

Why and How to Build Civic Tech Hubs in Emerging Markets
A Case Study of Phandeeyar: A Myanmar Innovation Lab

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Executive Summary: Myanmar is undergoing a connectivity revolution, going from 1% to over 80% of the population online since 2011. Phandeeyar is a civic tech hub in downtown Yangon taking advantage of growing enthusiasm for all things Internet by facilitating the growth and projects of the technology, social impact, and entrepreneurship communities. It and one of its primary investors, Omidyar Network, are part of a global movement of civic tech that has recently received more funding and positive metrics in recent years largely due to its holistic approach to economic, social and civic development. This case study narrates Phandeeyar's origins and successes, while also offering key reasons, concepts, and best practices to build a civic tech hub in an emerging economy.

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I. Overview and Summary

In 2011, only 1% of Myanmar's citizens had access to the Internet. After the country opened up that year, that number skyrocketed to over 80% today.¹ People are flocking to be part of the connectivity revolution and with that comes an interest in technology and innovation.

In a short amount of time, the international development community has had to adjust to the quick pace of social change fueled by telecommunications growth and foreign investment in Myanmar. Given that many country plans and grant timelines move slower than rates of Facebook adoption, trying to develop meaningful tech projects in the social and civil impact spaces is not easy for the development community.

Rather than developing stand-alone tech products or programs, one organization developed a model to cultivate a civic-minded technology ecosystem. That organization is Phandeeyar, a self-described "Innovation Lab" in downtown Yangon. It acts as a community center, accelerator, training center and event space for entrepreneurs, technologists, social impact professionals, and the media. Many of the values Phandeeyar holds are mirrored in the global movement of "civic tech," described as "the use of technology for the public good."² Civic tech is more than a product; it is a community, a movement, a culture. To this end, Phandeeyar as a civic tech hub³ is helping to create a foundation for social, technological and economic growth by connecting those often non-connected communities in order to meaningfully collaborate.

While quantitative impact metrics are still emerging, the qualitative success of Phandeeyar is evident in talking to local leaders in telecom, entrepreneurship, civil society, investment, and media. As theory and empirical evidence suggests, civic tech hubs offer a platform for economic, civic, and cultural development to grow by connecting communities and giving them financial resources to begin building solutions to big problems. The growth of civic tech investment is a testament to the belief in civic tech's economic and social impact. Funding for civic tech projects up 119% and affiliation with "civic tech" went up 107% between 2013-2015.⁴

While Phandeeyar's success might sound like a unicorn to some international development practitioners, this paper is here to spread the good news: there is a model for building civic tech hubs with some clear principles for best practices. Those include:

- *Independence*: In funding, location, decision-making, and reputation
- *Accessibility*: In physical space and local language
- *Inclusivity*: In hiring, community-building and project facilitation
- *Platform Driven*: In organizational model and leadership

¹ "Land of temples and tech: The startup culture germinates in an unlikely place," *The Economist*, 18 March 2015.

<http://www.economist.com/news/business/21647318-startup-culture-germinates-unlikely-place-land-temples-and-tech>

² From Matt Stempeck of Microsoft, Micah Sifry and Erin Simpson of Civic Hall Labs at "The Impacts of Civic Technology

² From Matt Stempeck of Microsoft, Micah Sifry and Erin Simpson of Civic Hall Labs at "The Impacts of Civic Technology Conference on 27 April 2016. Also available here: <https://blogs.microsoft.com/on-the-issues/2016/04/27/towards-taxonomy-civic-technology/#sm.001aipwe5te4ehz11p21znc67usop>

³ "Civic Tech Hub" is the term in this paper to describe a community, event, and training center that brings together the tech, civic, social impact and entrepreneurial communities. Instead of using "innovation lab" as Phandeeyar calls itself, the term civic tech hub also connects itself to a global trend. Other terms for this have been "innovation hub," "innovation lab," "iHub," or "social innovation center." It should not be confused with just a co-working space, accelerator, or incubator though it might include those things.

⁴ Omidyar Network and Purpose, "Engines of Change: What Civic Tech Can Learn From Social Movements." June 2016. https://www.omidyar.com/sites/default/files/file_archive/Pdfs/Engines%2520of%2520Change%2520-%2520Final.pdf p. 12.

- *Distributive*: In finances, resources, and knowledge

In offering a case study of Phandeeyar, this paper is a narrative best practices guide designed for practitioners of international development who want to understand “why” and “how” to build such civic tech ecosystems. Much of the information presented here has been gathered through ethnography and live interviews with the Phandeeyar team, funders, and Myanmar technology community.⁵ With the exception of Phandeeyar’s founder, names are not reported to respect to interviewees’ privacy.

To present the community-feel Phandeeyar offers the style of this study is a bit unorthodox, part academic-style and part narrative. The research is based on a larger forthcoming academic study tracing the emergence of the narrative of “innovation” and “civic tech” in international development. The project is generously funded by Columbia’s School of International and Public Affairs Tech and Policy Initiative and the Carnegie Corporation of New York.

II. The Story of Phandeeyar: Origins and Structure

In order to demonstrate the best practices for building civic tech hubs, one must also first understand a little bit about Phandeeyar and its founding, its early programming, and organizational structure.

Origins

If there is any takeaway from the story of Phandeeyar’s early days, it is the importance of being community-driven before being technology-driven. The result is an organization that puts people and their needs first—technology just facilitates.

Phandeeyar was founded in 2014 out of a series of Code for Change Myanmar hackthons. The organizer was David Madden, an Australian youth organizer, Internet entrepreneur, and founder of GetUp.org (an Australian equivalent of Change.org) and Purpose (a consultancy that helps organizations leverage Internet-based platforms for community building and campaigning). Madden describes arriving in Yangon in mid-2012 when the mobile and Internet penetration rate was “less than North Korea” and a “SIM card could sell for \$250.” The telecommunications sector had just opened up to foreign companies and the people of Myanmar were eager to connect with the world. As a serial community builder and global technology enthusiast, Madden had been inspired by the Nigerian Co-Creation Hub in Lagos, also a self-described “social innovation centre dedicated to accelerating the application of social capital and technology for economic prosperity.”⁶

To see if such an “innovation hub” might catch on in Myanmar, Madden tested the concept by putting on the first Code for Change Myanmar hackathon. A hackthon is typically a 48-hour weekend event where computer programmers get together to “hack” technology-based solutions to a set of posed problems. Technology enthusiasts were easy to find; in January 2013, Myanmar had the largest ever BarCamp (a user-generated technology conference made popular by tech entrepreneur, Tim O’Reilly) with over 6,400 attendants.⁷ The government-sponsored Myanmar Computer Federation (MCF) organized these events. Yet, aside from BarCamps and a

⁵ Quoted and non-cited material comes from interviews done by the author.

⁶ From Co-Creation Hub Website, <http://cchubnigeria.com/>

⁷ Anh-Minh Do, “The World’s Largest Barcamp is in Myanmar,” *TechinAsia*, 29 Jan 2013, <https://www.techinasia.com/worlds-largest-barcamp-myanmar>

few trainings at a tech park far from downtown, there weren't many places for enthusiasts to go. To get the first hackathon off the ground, Madden enlisted the new Qatari telecomm provider, Ooredoo, to provide a space and wireless Internet—a service offering that the company had yet to launch to the public. Madden wanted to involve civil society in the event. His question was, “What was the willingness of non-technical groups to embrace technology?” He reached out to local civil society organizations and NGOs to source problems for the hackathon.

Madden recalled a key moment from the first hackathon “when everyone was red-bullied up.” Population Services International (PSI) had posed two unique problems to the hackathon teams: how could tech be used to help women with birth spacing, and how could tech be used to reach sex workers with health needs? A young doctor from PSI refused to leave that night, going around to all of the teams hacking together solutions. That is when Madden knew he had his proof of concept for a space connecting techies and social do-gooders. “I'm completely familiar with all the writing on hackathons [referring to research questioning their utility] and I'm well versed in their limitations and all those things, but as a means of testing out a bunch of ideas and beginning to build a community around this stuff, [the hackathon] was very, very effective.”

Madden continued to connect the tech and social impact communities and decided to have a second hackathon in September 2014, bringing in USAID and the World Bank. He also solicited space and Internet from Ooredoo, which had just launched its 3G service and was interested in an ecosystem that could build apps for this new service. The hackathon had a practical purpose of solving local business challenges, but the other larger objective was always visible to the public: the hackathon was “to help the growth and the development of the technology community.”⁸

Around this time, Madden had secured philanthropic investment to build a civic tech hub from eBay founder Pierre Omidyar's philanthropy and venture capital organization, the Omidyar Network. Omidyar Network also partly funds other tech hubs like Co-Creation Hub in Lagos and Civic Hall in New York,⁹ both of which had launched or were in the process of launching at nearly the same time. Indicative of the role information, news, and civic engagement would play in its future, Phandeeyar was fiscally sponsored by InterNews, an organization dedicated to empowering local media. With support in place, Phandeeyar leased a space on the top floor of a building overlooking Sule Pagoda in the heart of downtown Yangon.

Early Programming

With a space in place, Madden and his small, diverse team of entrepreneurs, social impact enthusiasts and recent graduates started their work. In the first year of 2015 alone, Phandeeyar held over 100 events, including 36 MeetUps, 21 seminars, 42 workshops and 10 major events (like hackathons). Work fell into three thematic areas: technology and the election, entrepreneurship and product development, and technology for social impact. LGBT groups, feminist organizations, religious pluralism groups, Maker enthusiasts and Linux fans found common ground at Phandeeyar. Facebook hosted events and Google sponsored a “Election Create-a-thon” to bring together creative to tackle civic education challenges for 48 hours. Civic engagement was in the DNA as much as tech and entrepreneurship were.

One of the most impactful events in Phandeeyar's first year was the MaePaySoh (“Let's Vote”) Hack Challenge in September 2015 in which 137 developers in 30 teams participated.

⁸Catherine Trautwein, “Yangon's second ‘hackathon’ scheduled for September,” *Myanmar Times*, 11 August 2014. <http://www.mmmtimes.com/index.php/business/technology/11337-yangon-s-second-hackathon-scheduled-for-september.html>

⁹ Full disclosure, the author of this paper was on the founding team of Civic Hall.

Myanmar would have its first national vote in November 2015 since the country had introduced nominal civilian government after almost 50 years of military rule. Phandeeyar partnered with the Asia Foundation and the International Foundation of Electoral Systems (IFES) to hold a two-week competition to see who could build the best election app using the candidate information API. The Asia Foundation had worked with the Myanmar Union Election Commission to create the API. The API offered dataset access to biographical information for 6,074 candidates and also parliamentary records obtained from the Open Myanmar Initiative for existing officials up for election. Additionally, the hack challenge urged hackers to answer three common questions: are you registered to vote and if not, where can you? Who can you vote for? How do you vote?¹⁰ Though the information sounds basic, easy civilian access to it was *unprecedented*. The winning team received membership to the Accelerate Track of Facebook’s FBStart Program and \$80,000 worth of services for technology entrepreneurs.¹¹ Ultimately the winning app, MVote, had over 211,000 downloads, had been viewed in 87% of Myanmar’s 330 townships, and had over 58,000 active viewers on election day alone.

Given the dearth of digital information, local and international journalists relied on the app for reliable data about candidates. It was the first “Civic App” in Myanmar. One journalist described this as the first digital Burmese news tool she ever used: “MP lists were never published on the Internet. I had to rely on a friend from Voice of America to supply me lists of the names of MPs. Normal people never knew the name of their MP in military times unless [the MP] went to their villages to give speeches.”

The benefits of a civic API trickled outside of just the winning app. One former official from the Asia Foundation described seeing printouts of screenshots of the app with information about candidates running for office in a small village. As one local media insights and search startup in Yangon that participated described, “We couldn’t miss the opportunity of participating and putting the election data on our app. We got 25,000 new downloads of our own [news] app during the election.” This early social impact and election programming really set the stage for a civically informed technology community.

Organizational Structure

By Summer 2016, Phandeeyar had 27 employees. The company could be divided into four core competencies, at least judging by the most active group “channels” on Slack, the instant messaging app in the office that is popular in technology startups. There are many overlaps and cooperation between teams, particularly given that teams are not stacked in even informal hierarchies. In this sense, Phandeeyar remains pretty heterarchical, or horizontal, in organizational structure. The teams include:

- 1) Social Impact Team
- 2) Technology and Open Data Team
- 3) Operations and Finance Team
- 4) The Accelerator

Some of the longest employed associates at Phandeeyar currently work with the Social Impact team (or “#social-impact” on the Slack channel). Projects include training religious pluralist groups how to do effective Facebook campaigns, teaching journalists how to use online

¹⁰ Catherine Trautwein, “Hackers in programming meet to prepare for the vote,” *Myanmar Times*, 15 September 2015.

<http://www.mmmtimes.com/index.php/business/technology/16485-hackers-in-programming-meet-to-prepare-for-the-vote.html>

¹¹ Kim N.B. Ninh, Mi Ki Kyaw Myint, Susan Lee, “Myanmar Elections Hack Challenge: Let’s Vote! *The Asia Foundation*, 23 September 2015. <http://asiafoundation.org/2015/09/23/myanmar-elections-hack-challenge-lets-vote/>

databases, doing social media advocacy trainings with LGBT groups, collaborating with disability rights groups, or hosting meet-ups with feminist groups to combat online harassment and trolling. These civic projects were some of the first and most enduring activities at Phandeeyar.

The Technology and Open Data (“#data” on Slack) group cultivates, networks, trains, and organizes the technology community. A good example of this was the August 2016 launch of a Myanmar open data platform, a sub-site of the regional Open Development Mekong data portal funded by USAID. Phandeeyar worked with 23 organizations to facilitate and code the web-based open data portal. The Technology team also works intimately with the Social Impact team to run trainings and meet-ups.

The Operations and Finance (“#ops” on Slack) team keeps the Phandeeyar office going—a challenging task in the rough environs. This involves everything from repairing the Wi-Fi, fixing ceiling leaks during rainy season, ensuring HR trainings are completed, doing accounting on QuickBooks, and freeing captives in the elevator stopped by power outages. Given that Phandeeyar is not located in a government or multi-national compound, the operations and finance team plays a uniquely special role in ensuring the functioning of the community center. While these roles might be at the bottom of a hierarchy in some development organizations, at Phandeeyar they are celebrated as crucial and equal positions.

Probably the most independent of these groups is the new Accelerator (#accelerator on Slack), which launched in August 2016 thanks to a \$2 million grant from the Omidyar Network. They recently gave \$25,000 each to six startups, which won placements into the accelerator.¹² The accelerator is the newest team and physically occupies a different space in the building, compared to the other three teams, which sit together.

As far as leadership goes, there are leads to each team, comprising both Burmese and foreign individuals who have competencies from prior work in each of those areas. For instance, the lead of the accelerator is a foreigner who had come from a development tech background. The lead of the tech team is a local who worked in product development abroad. The culture of leadership at Phandeeyar does not lend itself to hierarchical decision-making but instead relies on consensus. For example, the operations officer held an open vote for which floor tiles and tables should be purchased for the remodeling of the new accelerator space. Everyone got to vote including the strategy manager, the intern, the kitchen staffer, and the author of this report. Additionally, new programs in tech or social impact are rarely initiated without a lead from the outside community, further underscoring the value placed on grassroots, community driven projects.

Madden’s influence on the vision, strategic direction and fundraising success is undeniable. That said, the organizational structure and culture at Phandeeyar is not so much led by individual personality, but by grassroots organizing and horizontal leadership. It is a platform for growth and grassroots inclusion, not a pyramid of hierarchy and planning. Yet, what is the impact of building such an organization?

III. Why Build a Civic Tech Hub? Reasons and Metrics

Why invest in a civic tech hub? For one, a civic tech hub brings together diverse communities in order to innovate and create sustainable solutions to challenges, both civic and

¹² Steve Gilmore, “Local start-ups get ready for six-month accelerator,” *Myanmar Times*, 12 September 2016, <http://www.mmtimes.com/index.php/business/technology/22447-local-start-ups-get-ready-for-six-month-accelerator.html>

commercial. Secondly, it also creates an infrastructure of resources, skills, and network capital for the growth of tech, civic, and entrepreneurial sectors – all of which are particularly important for infrastructure-poor nations. Yet why do these reasons matter? What is their impact?

First, innovation increasingly matters as an organizing principle for new economic growth. The international development community has jumped on the bandwagon of “entrepreneurship” and “innovation” initiatives thanks to the global proliferation of Silicon Valley products and principles. Yet many organizations mistake “innovation” to mean a new technology product. Innovation is more than a new product—it is a culture of change, which can be painful to bureaucracies. As economist Joseph Schumpeter identifies it, innovation is the creative recombination of assets that may deeply disrupt cultural taken-for-granted and organizational routines.¹³ This “recombining” of resources becomes greater when there is a larger and diverse community to draw on. Because entrepreneurs are inherently starting something “new,” they often face less (what Schumpeter calls) “taken-for-granted” in the quest to produce newness. Yet entrepreneurship also requires a certain culture and resources. If innovation is about the “recombining” of resources, it cannot emerge in a vacuum. Innovation requires an encouraging, networked community of skilled technologists, business friendly policies, and access to flexible funding.

Omidyar Network understands the need to create a strong, diverse community that enables people to collaborate and create, probably because its founder, Pierre Omidyar, made his fortune off of a community platform, eBay. In conversations with representatives from Omidyar Network, they describe how the idea of a community driven platform influences their philanthropy and investments. By giving people a place to meet and exchange ideas, goods, or skills, they can lay the foundation for whole sectors to connect, share, and “recombine” for greater innovation. Omidyar Network calls this “priming the pump,” where instead of using investment and philanthropy to fund individual projects piecemeal, they focus funding on whole sectors and communities. By doing this, they can grow supportive communities of kindred culture, support, and progress.¹⁴

This “priming the pump” concept is also informed by the idea of the “platform.” The word “platform” can be painfully overused in the tech scene, but when built correctly and bringing in communities in the development process, platforms are tools, applications, frameworks, or foundations that “enable a whole ecosystem of participation.”¹⁵ Media entrepreneur and open source advocate Tim O’Reilly coined the term “Government as Platform” in 2010, trying to describe a new way of approaching government innovation in a more open and participatory manner.¹⁶ He likens government to a vending machine: plug in tax money and get a service. There is very little engagement or participation. He contrasts this to the more open model of a bazaar where there is open collaboration and exchange of information, drawing on Eric Raymond’s open source computing manifesto, *The Cathedral & the Bazaar*. To draw from these two foundational concepts in civic tech, a civic technology center is an embodiment of a platform (or a bazaar!) where different communities can build off of one another.

¹³ From David Stark, *The Sense of Dissonance: Accounts of Worth in Economic Life*, Princeton: Princeton UP, 2009. p. 4.

¹⁴ Matt Bannick and Paulsa Goldman, “Priming the Pump: The Case for a Sector Based Approach to Impact Investing,” *Omidyar Network*, September 2012.

https://www.omidyar.com/sites/default/files/file_archive/insights/Priming%20the%20Pump_Omidyar%20Network_Sept_2012.pdf

¹⁵ Tim O’Reilly, “Government as Platform” in *Open Government: Collaboration, Transparency, and Participation in Practice*, eds. Daniel Lathrop & Laurel Ruma. Cambridge: O’Reilly, 2010. p. 11-40. p. 13

¹⁶ *ibid.* p. 13

Given that developing countries might not have a strongly connected civil society, corruption oversight, or good business policies to support growth, a civic technology center must do more than be a platform for growing the technology community. It must also “prime the pump” of the civil sector. The civic focus ensures that the ecosystem does not just have a financial bottom line, but a more holistic approach to growth. A strong local private sector in emerging markets requires small business-positive policies, media oversight, and educated citizen-consumers. One Myanmar health entrepreneur who works with Phandeeyar pointed out, “There are real problems here that Silicon Valley Tech bros who want to make laundry apps aren’t persistent enough to solve.” He sees civic tech as an anti-dote to what he called, “Short-termism,” or the desire to just use tech to make quick apps that don’t solve systemic problems. Civic tech embraces large-scale problems for meaningful growth both economically and culturally.

Omidyar Network sees investment in civic technology as a platform for growth, but also as part of a global movement. In a report they recently did with Purpose (the consultancy Madden founded), Omidyar Network outlines how well “civic tech” as a movement meets the criteria for 21st century movements: scale, grassroots activity, sustained engagement, shared vision, collective action, and shared identity.¹⁷ It meets many of the criteria except for shared vision and identity: the vision is almost so inclusive it is too general to be defined. That does not stop the growth of investment in civic tech, up 117%, growing from \$225M in venture capital in 2013 to \$493M in 2015.¹⁸ This growth is primarily in govtech (considered part of civic tech) but speaks volumes to the power of others to value the offerings of the movement.

Measuring this impact is difficult and the consensus is still out for long-term effects of building these civic tech centers. While studies might have been done on the effects of co-working centers, very little formal academic research has been done on civic tech hubs—probably because they are so new. In an effort to try to measure the impact of this movement, Omidyar looks at identity, reach, engagement, and influence of organizations in its portfolio. However, there is a known and strong consensus across the civic tech community that finding meaningful metrics is a big challenge.

What do some metrics look like? To measure engagement, Omidyar Network requests metrics on events from its grantees and investees (luckily there is an event RSVP company, Meetup.com, in its portfolio). From 2013 to 2015, civic tech events jumped from 629 to 1,737 in 2015 in the U.S. alone. Engagement might also be measured by GitHub commits. Influence and reach can be measured by the frequency of civic tech terms in social media and mainstream media. Though there is a temptation to measure “technology’s reach” online with easily acquired social media states, more meaningful metrics about connection and community have to be measured offline.

As a final note, the civic tech movement in the United States has more research about it. There are different challenges and issues in the developing world’s civic tech. A place like Myanmar has unique infrastructural, financial, human capital, and cultural challenges that Western organizations don’t have to face. This does not mean these centers are isolated from the movement. To the contrary, they are quite plugged into trends in tools, conferences, news, and best practices in the global civic tech community. Phandeeyar invites initiatives like Founder Institute, Hack Days, Code for Change, Agile Meet-ups, Makerbot 3D printing classes, and Lean

¹⁷ “Engines of Change,” p. 9

¹⁸ *ibid.* 13

Start-Up challenges. People feel plugged into a global movement as a result, which breeds enthusiasm and network capital.

These theoretical and empirical findings offer enough evidence for investors to put money and resources into civic tech hubs around the world. Given these trends in the movement, there are certain key best practices to building a successful civic tech hub.

IV. Practitioner Best Practices on How to Build a Civic Tech Hub

There are certain physical, financial, structural, technological and organizational elements to Phandeeyar that can be mirrored to create a civic tech hub. Of course, some elements are a matter of luck, like having a dynamic, connected founder or scoring a lease in the right location. That said, the following section offers some core principles and best practices that are ingredients to create a strong civic tech hub. Those five principles are:

- *Independence*: In funding, location, decision-making, and reputation
- *Accessibility*: In physical space and local language
- *Inclusivity*: In hiring, community-building and project facilitation
- *Platform Driven*: In organizational model and leadership
- *Distributive*: In finances, resources, and knowledge

These principles were identified through interviews and research. Additionally, though not in complete detail here, the best practices are informed by similar organizations like Civic Hall in New York or Co-Creation Lab in Lagos, but also other Myanmar initiatives in technology.¹⁹

Independence

Key Takeaways:

- *Flexible core-funding is absolutely necessary to independence.*
- *An independent organization is distinct from large bureaucracies in its mores, decision-making, planning, reputation, and tools.*

The single most important principle this paper offers is the principle of independence. Phandeeyar is not the “project” of another larger organization. It is an autonomous organization with flexible core funding. As such, it is not tied to legacy reporting, planning, cultural norms, mores, leadership hierarchies, technology, or accounting practices of an older bureaucratic organization. It is free to forge its own culture, leadership, budget decisions and reputation.

Most instrumental to its independence is the existence of flexible core funding from Omidyar Network. This core funding is not tied to a particular project with strict metrics or rigid budgeting tied to specific plans. Instead, the money supports projects and opportunities as they emerge—as they tend to in the tech sector. Representatives interviewed at Omidyar Network are aware that this kind of critical core-funding is often lacking in the global philanthropy scene; very often investors want a specific return, for a specific program, for a specific donor interest. This rigidity constrains creativity and limits opportunity (not to mention breeds the “vending machine” versus platform style organization discussed previously). Flexible funding offers the ability to chase needs, opportunities and markets. A Phandeeyar staff member who had spent

¹⁹ This location was not visited by the author, but in interviews with Omidyar Network, the civic tech community, and Phandeeyar staff that knew of it, many referenced the similarities between the three places.

time in aid-rich post-conflict zones noted that, “Aid money isn’t creeping into every corner of society [here] creating unhealthy dependencies to fulfill *specific* program mandates. People here take more of a market approach.” The result is grassroots programming.

Compare this financing to that of a well-meaning and ambitious group at UNICEF in Yangon. A team interviewed there had recently launched UReport, a mobile tool that allows UNICEF to take polls and get feedback from SMS surveys of the youth population. The team did good work, but acknowledged they were constrained by limiting funding tied to a five-year plan—recall that five years ago Internet penetration in Myanmar was 1%. The opportunity to do mobile technology work emerged in the middle of UNICEF’s Myanmar country program so trying to cobble together funding was challenging.

Phandeyar’s independence manifests itself in more than just funding. It also allows it to build its own reputation. As one Phandeyar employee pointed out, “Many groups in Myanmar are resistant to international organizations. They got into complicated situations with locals during the military times and there was very little trust.” Phandeyar does not come with the reputation of a large multi-national organization—for better and for worse. This means they must build a unique reputation and trust with the organizations they work with. This can be a great thing, because many staff members and organizations within the Phandeyar community see Phandeyar as a product of Myanmar—not the international aid community.

Finally, independence manifests itself in what tools Phandeyar uses—critical to a civic *tech* center! There are no “legacy” technology tools that Phandeyar is forced to use that were custom built to fit the clunky requirements of a large organization. Instead, Phandeyar can be more nimble in experimenting with out-of-the-box communication and project management tools. The offices uses many cloud-based tools like Trello (project management), Google Docs, Mailchimp, Facebook, Slack and Eventnook (a Myanmar start-up version of Eventbrite). They do this with the ease of a scrappy Silicon Valley startup trying to use the most convenient tools with the least amount of friction for the least amount of money, getting rid of those that don’t work.

The independence to make these choices also affords them the freedom to be a more open and accessible organization. The difficulty of being independent does not go unacknowledged. The lack of core-funding from philanthropic organizations and eagerness of larger organizations to start but then involve themselves in projects like this makes independence difficult. Hopefully the trend Omidyar Network has started in core funding will make independence more feasible.

Accessibility

Key Takeaways:

- *A community center with fast, available Wi-Fi must be easily and physically accessible to community members.*
- *Activities and materials should be in the local language, on- and offline.*

The importance of an easily accessible home base with high speed Internet cannot be underestimated in building a civic tech hub. While centrality and wireless connectivity might seem like a given, it cannot be taken for granted in a country with intense infrastructural challenges. One Burmese-American entrepreneur described how small improvements in access can make a huge difference: “The power goes out. There are mosquitoes. The Internet goes out. People here don’t have a lot of income, making electronic fund transfer—already hard—even more difficult.” This is not Silicon Alley or Valley.

Access to high-speed Internet is one of the most impressive features to many guests who come to the space. One of the most memorable aspects in Phandeeyar's early days was during the first hackathon when participants marveled at Internet speeds they never witnessed before by tweeting the mbps speed and quickly downloading content. Phandeeyar continues to offer Wi-Fi to guests for free—though the password is changed frequently to avoid freeloaders on other floors. Contrast this to many international development offices that don't offer Wi-Fi to guests (one office visited by the author was launching a digital product yet had no Wi-Fi in the office for neither guests nor employees because of security concerns).

Many visitors and team members at Phandeeyar praise the centrality of its location in the heart of Yangon's downtown area, right next to key government offices. While the traffic in Yangon is dreadful in any direction, having a place where most busses go makes it easy for people to access. Compare this to the Myanmar ICT Park (MICT Park), which is much farther away from the center. This is also where the Myanmar Computer Federation (MCF) is housed. One MCF official and media mogul shared a story: "One of my graphic designers went to Phandeeyar one day and she gave a talk about Adobe Photoshop design. 200 kids show up. I'm a [leader] of one of the largest professional associations in Myanmar and we host events every month and never get that kind of turnout." MCF tried to create something like a Phandeeyar called Kanaung Hub in MICT Park. Kanaung Hub hosts some meet-ups mostly in technical skill development (the website offers "Laravel Meetup Yangon" and "Internet of things with Raspberry Pi, Arduino, and Esp8266"). However, the space mostly functions as a co-working facility where one can rent a dedicated desk for about \$40/month (Phandeeyar offers open seating for \$30/month). This is reasonable given the inflated real estate prices caused by foreigners, but not cheap to many locals.

As a final note on accessibility, live and digital access in the local language is absolutely necessary. While Phandeeyar's primary website is in English, its Facebook page is sometimes exclusively in Burmese if it is not bilingual. Most people in Myanmar do not access webpages, but instead use Facebook as the primary source of information exchange. Many committed techies in the office also make sure that all of the information online is in machine readable Burmese Unicode font online that adheres to international Unicode standards, instead of Zawgyi, which is an older Burmese computer font that makes storing and rendering text more difficult. It goes without saying that many events are exclusively in Burmese and do not offer any English translation. When there are English speakers, translators into Burmese are readily available. The online and offline accessibility makes it easier to build an inclusive community.

Inclusivity

Key Takeaway:

- *Actively seek minority, youth, and female voices to hire and give them significant roles within the organization.*

Phandeeyar actively seeks women, religious minorities, ethnic minorities and youth to participate in the organization's activities, programming, and hiring. In a country with deep ethnic and social division, the inclusion of religious or ethnic minorities can be challenging and face a lot of critique. One night during the course of interviews, Phandeeyar hosted an openly transwoman and a panel of feminist leaders to speak. Given online harassment and violence against women and LGBT activist, an event like this is a bold statement, if not a risk. Currently, Phandeeyar is also offering financial and technology training assistance to an LGBT group called

Rainbow Organization. There are special events for women including a special Geek Girls meet-up. This kind of open and public inclusion around more Western-style identity politics is incredibly new in Myanmar, but also a source of pride for many young people involved.

Many team members were hired after working on a project with Phandeeyar in hacking, election monitoring, religious pluralism or media freedom. Many of those hired are women under 25 years old. They are not in “intern” level positions either; they take on leadership roles in coordinating projects and organizing various communities to which they belong. This includes the media, religious pluralism advocates, feminist groups, ethnic minorities who have returned from exile abroad, college computer science classes, or hacker collectives. These younger people do not come with as many rigid ideas about technology and open communication as compared to their parents’ generation, which grew into adulthood during a military coup that censored most all controversial information.

Given the newness of tech, describing Phandeeyar to older generation civil society organizations can sometimes be challenging for the younger staff members. One Phandeeyar social impact team member described her pitch: “I just say I’m promoting peace at a technology hub.” She then goes on to describe how they can help groups use Facebook or Slack to better coordinate their communities. The utility of tech helps sell Phandeeyar.

Inclusivity means making a special effort at building trust with parts of society that might even be suspicious of Phandeeyar’s work. Sometimes this means making a case for why technology is useful to that group. One open data team member described how she convinced her MP back in the village she is from why she should use and promote open data: “I had to convince an MP that we are launching the open data dashboard for good [reasons] and it is useful for her. They should know what their constituency is.” By selling utility, Phandeeyar gains trust and builds a network.

Platform Driven

Key Takeaways:

- *Horizontal structure and leadership is critical to building the foundation for a networked and solution-driven community.*
- *Innovation is a culture, not a department.*
- *The hub is the platform and facilitator of community driven projects.*

The idea of the platform, as described in the “why” section of this study, makes the case for the value of a flat organization that invites others and facilitates the development of their ideas. A platform driven organization facilitates a whole ecosystem of participation, inclusion, innovation, and growth. Yet the concept of “platform” is not necessarily intuitive, especially in emerging markets.

One of the most striking elements at Phandeeyar is the horizontal leadership and culture of openness. In the work culture of many Myanmar businesses, there is a strong hierarchy with very little incentive to speak to superiors for fear of making a mistake. The team at Phandeeyar rejects this culture and tries to teach new staff members how their office culture is different. One junior team member said, “In Myanmar, if you don’t know, you can’t ask. Here [at Phandeeyar], if I don’t know, I don’t know and I can ask.” This openness and fluidity between team members, no matter how long they’ve been there, allows problems to be surfaced and solved faster.

Earlier, this paper mentioned Joseph Schumpeter's and also sociologist David Stark's notion of innovation as a "creative recombination of assets."²⁰ The combination of a diverse community and the flatness in the organization itself invites the rapid recombination of assets. Many people in the organization offer multiple skill sets, communities, and histories. As an "Innovation Lab" in Myanmar, Phandeeyar does not segregate "innovation," to a department or to a certain individual dubbed as the innovation lead as they might be at UNICEF or Impact Hub Yangon.²¹ Innovation is a culture endemic to every activity, tool and behavior of Phandeeyar's diverse organization. Seeing as how they cannot solve systemic societal problems amongst just their staff, Phandeeyar looks outside of their organization to help facilitate and connect groups already tackling these problems.

As one of the leads in the social impact team describes, Phandeeyar "facilitates" existing organizations instead of building products or programming solo. He mentioned there are three criteria in looking for partners: "Who has capacity, who has a small budget, who really needs technology to make impact with their work." Instead of trying to build new competencies from scratch, Phandeeyar partners with other organizations, enhancing their work with technology resources and connections. One Phandeeyar staff member sees the work they do as truly being grassroots: "We are not implementing programs so much as we are supporting." While Phandeeyar plans events with visiting technology experts or supports the Open Data portal, all of these initiatives have one or more external partners.

In valuing the principle of "platform" Phandeeyar facilitates the work and networks of others and thus creates a buzzing ecosystem that is much more effective than if they built new competencies from scratch. As one Phandeeyar team member describes, "We might not achieve our slated goals [with an event or program] but we do build network capital."

Distributive

Key Takeaways:

- *More can be accomplished when the platform distributes money and resources to self-initiated groups, instead of trying to scale up those capacities inorganically.*
- *Expectations on "returns" are not tied to strict metrics so experimentation is encouraged.*

In a country still struggling with poverty, conflict, literacy, digital literacy, and reliable mobile signals, material needs cannot be taken for granted. This is why a distributive attitude towards sharing resources within the community is critical. This is not to say a civic tech hub should be freely giving away computers at every turn. On the contrary, the distributive nature should be thought of as *investing* in key projects in disadvantaged groups.

Phandeeyar recently started offering microgrants to various organizations in its Social Impact network in order to do work in more remote areas of the country. Money went to Rainbow Organization, an LGBT group that organizes ten grassroots groups to use social media advocacy tools in tech conferences. Another grantee was Myanmar Fifth Estate, a civic tech startup that launched Open Hluttaw, a mobile web platform that promotes political accountability among citizens by offering an open database of information about the country's 440 parliamentarians. Myanmar Fifth Estate also uses digital marketing strategies to drive engagement between citizens and elected officials on Facebook. Finally, one of the recent

²⁰ From Stark, p. 4.

²¹ Both UNICEF and Impact Hub in Myanmar each have a special "Innovation Lead."

grantees includes iSchool Myanmar, which is a campaign promoting inclusive technology to improve the civic participation of persons with disabilities in Myanmar.

Then there is the Accelerator. After a three-month recruiting period, six startups were recently brought on and given \$25,000 in seed funding plus access to over \$200,000 of donated services like servers, accounting, and legal help. Startups include an Airbnb-style app for Myanmar apartments, a cargo truck sharing app, and a tech-based microloan company. The lack of startup capital in Myanmar made the launch of Phandeevar's accelerator all the more exciting—especially after one local telecom's accelerator failed to launch. The lack of startup capital is even worse for civic-minded businesses. As one entrepreneur of a search and insights app said, "Being a good guy in business is a problem. Our investors look at our app or civic engagement projects and say 'We don't want to fund a research lab.' People need to see the value of civic tech, especially in Asia." When there is social impact investment money available, the terms aren't great. Says one entrepreneur: "Social impact investors expect the same types of returns as other businesses, but with *additional* social impact returns. It is impossible to get those returns here." Phandeevar does not escape similar critiques: it takes a 12% equity stake for a \$25,000 investment²² – a significant amount by Silicon Valley accelerator standards for such a relatively small amount of money. Regardless, the access to capital has energized the startup scene.

For a point of comparison it is worth noting a company doing similar work: Telenor, the Norwegian telecommunications provider that has over 17 million active users of its services. A "business sustainability" representative (not an "innovation officer") at Telenor described their Lighthouse Digital Literacy training centers that they were setting up all over Myanmar. These physical centers offer mobile and computer trainings to locals in an effort to build capacity (and customers). They are also currently trying to develop an app to give these trainings remotely. The representative noted that the program is not obliged to link their success to sales metrics—which might put undue pressure on each Lighthouse. In addition to meaningfully training more users of their products, the program builds the perception of Telenor as an innovative and collaborative player in the Myanmar technology ecosystem.

One Phandeevar staff member who had seen a lot of the poverty and conflict of Myanmar first hand feels strongly about making sure that Phandeevar disperses its knowledge of digital literacy and technology to remote or poor places: "I don't want to see young people compete for a device or resort to prostitution to get [a smartphone], but then not know what to do with it." As with the Telenor Lighthouses, Phandeevar considers the distribution of skills, knowledge, and tools as fundamental to developing a fair and valuable tech market just as much as selling a phone.

V. Conclusion: Thoughts on Improvement and the Future

The Phandeevar journey has been one of great community building, skill development, networked diversity, and facilitation. But it has also been one of navigating disparate communities, difficult terrains, and cultural challenges. In its first iteration, Phandeevar has managed to bring together groups of people, train them, expose them to opportunities to work together, and offered resources to do so.

²² Juliet Shwe Gaung, "Myanmar: Phandeevar sets up accelerator, to invest \$200k in 8 startups in 2016," *Deal Street Asia*, 12 June 2016 <http://www.dealstreetasia.com/stories/phandeevar-to-seed-fund-up-to-200000-through-their-first-tech-startup-accelerator-43871/>

Yet what challenges will Phandeeyar face looking ahead? Staff and community members chimed in with a few critiques and challenges. One start-up executive said Phandeeyar's generalist attitude could be a challenge, "They put their hands into everything because no one else does, but that is tricky. Because I don't know who they are about and what they are about. The people in Phandeeyar are generalists. Specialists bring a certain credibility." This generalist culture might also affect how much Phandeeyar can actually impact certain areas, like government tech for instance. As one tech executive with government ties described, "We need someone who understands both tech and government bureaucracy. So many explain e-Government without understanding what it means here." Phandeeyar will probably not satisfy that niche given it focuses on community more than pure technology solutions. Organizations with government ties like MCF better serve technicality heavy trades like enterprise technology. Regardless, as Phandeeyar grows its staff and community, more work will have to be done beyond just connecting and facilitating projects. Phandeeyar might have to support or hire more specialists to address complicated problems. One entrepreneur thought this would be useful in framing meaningful problems, challenges, or questions, and then actively nudging community members to solve them.

Several people noted Phandeeyar is so strong because of its exceptional people. (One start-up executive compared one Phandeeyar staff member to "that elf lady in the Hobbit who can do everything.") A few questioned if Phandeeyar could survive without the leadership of David Madden. Given Madden's track record of leaving behind sustainable businesses after stepping down as a CEO, this did not seem to be a worry at Phandeeyar.

These two points were the most frequent critiques, but for the most part there was a lot of enthusiasm and optimism about Phandeeyar. Most just wanted Phandeeyar to become more well-known and present in the mainstream. The uniqueness and specialness of Phandeeyar is palpable as soon as you walk-in; most Phandeeyar enthusiasts just want to share that with people who never knew such open and vocal organizing because of their experience under a military regime.

Right now, the youth of Myanmar are excited, engaged, and enthusiastic about the future of the country and the new connectivity revolution. Yet, will this newness lose its luster as time goes on and disappointments or scandals emerge—as they tend to in any political system? Will loss of optimism affect Phandeeyar's growth? Many of these questions are speculation and hard to address. Yet, if Phandeeyar can remain true to its role as an independent, accessible and diverse platform for change, collaboration training, and resource acquisition, it is in a good place to prime the pump for the next chapter of development in the tech and civic sectors.