See “Game Changers of the World, Unite,” in the summer 2010 issue of SSIR.)

The digital divide was exactly the kind of problem that Evoke was intended to tackle. In Africa, for instance, only 3 percent of the population has broadband Internet access. By the time Evoke ended its run in late 2012, Dewane and a team of colleagues were ready to move their napkin-sketch concept—a plan to build revenue-generating, Internet-enabled libraries across Africa—to the prototype stage. The World Bank Institute selected Librii as one of a handful of Evoke-inspired ideas that would receive seed funding and mentoring support. “This is a fantastic example of what we hoped would emerge from the game,” says Robert Hawkins, senior education specialist for the World Bank.

Supporters, including Librarians Without Borders and Architecture for Humanity, hoped would emerge from Librii. “When this concept hits the ground, it will adapt and change,” says Hawkins. “There’s a lot to learn here. Librii is going to be not just a source of information, but a space to gather people who will create new things together.”

The first Librii branch will serve residents of the Osu area in Accra. Once that facility is operational, the next step will be to open branches in other parts of that city. “We want these branches to function at the level of neighborhoods,” Dewane says. Each branch will likely have “different tools of production” that reflect local preferences, he says. One might have a music recording system, another a 3-D printer.

In that way, Librii branches will not only embody the public library ideal, but also go a step further. “They’re really laboratories,” Dewane says. “We want to provide the best tools and then just get out of the way and see what happens.”

CHECK IT OUT: The first Librii branch, set to open in 2014, will serve residents of Accra, Ghana.