Supporting Entrepreneurship in a Region of Conflict, Limited Connectivity, and Conservation Concern:

A Case Study in Beni, North Kivu, DRC

Carol Adebowale, Justin Buenger, David Girón, Charles Hintz, Macey Lively, Evania Robles, & Nik Zurin

CAPSTONE SPRING 2018

wakisha

Executive Summary

Entrepreneurship in the Democratic Republic of Congo (DRC) is challenging due to numerous issues. A combination of ongoing conflict, weak government institutions, and adverse economic policies hold back business and entrepreneurial growth in the country. Another issue preventing growth is low connectivity, including the lack of consistent electricity and internet. Past literature also casts skepticism on promoting entrepreneurship in areas of high-conflict risk and low connectivity.

However, we believe that investing at the community level can deliver large dividends; which in turn, can have significant macro-scale effects further down the road. In a novel approach, the EC3 (Entrepreneurship, Conflict, Connectivity, and Conservation) Model seeks to integrate solutions across the domains of entrepreneurship and connectivity in order to improve local business environments within conflict zones. Conservation, another important pillar of the EC3 Model, is essential for attracting investment which contributes to sustainability.

The model is currently being piloted in the city of Beni in North Kivu, Eastern DRC by a local business accelerator called Wakisha (meaning "to ignite" in Swahili). Through Wakisha, selected entrepreneurs receive mentorship and training (monthly meetings with mentors, weekly trainings, and an initial three-day workshop), financial capital from local and international investors, and a shared co-working space to mitigate the effects of low connectivity. These components provide financial and business knowledge, increase reliable means of credit/capital, and increase the level of connectivity needed to conduct business activities.

The long-term and complex nature of the model similarly requires a fairly comprehensive mixed-methods evaluation framework, which is also discussed in detail in this paper. Qualitative data on program effectiveness and shortcomings will be gathered on a weekly basis to give mentors and mentees an idea of how compliant their performance is with baseline expectations, while also highlighting limitations of the program for improvement. Quantitative data will be drawn out from financial statements and other sources (such as the DRC Central Bank) in order to assess the localized average treatment effect of program participation; in this, we resort to the use of advanced econometric evaluation methods, such as propensity score matching and difference-in-difference.

Introduction

Problems in the Democratic Republic of Congo

The DRC as a whole faces a classic case of coordination failure; multiple actors across the DRC exist in a suboptimal economic equilibrium due to their inability to coordinate their actions. This is perhaps most evident at the macroeconomic level: weak government institutions, limited lines of credit/capital due to insufficient private and public savings, ineffective taxation, rampant corruption, a volatile and hyperinflated currency, and security issues plaguing the socioeconomic and political conditions of the DRC. These in turn generate microeconomic problems of their own; the lack of faith in the Congolese franc has turned both consumers and businesses alike towards the more dependable US dollar, thus complicating daily business transactions. Weak governance and institutions, coupled with an unwieldy taxation scheme have inhibited public goods and infrastructure provision while draining funds from businesses and citizens alike, making it difficult for businesses to connect physically with other businesses. Without strong financial institutions and access to reliable sources of credit and capital, small and medium businesses are limited in terms of scale. Furthermore, the persistence of these conditions have been non-conducive to the acquisition of human capital multipliers, particularly in the form of accounting and information technology knowledge, in turn limiting the ability of SME owners in Beni to make effective business decisions. Following the arguments of path dependence, as long as these trends continue, it will be increasingly more difficult to encourage interest in entrepreneurial activity. Gaps across all these major areas continue to grow without immediate action.

There is a temptation to consider the scale of these structural problems and simply write off the DRC as being an untenable investment. However, we believe that it is still possible to have an impact on the business dynamics in the DRC at the community level that could potentially have macro-scale effects further down the road. After all, macroeconomic cycles are merely an aggregation of behaviors that happen at the microeconomic level over a long time horizon. It is thus merely not logically possible to simply propose macroeconomic restructuring without any consideration for micro-level behaviors. Even in the developed world, this paradigm shift is taking place as a consequence of the global financial crisis (Blanchard et al., 2010). For the developing world, proposed projects and treatments are increasingly integrating analyses of both scale effects to reinforce the potential for their projects (Kotsopoulos and Connolly, 2014). With this, we advance the EC3 Model as a business and community-oriented solution to these problems in the DRC.

Proposed Solutions

EC3 stands for Entrepreneurship, Conflict, Connectivity, and Conservation. As the model's name suggests, it integrates solutions across the domains of entrepreneurship and connectivity in order to improve the local business environment in conflict areas; conservation on the other hand is an important consideration for ensuring sustained growth and as a potential platform for attracting investment. The model is currently being piloted and continues to evolve in the city of Beni in North Kivu, Eastern DRC. It is comprised of four major components: mentorship, training, an investment pool (comprised of both local and foreign investors), and a co-working space. These components are designed to provide solutions to three major areas of concern: a lack of solid business and financial knowledge among most SME owners, a lack of reliable means of credit/capital, and a lack of connectivity to facilitate business activities. In this sense, our model targets the most salient features of the coordination failure problems in Beni, in the expectation that it will generate the critical mass for more business activities to occur. The primary implementer of this project, the organization called Wakisha, is so named precisely because Wakisha means "to ignite" in Swahili.

Our paper will be organized as follows. In the next section, we will conduct a review of the context of the DRC's post-conflict environment, while also looking to other programs dealing with entrepreneurship promotion in other similar post-conflict environments. This review should yield major insights not only about the causes and complications of business failure in the DRC, but also the knowledge of success and failures from other programs. We then explain our model and its components, and how they address the major problems we have identified. The final section of the paper will propose a comprehensive monitoring, learning, and impact evaluation plan to help track the progress of the model and program as it continues to evolve. Additionally, we will conclude with some lessons learned.

Literature Review

Conflict in the DRC

Conflict in the Eastern DRC can be traced back to colonial rule; land was forcefully taken from the local population and handed to Belgian war veterans as compensation for their service in World War I (Hochleithner, 2017). In order to supply the demand of workers, plantation owners – backed by King Albert I – introduced coercive labor policies and displaced thousands of Rwandans into the area; these policies have created socio-economic and demographic tensions in and around North Kivu (Verweijen and Marjinen, 2016). In 1925, Virunga National Park (VNP) was created to protect endangered native species, including the mountain gorilla (*Gorilla beringei beringei*); as more flora and fauna were discovered, the park's boundaries expanded. When the state apparatus responsible for the protection of VNP collapsed during the 1970's, park guards began to brutally extort and threaten the local population. As a result, insurgent militias (Mai Mai and FDLR) were formed to fight back (Verweijen and Marjinen, 2016).

In 1997, Joseph-Désirè Mobutu was overthrown by a rebel-led coalition headed by Laurent-Desire Kabila. Mobutu's totalitarian rule lasted for over three decades; rampant corruption, state-centralization, and massive currency devaluation failed to lay the foundation for future economic growth. In 1998, a cohort of rebels backed by Rwanda and Uganda defeated the DRC's military alliance with Zimbabwe, Namibia, and Angola to gain control of the Eastern Congo (BBC, 2017). After the 1999 Lusaka Accord failed to end hostilities between the six African nations, the United Nations Security Council authorized a 5,000-person mission to assist with the implementation of a ceasefire.

In 2001, President Laurent-Desire Kabila was assassinated and replaced by his son and still incumbent president, Joseph Kabila (BBC, 2017). During President Joseph Kabila's transitional rule, several coups were attempted and fighting in the east between the Congolese army and soldiers from a former pro-Rwandan rebel group began to intensify. After four decades, the first free elections were held in 2006 under international monitoring, declaring Joseph Kabila the victor (BBC, 2017). While a peace agreement aimed at ending this conflict was signed in 2008, a new clash between Hutu militias and army troops surged – further displacing the eastern Congolese. Despite Congolese and Rwandan cooperation in a campaign to eliminate rebels, Hutu and other rebel groups re-emerged, causing further deaths, displacement, and mass rapes. Other rebel groups emerged by 2012: M23 (March 23 Movement) and the Mai Mai militias. Currently, President Kabila remains in power, peace remains fragile in eastern Congo, and multiple armed groups continue to operate and terrorize civilians within the region.

Conflict and Entrepreneurship

Countries experiencing internal conflict often lack institutions essential to economic growth, starting a business, and development. Kolk and Lenfant's (2015) research has pointed to partnerships (such as social alliances, cooperatives, unions, etc.) as a possible solution to help businesses develop within the aforementioned context. Partnerships between coffee growers (through cooperatives) allowed farmers in the DRC to share information and receive training from local experts – leading to increased financial training, better agricultural practices, and better marketing techniques. This in turn helped farmers and other related businesses to attract funding and grow their businesses. They also experienced increased access to markets and received better prices for their products (Kolk and Lenfant, 2015). Higher availability of information and cooperation decreased criminal activities within the sector. This increased trust and security helped set "rules of the game" for interactions between partners at the community level.

Securing lasting peace in conflict and post-conflict societies depends on economic development and institution-building. According to Lemmon (2012), foreign investment in small and medium enterprises (SMEs) can help diversify the domestic economy in developing countries, which in turn will render them less vulnerable to economic shocks that can lead to conflict. Research done by the National Bureau of Economic Research found that a 10% increase in labor-related spending was associated with a 10% decrease in insurgent violence in Iraq (Lemmon, 2012). SMEs contribute 45% of formal employment in the manufacturing sector and about 29% of formal GDP in low income countries (Lemmon, 2012). However, entrepreneurs in countries experiencing conflict face great challenges in obtaining microfinance loans. SMEs in these countries face very high interest rates and must repay loans in short amounts of time—even before their business becomes profitable. SMEs in regions of conflict are unable to thrive without outside entrepreneurial assistance, since they lack the skills, capacity, and capital of larger businesses (including international firms that compete for local contracts) (Lemmon, 2012). Foreign investment and entrepreneurial assistance should focus on providing SMEs access to markets, networks, skills, and financial services.

In countries experiencing conflict, female entrepreneurs often face higher challenges while attempting to start and run a business. Most women in these countries work in the informal economy, rarely own land, have low mobility, and have proportionately less business education than men. Coupled with gender norms, women face greater difficulties accessing capital, which reduces the likelihood of success for many SMEs (Lemmon 2012). According to Anugwom (2011), conflict is considered to be a main driver of entrepreneurship among women because it serves as a means of survival since there are few alternative options for employment. In the Niger Delta, conflict has produced unusual opportunities that have given women a greater advantage than men in running small businesses (Anugwom, 2011). In this context, the author argues that there is a cultural bond between mother and son that offers protection to women entrepreneurs from the violence of young male militants, whereas men do not enjoy this protection (Anugwom, 2011). Many of these women have thus started mobile phone call centers that depend on social networks to be successful. At these call centers, the women provide a cell phone which anyone can pay to use. These women have kept themselves safe because of their willingness to do business with non-combatants and youth militants. The author argues that these women's experience interacting with these different groups could make them key players in the peacebuilding process (Anugwom, 2011).

Conflict and Connectivity

Connectivity challenges in conflict zones, from electricity to internet, cause entrepreneurs to face difficulties in starting and growing their businesses. People in conflict zones become resilient and this enables them to cope with a greater amount of risk and ambiguity. Cyprusinno (2016) argues that these characteristics are very important for those who want to become entrepreneurs. Entrepreneurship and economic growth can be drivers of peace within regions of conflict. It allows for the utilization of domestic resources, which promotes future growth – unlike economic stabilization through international aid. In turn, entrepreneurship increases the demand for skilled workers and a more educated population. However, entrepreneurs face challenges in receiving mentorship and knowing how to expand their businesses. Entrepreneurs deal with these challenges in various ways across the globe. The author mentions that in Syria, entrepreneurs deal with these challenges by getting together and sharing valuable knowledge. In 2014, over 100 entrepreneurs participated in the Startup Weekend conference. During this time they received and provided in person and online mentorship, while collaborating across various sectors.

Technology-related startups often venture out to neighboring markets in search of stability and connectivity in order to hedge risk and expand their businesses. In Gaza, entrepreneurs face connectivity issues, blockades, and high unemployment. Despite this, they remain motivated and created Gaza Sky Geek, which connects startups to the global community and attempts to attract global mentorship and investment. In Nigeria, terrorism and political corruption hinder new businesses from starting and older ones from expanding. Bus Stop, a startup founded by Emmanuel Adegboye, has provided a solution for the chaotic public transportation system by making the public transport patterns available and helping passengers navigate the city easier. Lastly in Egypt, since protests and violence broke out - around ten startup incubators have launched throughout the country. In order to fight the lack of mentorship and stability, Cyprusinno (2016) says many Egyptian entrepreneurs have looked to international markets to stabilize their businesses and gain knowledge and experience.

Bayram's (2017) report provides many examples of how conflict hinders connectivity. Insecurity and political instability throughout the Syrian Civil War has made entrepreneurship and business continuity extremely difficult. Many critical roads have been destroyed, along with facilities that manufacture necessary goods. Infrastructure such as schools, hospitals, roads, and bridges have been destroyed as a result of the conflict. In addition, the lack of electricity and telecommunications isolates entrepreneurs from reaching potential markets, investors, and customers. Another problem faced by entrepreneurs in Syria is the lack of connection to financial support. Large-scale withdrawals during the onset of the conflict contributed to their inability to conduct business regularly and made accessing additional loans difficult for entrepreneurs. The unstable economic conditions in Syria make increasing income a higher priority than securing investments for startups. In addition, some internal sanctions even limit the movement of some goods and services within the country. External sanctions present another layer of complexity, with restrictions that prevent online transactions from outside of the country and prohibiting direct foreign investments all together. Payment systems have been banned, and without access to credit cards the only payment option available other than cash is traditional money transfers; this also limits the ability of entrepreneurs to purchase online goods and services.

Summary

Investors point to the lack of existing capital, business education, limited connectivity, and the underrepresentation of women as primary reasons to avoid investing in SMEs in developing countries. However, recent examples of entrepreneurial activity in Syria and Egypt highlight the opportunity for massive and mutual gains for investor-entrepreneur partnerships. Similarly to

Syria and Egypt, there is a strong entrepreneurship culture already existing in the DRC. Currently, there is not an entrepreneurship program that addresses these investor concerns in Beni. Although the EC3 Model does not claim to solve macro-issues such as conflict and corruption, the model has four built-in components to help entrepreneurs and investors overcome challenges in conflict regions: 1) Mentorship, 2) Training, 3) Investment and 4) Co-Working space. In contrast to the example of coffee cooperatives in the DRC, the EC3 Model will provide entrepreneurs with more than just mentorship; it will provide investment capital and a co-working space. Furthermore, the EC3 program will maintain an equal sex ratio of participants to encourage gender equity in business ownership.

Conservation

Beni is located on the western periphery of Virunga National Park - making it a unique location to pilot the EC3 Model. Despite the high and constant incidence of violence and the movement of hundreds of thousands of refugees, the mountain gorilla has surged as a national symbol of pride and hope (Maekawa et al., 2015). In addition to protecting the mountain gorilla, there is a general consensus among conservationists that the protection of Virunga National Park will reduce timber and fuelwood extraction, reduce bush meat hunting, and curb forest-clearing for agriculture; in turn, improving the resilience of the surrounding populations to shortages. Conservation, a component of the EC3 Model, builds off these concerns by drawing funds from international donors focused on conservation. Wakisha, the implementer of EC3 in Beni, provides foreign benefactors an in-country partner that is knowledgeable and able to administer projects that contribute to both entrepreneurship development and conservation. David Wilkie et al. (2000) also believe that if the unique and diverse forest resources of the DRC are to survive, international conservation organizations must create local partnerships to encourage environmental-friendly policies and practices.

Model

Overview

The EC3 Model aims to identify and support entrepreneurs in regions of conflict, limited connectivity, and conservation concerns (depicted in Figure 1). Wakisha, a Congolese-led business accelerator is implementing EC3 in Beni, the pilot location for testing EC3. Wakisha's mission is "Giving young entrepreneurs a chance to add value to the local economy by scaling their viable small businesses" (Wakisha). Wakisha partners with Université Chrétienne Bilingue du Congo (UCBC); currently, the co-working space is located there. In the future, greater cooperation on agro-business with UCBC is expected.

In this section, we describe the EC3 Model as implemented by Wakisha in Beni, beginning with the selection process for entrepreneurs and the contract that is offered to them. From there, we discuss the mentorship program, which complements the training given to entrepreneurs. We conclude by discussing the investment aspect of EC3 as well as the co-working space that our model provides.

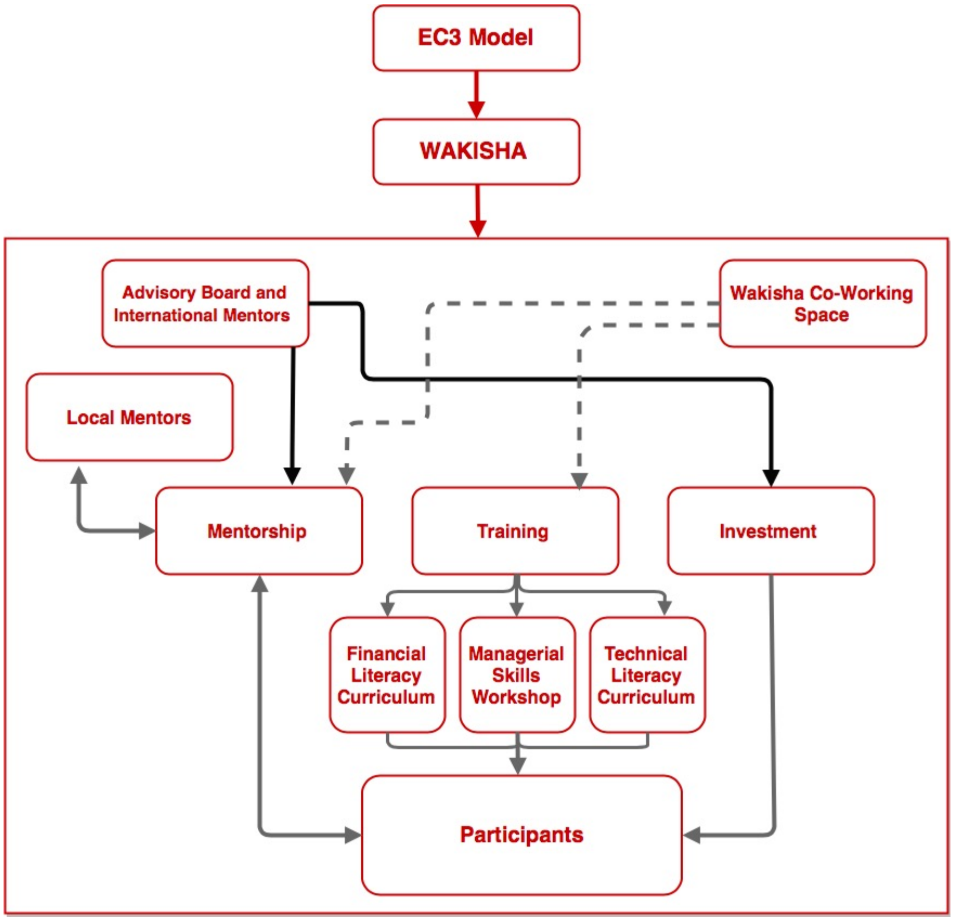

Figure 1. EC3 Model overview

Selection Process

There are two main stages of selection into the EC3 program: the application process and business presentations. Wakisha staff will use radio-broadcasting, social media, targeted visits to organizations, and word of mouth to disseminate information regarding the application process. Interested entrepreneurs will fill out a paper application to be considered for participation in the program. The most promising applicants will move on from the first round into the second round, “Leopard's Lair”. During the second round, entrepreneurs will present their business ideas to a panel of judges. The panel will be composed of advisory board members, mentors, and Wakisha staff. They will assess the feasibility of their business plans, strength of actors involved, dedication to participating in the program, benefit to the community, drive to be successful, and agreement to the terms of the program. After panel deliberation, ten businesses will emerge as finalists. Of the participants selected into the two-year EC3 program, there will be an equal sex ratio. Additionally, ten percent of the businesses chosen will contribute to Beni's social cohesion via fashion, music, movies, and other arts. The businesses not selected will still have access to the Wakisha Working Space and can attend EC3 workshops in order to strengthen the overall business climate in Beni.[1]

Contract

Business owners that are accepted into the EC3 program sign a memorandum of understanding between their company and Wakisha. This contract serves as documentation of a common agreement between Wakisha and the company in order to outline expectations for the partnership. As a business accelerator, Wakisha will support the entrepreneurial culture in Beni in order to improve the local business environment. Wakisha will strive to accomplish this goal by providing training and mentoring, equity investment, and a co-working space. In return, the selected business must agree to avoid compromising its social responsibilities while conducting operations.[2]

Mentorship

The mentorship aspect of the EC3 program is meant to help participants develop their businesses and navigate related challenges. Mentors will be composed of international mentors as well as local Congolese mentors. Mentors will benefit from contributing their insight to the formation of the program and learn about the business environment in the DRC. It is expected that next year's EC3 graduates will become local mentors for the next cohort. The international mentors also play an important role in the EC3 program because they serve on the program's advisory board. Whenever possible the program will match mentees with mentors within the same sector. To facilitate conversations between mentors and mentees, the Wakisha co-working space will serve as a networking and connecting space where mentees can meet with their local mentors and arrange telephone conferences with international mentors. The time commitment to participate as a mentor or mentee is to hold a two-hour conversation once a month for a duration of twelve months – in addition to weekly trainings for mentees. In case of mentor attrition, the program will attempt to replace them. Participants sign a contract including these items to demonstrate their commitment.

[1] During the 2017 application process, there were 30 applicants, 18 entrepreneur presentations, and 9 participants.
[2] See full memorandum of understanding in Appendix 1.

Training Curriculum

Managerial Skills Workshop

A major challenge for those in areas like Beni is the scarcity of entrepreneurial and business training. The EC3 Model seeks to rectify this situation by providing training that builds entrepreneurial capacity through a managerial skills workshop. The workshop will add value to the marketplace by expanding the capabilities of the entrepreneurs and as a result, EC3 participants will become a tangible asset to the community.

Figure 2. Managerial Skills Workshop Adapted from Lorika Model

The training (heavily inspired by the Lorika curriculum[i] implemented in the Rift Valley in Kenya) will take place over a three-day intensive workshop as seen in Figure 2. Each day lasts about six hours with a one-hour lunch break included. The training is comprised of instruction from a trainer and both individual and group activities that will expand upon the participants' entrepreneurial knowledge-base. It is expected that the lessons and training provided will be incorporated into the participants' businesses practices afterwards. Since the participants come from different education levels, the lessons will be made easily understandable. Lessons will include visuals as well as storytelling. Additionally, trainers will emphasize the importance of the environment and how to nurture it so that participants gain a sense of eco-literacy. Such practices will benefit the community in the long run and will be vital for gaining further foreign investment in the future. [3]

Financial and Technical Literacy Curriculum

The practice of accounting and the use of information technology to facilitate business in Beni is fairly scarce, in turn limiting the ability of SME owners to quickly process data and make effective business decisions. Thus, in addition to materials concerning managerial skills, the EC3 Model also aims to cultivate a culture of data-driven decision-making to address this issue. This will principally be engendered through the financial and technical literacy curriculum, which aims to bridge precipitous knowledge gaps in both finance and information technology (Figure 3 and 4).

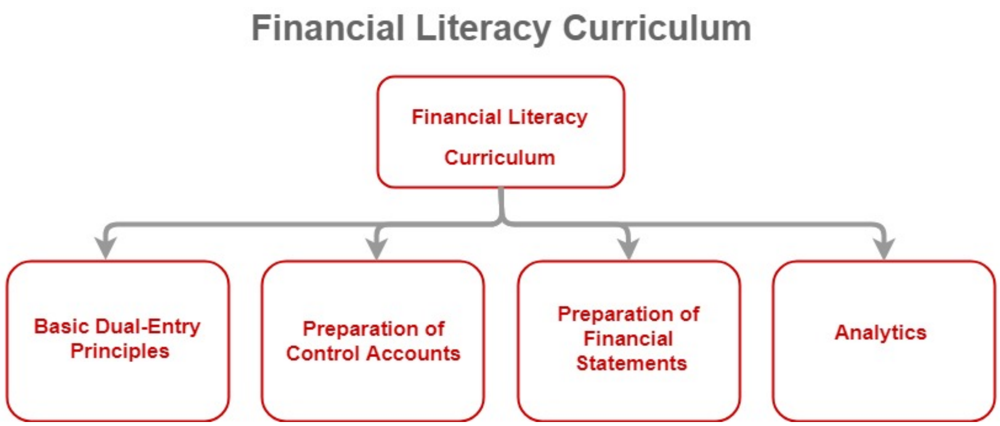

Figure 3. Financial Literacy Curriculum

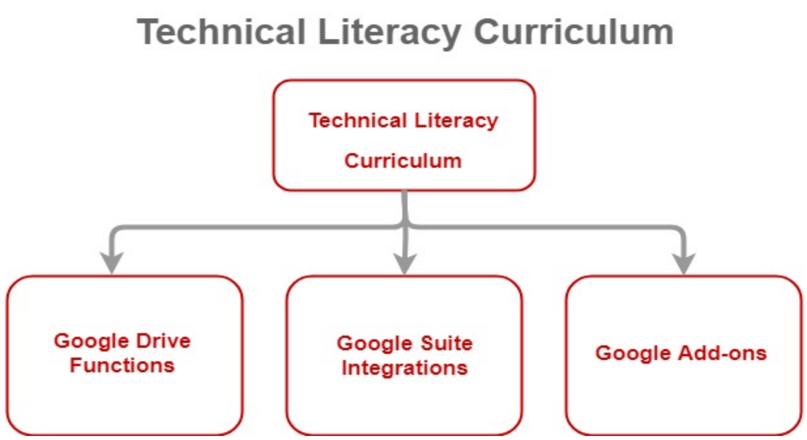

Figure 4. Technical Literacy Curriculum

[3] A full itinerary and outline of the workshop and curriculum is attached for further perusal in Appendix 3, 4, and 5.

On the former, we adopt the basic O-Levels / LCCI Bookkeeping and Accounting Certification syllabus, which provides a fairly comprehensive foundation for bookkeeping and accounting particularly to SMEs that are largely comprised of sole proprietorships and partnerships. On the latter, we have prepared a basic curriculum surrounding the use of Google Suites and its various integrations and addons as a means of streamlining both financial and managerial matters. The material is to be taught weekly; the entire syllabus for both subjects will be spread out across a period of 1-2 years, with roughly 3-6 months spent on each component.

The material prepared for the bookkeeping and accounting curriculum is fairly low cost, but the potential for generating significant returns is substantial. Firstly, these accounting standards are principles-based rather than rules-based; most countries in the world rely on principles-based accounting, but the DRC, as part of its French colonial legacy, technically uses rules-based accounting. While we acknowledge that this may potentially complicate matters, principles-based accounting is far more widespread and thus more useful, especially given the involvement of international mentors and investors.

Regardless of the actual system used, the mere presence of significant accounting skills will not only open up new employment opportunities but also enhance business performance. Knowing and tracking one's own financial performance over a fixed time period allows for careful and critical analyses of one's business decisions; these lessons can then be integrated into the next accounting cycle, in the expectation of improving profitability. Widespread cultivation and internalization of accounting as a business culture will also organically evolve an institution of higher accountability and transparency among SMEs, which in turn will help to establish trust and reduce information asymmetry. In this way, the adoption of such a syllabus generates both positive benefits as well as positive externalities for relatively low cost.

The information technology curriculum on the other hand is centered around the use of Google Suites, which in turn has a fairly extensive open-source and user-made set of addons and integrations that can significantly reduce managerial pressures. Primarily, because of its high modularity and high integration between apps and integrations, a Google Suites account allows a user to connect to multiple useful applications to rapidly speed through various processes and decisions through a fairly user-friendly interface. A single Gmail account can be connected to Google Calendar (which can be used to schedule meetings and other important events), Google Sheets (for all spreadsheet related needs), Google Docs (for generating important document templates, such as invoices) and Google Forms (for generating surveys / questionnaires / inventory forms).

Secondly, the integrated security features of Google Suites also allow SME owners to set rights and authorities among their employees, thus enabling multi-layer and hierarchical collaboration. This means that any one employee with the correct security credentials set by the SME owner can also work on these apps and integrations simultaneously on the same document; all updates are recorded into the system, and changes can be approved or reverted as needed. Most importantly, most of these features are free, and the few user-made add-ons that are paid typically also include free trials or free non-premium versions with more basic integrations. The possible combinations of integration of applications and addons are endless. The end result is the ability of an SME to be highly productive and efficient with time while also being able to process large amounts of data rapidly.

As a proof of concept, our team has integrated the lessons learned from both curricula, culminating into a basic, free, and highly modular accounting and bookkeeping application. The idea of the app is to minimize the potential of human error in financial reporting by automating most of the cognitively taxing and time-taxing processes, such as the generation of invoices, calculations, balancing accounts, calculating accounting ratios, and generating automatic financial statements. Doing so allows SME owners to focus on other important decisions, such as managing their teams and connecting with fellow businesses to synergize on their various comparative advantages. The proof-of-concept as it stands currently relies on completely free integrations and addons on Google Suites, while offering the basic capabilities of other accounting apps that would otherwise require a standard monthly fee.

In this sense, our technical curriculum provides a rare and interesting integration that has significant potential to increase profitability and value for SME owners in Beni. To date, no other model or program has so heavily integrated automation and bookkeeping into a single platform as a means of economic development, and at no charge through the use of free integrations. Most other apps of similar function require a minimum monthly fee for operation. The use of the app itself is inherently not zero-sum; on the contrary, it's highly collaborative nature thrives on more and more users being able to use the app and modifying it to create integrations suited to their needs. This means that long after the first cohort has internalized these lessons, the app will continue to be useful; in fact, over time, there is a potential for it to grow and become even more useful over its entire lifespan. At the same time, it should be noted with caution that the app's gains can only truly be unlocked by having the appropriate respect and appreciation for both tech and financial literacy; this in turn also requires very effective instruction catering to the speed of the mentee. However, failing that, it is still possible to benefit from both curricula, as they serve as complements rather than as substitutes.

It must also be cautiously noted that most of the tech curricula is predicated on the assumption of uninterrupted internet connectivity. Our model can only account for a part of this through the Wakisha co-working space, to be discussed below. However, due to security concerns, it is realistic to expect that beyond the co-working space, internet connection will at best be intermittent and at worst completely disabled. Even so, most of the accounting and bookkeeping knowledge imparted here can easily be done and backed-up by pen-and-paper methods.

Investment

The investment component of the EC3 program is meant to improve the businesses' revenues, costs of goods sold, overhead, and overall profitability on a short and long-term basis. By providing businesses with an investment offer in exchange for shares of the company, the EC3 program offers a form of microcredit to companies that would otherwise not be able to obtain such financial resources or support. The amount in microcredit and shares depends upon the businesses' size of operation.[4]

Investing in businesses operating within a conflict zone is regarded as a high-risk investment due to the high chance of underperformance and market instability. However, the EC3 Model does not promise a high yield of profit in an immediate time period like most high-risk investment opportunities. Rather, the model itself is built upon the idea that it is possible to ignite social and economic transformation by creating a community of visionary entrepreneurs that will, through investment and mentorship opportunities, be able to break through current market constraints and gradually build a more business friendly environment. Many of the challenges hindering business owners in the DRC, such as the lack of strong infrastructure and connectivity, are the same factors that would make investing in the DRC such a rewarding venture because of the vast opportunities that remain untapped. The EC3 Model provides a window for investors to peer into the many prospects for success in the DRC, and gives entrepreneurs a chance to reach new audiences who will be both excited and inspired by their ingenuity. In addition, the EC3 program affords investors more accountability since it will be easier to identify where the money is being put to use in the context of each individual business concept plan. The success of these business owners will provide long-term, locally-generated, financial sustainability for the EC3 program, and will in turn help numerous Congolese entrepreneurs in the future.

Wakisha Co-Working Space

Connectivity is at the heart of what makes businesses successful, but with limited connectivity such as reliable road networks, electricity, and centralized internet connectivity, businesses in the DRC are less likely to be successful and profitable. Limited connectivity as it pertains to access to internet connectivity also stymies the flow of information exchange and access to product development that can help businesses improve their products. Internet connectivity in Beni is especially important as it can be used to monitor productivity and is a valuable marketing resource for small businesses to reach their current and potential consumer base. Lack of access to electricity forces many businesses in Beni and surrounding areas to close during peak hours of operation, hindering the growth of businesses that rely on electricity for the production of their goods. Shortage of electricity in this area makes it difficult for customers and business owners to plan their activities, which causes inconsistent product delivery and consumption. To achieve

---

[4] In 2017, Maracujus, a juice company selling its product to supermarkets and hotels received, $7,000 USD, while Bastufi, an operation of fourteen chickens, received $500 USD.

profitable growth with the EC3 Model, businesses in the DRC will need to control and develop their networks by investing some of their profits into providing the necessary public goods to help their businesses thrive. With these issues of connectivity in mind, the EC3 Model offers a co-working space to help mitigate connectivity issues that might prevent Wakisha entrepreneurs from reaching their potential.

The Wakisha co-working space will offer an office space/cyber cafe hybrid to provide technology literacy for all entrepreneurs in Beni. The goal of this space is to create access to shared and private workspaces that foster connections between entrepreneurs in Beni. With open and free access for all, entrepreneurs will benefit from an environment which fosters a sense of community that provides an extended network of professionals with shared skills and resources. Businesses not selected to participate in the first cohort of the EC3 program will still have access to this co-working space. Allowing these businesses to improve tech literacy and have internet access will improve their business acumen and increase their odds of being selected into the subsequent cohort. In addition to the co-working space, Wakisha will offer consulting services from local and international mentors and training sessions to promote business knowledge. [5]

Monitoring, Evaluation, and Learning Framework

Hypothesis and Proposed Causal Linkage

The EC3 Model offers four distinct components designed to address various microeconomic challenges in the business environment of Beni. To recount, these four components are:

1) Mentorship
2) Training
3) Investment
4) Co-Working Space

We thus advance the following hypothesis:

H1: Entrepreneurs selected to participate under the Wakisha program will be more profitable than those not selected for the program.

This hypothesis is predicated on our arguments that our project will improve Beni's business environment. Specifically, we expect that participation in Wakisha will yield the following results: an improvement in the understanding of business and financial matters, more efficient business decision-making, greater access to capital, and greater connectivity and synergy between SMEs in Beni. These improvements, either collectively or individually, in turn are expected to improve SME profitability, as measured by various accounting identities such as

[5] A detailed outline of these services can be found in the appendix.

revenue - cost, profit margins, various accounting ratios, and inventory turnover rate. Figure 5 below provides a diagram mapping out the expected causal linkages for the model.

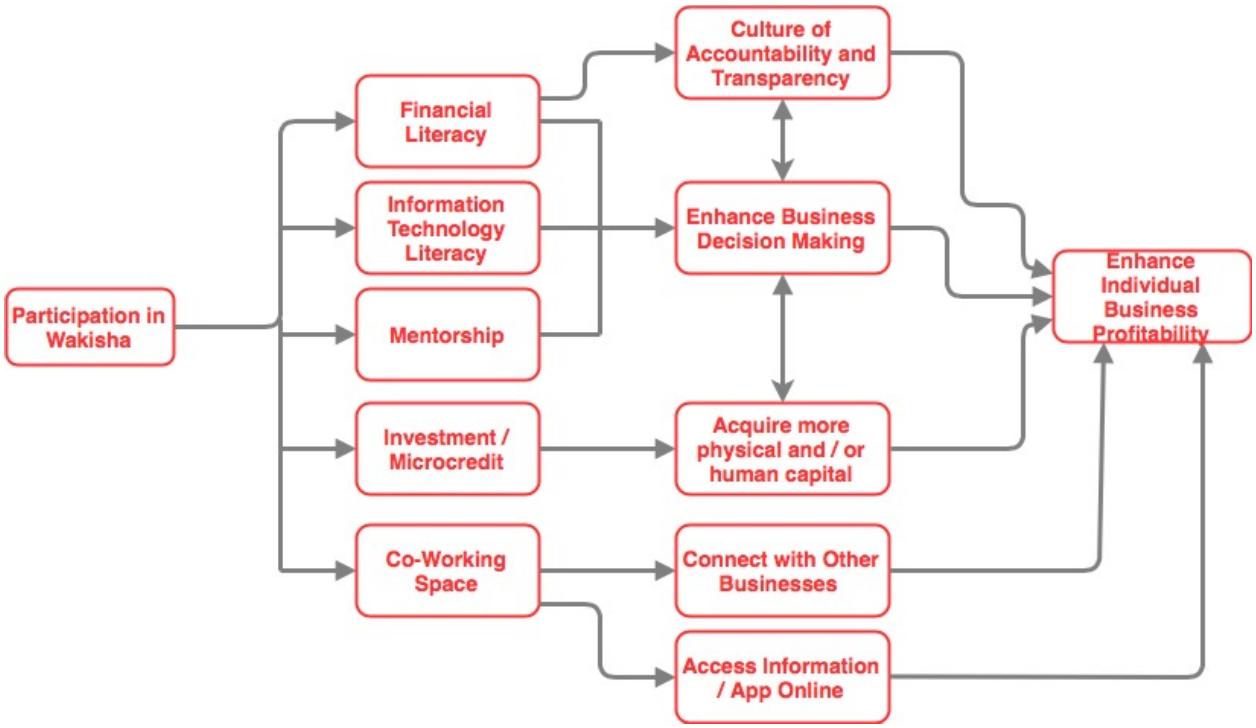

Figure 5. Diagram of Causal Linkages

Evaluation Stages

The long-term nature of this project requires a multi-staged evaluation approach. We propose a two-stage monitoring, evaluation, and learning system in order to provide program implementers a comprehensive framework for tracking program functionality, quality, and impact in the short and medium terms. Although we believe that our model could potentially generate significant macro-scale effects for the DRC economy, the evaluation of such effects is considered to be beyond the scope of our model. Nonetheless, we are still concerned with potential short-run effects of structural problems affecting our results; thus a brief discussion of long-term evaluations is also included, if only to tease out potential research avenues in the future.

Early stage evaluations will largely have a qualitative focus, and will seek to provide both mentors and mentees with the data necessary to better contextualize the program. In this sense, these short-term evaluations serve as a basis for teasing out "teething problems" that will inevitably occur as the model is being rolled out. Additionally, these assessments will also provide descriptive data and case studies to decisively demonstrate our proposed causal linkages. Middle stage evaluations will assess the localized average treatment effect (LATE) of the program in order to estimate program impact on the community as a whole, and will thus be quantitatively focused. This econometric impact evaluation will be carried out when the EC3 program has been sufficiently scaled.

Data Collection: Common Survey Framework

All data gathered by both evaluation methods will rely on a Common Survey Framework in order to simplify data collection and analysis. In this, we look towards the use of Open Development Kit (ODK) as a solution to create automated survey forms and questionnaires linked to several spreadsheets to facilitate data collection. Both the short term and medium term evaluations will draw data from this same source. In the short term, we will be operating with a fairly small sample size of no more than 30 small and medium enterprises in Beni. In the medium term, our data requirements will scale as we attempt to evaluate LATE; in this, we rely upon FEC's membership database of 2000 companies as a sampling frame to conduct our analyses, in addition to members of FENAPEC and other unregistered small and medium-sized businesses; this sample size should be more than sufficient to meet our power and minimum detectable effect size requirements. [6]

Data for both methods will be demarcated by yearly waves. At the beginning of the first year, baseline data will be collected for all participants in the EC3 program. Under this baseline data collection wave, information regarding the state of individual businesses prior to program participation will be gathered, to include both financial data as well as observable traits and characteristics of owners (i.e. gender, education, age, ethnic group, and preferred language) and their businesses (i.e. type of business, size of premises, and connectivity proxies). This will help analysis of both the qualitative and quantitative data; on the former, the baseline data allows mentors to understand where the mentees are starting from, which in turn should inform their approach in the mentorship and training program. On the latter, the baseline data will serve as the control group for those who comply with treatment.

Data will be collected on a weekly basis for the qualitative evaluations; surveys will be given to both mentors and mentees. For the quantitative evaluations, data will be drawn out from SME owner financial statements (cash flow, income statement, and balance sheet) that will be aggregated into annual values. All data will be collected and supervised by EC3 program enumerators and researchers from Texas A&M University. The rest of the monitoring and evaluation section of the paper is organized to detail the proposed evaluation methods in the short and medium terms.

Weekly Performance Assessment and Monitoring

The purpose of the weekly performance assessment and monitoring scheme is to ensure that compliance with the components is followed as closely as possible, in turn generating useful

[6] See Appendix 7 for power and MDE calculations.

descriptive data detailing potential causal linkages. Strict compliance is thus absolutely necessary to ensure that causal linkages function as they were intended. Additionally, it is hoped that these assessments also generate insights about program shortcomings and areas for improvement, which should improve program implementation over time.

Each component of the program will be assessed through either standardized testing (for technical and financial literacy), simple questionnaires and surveys, or derived directly from automatic recording systems (such as through the app and computers at the Wakisha co-working space) as part of the Common Survey Framework. For standardized testing, evaluators will prepare standardized technical assessments as needed and grade them based on the given syllabus; such assessments should include both objective (theoretical) and subjective (applied) questions in order to ensure full appreciation and mastery of the provided tools. Other performance data, particularly business performance, can be directly derived from financial statements, and should be used to corroborate the qualitative data provided from the above two sources.

Evaluators will derive baseline performance expectations by discussing with mentors and mentees in order to understand realistic progression milestones, while also including considerations for past performance and achievements. These milestones should be established at the onset of program participation, and should be reviewed monthly alongside other data to ensure that expectations are realistic given resources and local conditions.

Econometric Impact Evaluation

Ideal Econometric Framework: Randomized Control Trial with Factorial Design

The purpose of any econometric impact evaluation method is to estimate the true, unbiased impact of any given policy, given a set of fixed expectations and outcomes. Conceptually, this is simply defined as the difference in the outcomes between those that are impacted by those policies $(Y_{i1} | T_i = 1)$ versus those who are not $(Y_{i0} | T_i = 1)$. However, when the selection mechanism is non-random, this simple difference of outcomes often includes a persistent component of selection bias. When the selection bias is positive, the impact will be overestimated. When the selection bias is negative, the impact will be underestimated. Equation 1 below demonstrates the problem mathematically. Figures 6 and 7 illustrate the concern with selection bias.

Equation 1. Standard Neyman-Rubin model impact estimation equation.

$$E(Y_{i1}|T_i = 1) - E(Y_{i0}|T_i = 0) = [E(Y_{i1}|T_i = 1) - E(Y_{i0}|T_i = 1)] + [E(Y_{i0}|T_i = 1)] - E(Y_{i0}|T_i = 0)]$$

Where Y_{i1} refers to the outcome of those who received the treatment, Y_{i0} refers to the outcome of those who did not receive the treatment, T_i refers to the treatment assignment status (1 for assigned to treatment, 0 for assigned to control), $E(Y_{i1}| T_I = 1) - E(Y_{i0}| T_i = 0)$ is the total measured effect term, $[E(Y_{i1}| T_i = 1) - E(Y_{i0}| T_i = 1)]$ is the actual program impact term, and $[E(Y_0| T_i = 1)] - E(Y_{i0}| T_i = 1)]$is the selection bias term.

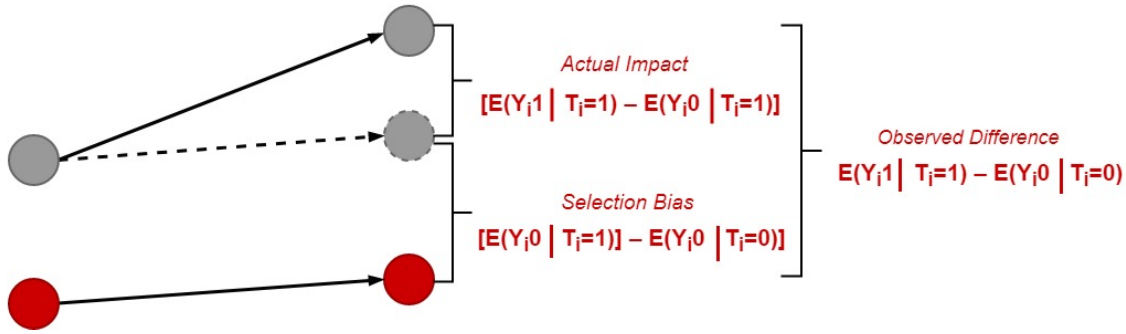

Figure 6. Graph illustrating positive selection bias.

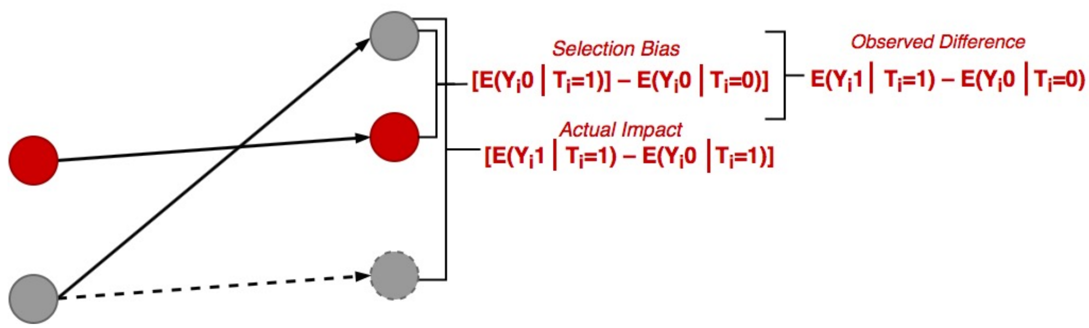

Figure 7. Graph illustrating negative selection bias.

Determining the magnitude of this bias ex-post is often difficult. Following the arguments of Duflo et al. (2007), as demonstrated above, randomization plausibly eliminates the effects of selection bias by averaging out the systematic differences between the treatment and control groups. In other words, the selection bias component $[E(Y_{i0}| T_i = 1) - E(Y_{i0}| T_i = 1)]$ would be equal to 0, and the total measured effect term $E(Y_{i1}| T_i = 1) - E(Y_{i0}| T_i = 0)$would simply be equal to the measured impact term $E(Y_{i1}| T_i = 1) - E(Y_{i0}| T_i = 1)$. This allows for the closest approximation of the true impact of a program or policy. Additionally, by adopting a factorial design, it is also possible to decompose the impact of each component of the treatment into separate sites in order to study the individual impact of each component. This yields four possible permutations: 4P1, 4P2, and 4P3, for a total of 40 possibilities.

The caveat to this general method of impact evaluation is that it is only able to estimate the average impact of the policy rather than the precise individual impact of the policy. This is rooted in the fundamental concern of causal inference, in which it is impossible to subject the same person to the same treatment / control status simultaneously. We acknowledge this methodological limitation, but also note that under the present circumstances, the randomized control framework provides the most ideal measurement of the impact of any program. Furthermore, we expect the effect size to significantly reduce for sites operating only on one component of the treatment, as each component builds off of the other; this would in turn necessitate the needed for a much bigger sample size, thus offsetting any potential sample size reductions otherwise expected in such a design.[7]

Complications with the Ideal Framework

As previously elaborated, Wakisha's selection mechanism involves the subjective evaluation of candidates in a 3-minute business pitch to the mentors. The mentors then select businesses that are eligible for receiving the intensive human and financial capital aid under the four distinct components of the program. Given this, the randomized control trial framework would not be possible to implement; candidates of differing talents and abilities will not be incentivized to participate in the program if selection was randomized, and potential conflicts may arise between candidates if they feel that their ability is not rewarded with program participation. Furthermore, as the program's existence is predicated on the support of mentor sponsorship and investment, the mentors will have significant say in determining which candidates should be accepted into the program. It is unlikely that the mentors will agree to a randomized lottery scheme as a selection mechanism.

Given these considerations, our evaluation framework for this program must adapt accordingly. We move away from employing the RCT framework and rely on propensity score matching to closely match candidates based on observable characteristics, and then using difference-in-difference to eliminate confounding effects from time-invariant and person-invariant unobservable variables. In this, we follow closely the arguments and methods employed by Chen et al. (2006), who faced similar concerns with evaluating anti-poverty programs in southwestern China.

Propensity Score Matching

The basic principle behind propensity score matching (PSM) is to estimate the impact of a policy / program as with the RCT framework, but it controls for non-random selection into the program by matching candidates based on their propensity score and then averaging out the differences in outcomes between those matched candidates. The propensity score is merely the predicted likelihood of receiving a policy treatment conditional on a set of covariates. In our case, these covariates become a significant factor because selection depends on the success of a candidate's

[7] See Appendix 7 for Factorial Design MDE and power calculations.

Leopard's Lair pitch, as well as the discretion of mentors. Once these scores are generated, candidates will then be matched to their closest equivalent among the group not selected into the program. In this, there are several different matching methods, such as kernel matching, nearest-neighbor matching, and odds ratio matching. The matching method used will merely depend on the state of the data as it is procured.[8] Equation 2 gives us the probit model equation that predicts candidate selection.

Equation 2. Propensity Score probit regression.

$$T_i = c + dZ_i + v_i$$

Where T_i is the binary treatment assignment variable (1 for treatment, 0 for control), Z_i is a vector of observable individual characteristics. In the case of our project, the observable characteristics of each Wakisha candidate include but are not limited to age, gender, education, and working experience. Intuitively, these variables will proxy for certain systematic tendencies that may give certain candidates a greater degree of success in the selection phase than otherwise possible. Matching candidates on these covariates then would effectively allow us to make unbiased comparisons, given that the conditional independence assumption holds.

Difference-in-Difference

The basic principle behind difference-in-difference is to find the difference in the rate of change of outcomes (hence "difference-in-difference"). This method is particularly useful in our case as it allows us to difference out unobservable time-invariant and subject-invariant effects, further limiting the scope of confounding effects in our evaluation. Equation 2 below shows the mathematical framework for this method.

Equation 3. Difference-in-difference equation.

$$Y_{it} = a + b_1 T_i + b_2 After + b_3 T_i After + cX_{it} + \varepsilon_{it}$$

Where Y_{it} is the outcome variable for individual i at time t, T_i is the treatment assignment variable, *After* is the time dummy vector (where 1 is for current year, and 0 otherwise), T_i*After* is the interaction term between time dummies and treatment assignment, X_{it} is the vector for observable business / SME characteristics, and ε_{it} is the error term. Impact in this instance would be calculated as the difference between the difference in outcomes between the treated before and after treatment and the difference between the control before and after treatment, condensed into the coefficient term b_3.

[8] See Chen et al. (2006). We follow their arguments by adopting odds-ratio based propensity score matching, as our sample is likely to be oversampling the control over the treatment groups in future iterations.

The caveat to this method is that the parallel trends assumption must hold; this assumptions suggests that the trajectory of outcomes for both treated and control individuals will remain constant over time. Intuitively, we believe this assumption is likely to hold in our case because, barring major shocks to society, it is unlikely for unobserved individual behaviors and group behaviors to shift rapidly over time.

It must be clearly noted that Equation 4's treatment assignment variable is conditioned such that it takes the value of one when a participant receives any one of the four components, and zero only when a potential participant did not receive any of the components. As previously noted in other sections, participants will have the option to self-select into either the Wakisha co-working space or the training programs or local mentorship or any combination of the three, whereas those that pass the selection process will receive international mentorship and investment opportunities in addition to any combination of the training and co-working space components. Because of this, it would be impossible to decompose the effects of each component as with the factorial design; doing so may significantly reduce the minimum detectable effect size, in turn necessitating a much higher bigger sample size.[9] In light of this, our team feels it is better to estimate some LATE rather than none at all; future works may consider a more comprehensive study to break down the LATE of the program into its constituent components.

Macroeconomic and Structural Concerns and Future Evaluations

Although we acknowledge that solving macroeconomic and structural problems in the DRC as being outside of the scope of our project, these conditions will nonetheless have an effect on the impact measure we are trying to estimate. Following the research conducted by UCBC on Beni's business climate, potential confounding macro-level effects include corruption, instability, poor governance, volatile domestic currency, ineffective taxation system, and lacking infrastructure. Other structural economic concerns are reliance on the commodity markets as the main source of growth, particularly copper and cobalt.

The precise magnitude of these macro-level effects on our project would be hard to measure with our current framework. Simply adding these variables into the current analysis will only raise the question of endogeneity; macro-level variables operate in the long run, which generally implies significant two-way causality between these variables. We acknowledge this as a limitation of our monitoring and evaluation framework.

However, their directionality would almost certainly be running in contrast to our expectations of program impact. For example, ineffective governance usually implies poor to non-existent public goods provisioning, particularly road and electricity infrastructure. Insofar as public goods are assumed to be profit-enhancing for businesses, the lack thereof would imply that businesses

[9] See Appendix 7 for MDE and power calculations for diff-in-diff factorial design.

would negatively be impacted by their absence. Intuitively, these public goods would help connect potential consumers to EC3 businesses; absent these public goods, it is likely that less customers would be able to go to these businesses than otherwise possible. The concern with volatile currency in particular also poses a significant question of measurement as well; the Congolese franc is typically not used for day-to-day transactions. Instead, most business transactions are conducted in US dollars, which are also quite rare. Intuitively, this would mean a very low money velocity, which in turn may have adverse effects on profitability as less customers are able to participate in transactions than otherwise possible. In summary, it is likely that these effects would lead to only underestimate the true impact of our program, which suggests that the program could potentially have greater effects than is otherwise practically estimated.

Future works may consider attempting to quantify these effects with other macro-oriented methods, such as vector autoregressions and year-lagged panel regressions. Extensive macroeconomic data would be required however, and it is likely that any effects to be found would be constrained to more aggregated units of analysis (i.e. at regional levels as opposed to individual business levels), while also being less well-oriented for partial equilibrium analyses, given the long-run time horizon. A computed general equilibrium (CGE) model may also be telling, and would help to bridge the gap between macro- and micro-level analyses.

Pilot and Lessons Learned

As to be expected in the piloting of the EC3 Model, Wakisha has learned several lessons that can inform subsequent iterations of the EC3 Model. First, Wakisha needs to refine the recruitment process for prospective participants in the entrepreneurship program. In Beni, Wakisha was less successful in obtaining applications through social media (i.e. WhatsApp and Facebook) than through local radio. Among the applications received, four were submitted by people who learned about the entrepreneurship program through social media whereas twenty-one were submitted by people who learned of the program through radio advertisement. Furthermore, future radio advertisements should mention that no money is on-site where the Leopard's Lair contest will be held; after the announcement for the pilot program, there was a robbery at UCBC and computers were stolen.

Additionally, through recent interactions with the *Fédération des Entreprises du Congo* (FEC), Wakisha learned that they should target entrepreneurs belonging to FEC for the next program as many FEC members expressed interest in applying. Another opportunity for expanded marketing exists among the FENAPEC, which stands for *Fédération Nationale des Artisans, Petites et Moyennes Entreprises du Congo*. In the future, the applications will also give more specific instructions and will therefore be easier for participants to complete. Second, Wakisha learned that international mentors from the United States experienced challenges in thinking about how businesses operate in the Congolese context. This challenge can be addressed in the next program by providing a more thorough background of the Congolese business context.

Third, and similar to the second lesson is that cross-cultural differences between the United States and the DRC need to be bridged more effectively. Language translation procedures need to improve for some mentors and mentees; having to wait for communications to be translated and relayed has been challenging for some international mentors. Additionally, Wakisha hopes to overcome cultural differences with time by making sure contact information is given out for test calls to occur in advance of scheduled meetings.

Additionally, there were some positive lessons learned from the pilot program. One entrepreneur reported that local training was making an impact as weekly financial reporting, a new practice for the Congolese entrepreneurs, was helping him understand his business more. Second, despite recent outbreaks of small-scale conflict during which the entrepreneurs had to flee into the jungle, they are coming back to UCBC to resume trainings. This is encouraging because it demonstrates the resiliency of the entrepreneurs, showing that they are strongly committed to the program and have not been deterred by the conflict environment.

Moving forward, Wakisha also plans on collecting more information from the businesses that attend trainings to discover which topics are most demanded. These surveys will also serve as a way for Wakisha to determine how the participants feel about the usefulness of the individual trainings. Wakisha also plans on expanding their staffing capabilities by initiating internships for students from UCBC in order to build greater connections between Wakisha and the campus.

Conclusion

Macro-level challenges such as - weak government institutions, corruption, and a hyper-inflated currency - complicate the possibility of implementing national-level development projects aimed at increasing economic growth. Similarly, the lack of security and connectivity in Beni has discouraged foreign investors from investing in local entrepreneurs. As a result, the EC3 Model aims to support businesses operating in the context of conflict, limited connectivity, and a region of conservation concern.

The EC3 Model attempts to promote entrepreneurial growth in these environments with the inclusion of four components: 1) Mentorship 2) Training, 3) Investment, and 4) a Co-Working Space. Although entrepreneurs will need to be selected to benefit from the investment and mentorship components, all entrepreneurs in Beni will have access to the weekly trainings and co-working space - fulfilling the EC3 model's objective of improving the overall business climate in Beni. In addition to improving economic growth in regions of conflict and limited connectivity, the EC3 Model also aims to attract investment from donors concerned with conservation. International donors have been discouraged from investing in Beni because they do not have the personnel to work there; with Wakisha present, these donors will have a reliable partner on the ground. The EC3 program - currently in its pilot phase, is laying the foundation for entrepreneurs in Beni to be the drivers of change and development within their communities and country.

Appendices

Appendix 1. Wakisha Contract

MEMORANDUM OF UNDERSTANDING (MOU)
Between
WAKISHA & [COMPANY NAME]

This document constitutes an agreement between WAKISHA, a business accelerator and [company name].

OBJECTIVE
The objective of this document is to outline expectations for the partnership of the Wakisha with [company name]. The document reflects common agreement and understanding between Wakisha and [company name].

INTRODUCTION
Wakisha strives to support entrepreneurial culture in Beni by providing training, mentoring and co-working space and equity investment. [Company name] aims to make profit without compromising its social responsibilities.
Wakisha's work and the goals of [company name] align in these and other domains and the partnership, collaboration between Wakisha and [company name], would benefit both parties.

Wakisha and ____ agree on:

INVESTMENT
1. Wakisha will invest $__________ in [Company name] and will receive shares that amount to ______% of the company's share capital.
2. If the majority of existing owners of [Company name] agree, at any point before 5 years (60 months) from the date signed, [company name] owners can purchase Wakisha's equity position of [percentage owned] for [multiple of initial investment in dollars]. After 5 years (60 months), if existing owners of [company name] are unable or unwilling to purchase Wakisha's equity back, any future agreement will have to be negotiated separately.
3. Wakisha will transfer $ _________ to [company name]'s bank account on [DATE].
    a. The bank account details are as follows:
    b. Account name: _____________________________________
    c. Account number: ___________________________________
4. [Company name] will deliver to Wakisha a certificate registered in Wakisha's name, representing __________ shares no later than [a later date].

5. The funds Wakisha invests in [company name]will be used to support the company's activities in developing the business concept as described in the profile document.
6. [Company name] will invest in legal business according to Congolese law.
7. Company name] will promote and ensure financial transparency and best accounting practices.
8. Wakisha will become a permanent board member of the [company name] as long as its investment is not yet bought back.
9. Company name] will provide information requested by Wakisha in the format and time indicated.
10. [Company name] commits to do not hide anything to Wakisha and/or its experts or partners.
11. Changes or termination of this agreement are by mutual consent between the leadership of [Company name] and the board of Wakisha. In case of failure to reach mutual agreement for any of the things provided for by this agreement, the parties concerned may introduce the case to the competent courts and tribunals.
12. Wakisha is not responsible for any legal issue occurred in the [Company name]'s activities.

INTERNATIONAL MENTORING

1. Wakisha will match [Name of the person and position in the company] with an international mentor pointed by Wakisha.
2. Assess the mentoring relationship and make sure of its effectiveness.
3. [Name of the person and position in the company] will:
    a. Commit one to two hours to mentorship once a month for 12 months.
    b. to share his experience with the international mentor.
    c. Establish fair rapport with international mentor based on trust, mutual respect, open and honest communication.
    d. Provide requested documents to help Wakisha assessing the international mentoring program
4. The mentoring relationship takes end after 12 months. Mentor and [Name of the person and position in the company]continue the relationship if there is mutual agreement,
5. Name of the person and position in the company] is not allowed to ask any kind of resource to the mentor. If the case appears, Wakisha can decide immediately to end the mentoring relationship.
6. The mentoring is conducted on the language [Name of the person and position in the company]. If [Name of the person and position in the company] and mentee are unable to speak the same language, they will be assisted by a translator pointed by Wakisha.

LOCAL MENTORING

1. Wakisha will match [Name of the person and position in the company] with an international mentor pointed by Wakisha.
2. Assess the mentoring relationship and make sure of its effectiveness.
3. Name of the person and position in the company] will:
    a. Commit one to two hours to mentorship once a month for 12 months.
    b. Accept to share his experience with the local mentor.
    c. Establish fair rapport with the local mentor based on trust, mutual respect, open and honest communication.
    d. Provide requested documents to help Wakisha assessing the local mentoring program.
4. The mentoring relationship takes end after 12 months. Mentor and [Name of the person and position in the company] can continue the relationship If there is mutual agreement,
5. [Name of the person and position in the company] is not allowed to ask any kind of resource to the mentor. If the case appears, Wakisha can decide immediately end the mentoring relationship.
6. The mentoring is conducted on the language [Name of the person and his business title]. If [Name of the person and position in the company] and mentee are unable to speak the same language, they will be assisted by a translator pointed by Wakisha.

TRAINING

1. Wakisha will:
    a. Organize business conferences and seminars for the management team of [company name].
    b. Assess the impact of its conferences and seminars to [company name]'s operations.
2. [Company name] will:
    a. Attend each week a two to three hour time training session organized by Wakisha
    b. Participate actively into all the activities required in the trainings.
    c. Provide requested documents to help Wakisha assessing the training program.
3. The trainings take end after one year. Wakisha and [company name] can continue the relationship If there is mutual agreement.
4. The training sections are conducted in French and or Swahili.
5. Training period is for 12 months.

CO-WORKING SPACE

1. Wakisha will:
    a. Provide a co-working space at UCBC equipped with internet, computers and electricity to [Name of the person and position in the company].
    b. Give opportunities to [Name of the person and position in the company] to be connected with others in the friendly atmosphere with less time and logistic.

    c. Assess the impact of its co-working space to the operations of [company name].
2. Name of the person and position in the company] will:
    a. Come at anytime to the co-working space from 9:00 AM to 4:00 PM.
    b. Share his experience with other entrepreneurs in the co-working space.
    c. Accept to follow the rules of the co-working spaces of Wakisha.
    d. Participate actively into all the activities required in the trainings.
3. French, Swahili and English are languages of the Wakisha co-working space.
4. The co-working space agreement will be for 12 months, subject to renewal if necessary.

GREEN ENVIRONMENTAL RULES

We; [Name of the person and position in the company], aware of my key role in the environment protection, commit to:

1. Clean Air
    a. Conserve energy. I will lower my utility bills and avoid generators for power supply.
    b. Don't burn waste. Because burning yard waste releases mold spores, soot, and other contaminants that can aggravate allergies and cause respiratory problems.
    c. Avoid charcoal by using alternative energy like solar and biogas. The production of charcoal requires cutting trees which absorb carbon dioxide.
2. Clean Water
    a. Never pour anything – especially waste oil or leftover chemicals – into a stream.
    b. Don't trash our streams. Cleanups find everything from old tires, plastics bags to old appliances in our waterways.
    c. Repair leaky faucets and toilets.
3. Clean Land
    a. Make a habit to say no to plastic bags as much as possible.
    b. Use reusable packaging and limit plastic use on all packaging for products. Be creative in packaging so there is less waste and lower impact.

SIGNATURE DENOTES AGREEMENT TO THIS MOU:

On behalf of [COMPANY NAME]

____ __________

[Name of the person and position in the company] Date

____ __________

[Name of the person and position in the company] Date

WAKISHA

___________________________________ __________

Butoto Mahinduzi, Coordinator Date

Jonathan Shaw, Board Member — Date

Leslie Ruyle, Board Member — Date

Witnessed by:

Date

Appendix 2. International and Local Mentoring

- The participant will be matched with an international mentor.
- The program will assess the mentoring relationship and make sure of its effectiveness on a monthly basis.
- The mentor and mentee will commit to a monthly two hour conversation for one year.
- During conversations mentors and mentees will share their experiences with mutual respect and open and honest communication – in order to build trust.
- The program will provide an interpreter if language barriers exist.
- Mentors should not be asked and are not obligated to provide financial resources to mentees.
- After 12 months the mentoring relationship will end and upon mutual agreement the relationship can continue.
- The mentors will work with the program to expand understanding of the nexus between entrepreneurship, development, and green practices.
- International mentors will receive $500 for their time investment in the program.
- Local mentors will receive a comparable sum (approximately $160).
- In case of mentor attrition the program will attempt to replace them.

In the Wakisha co-working space, entrepreneurs will have access to computers and internet. Here entrepreneurs can engage in conversations with their local and international mentors.

Example Topics for Mentorship Conversations:

- Vision formation
- How to circumvent EC3 issues
- Adapting business to EC3 issues
- Financing
- Credit
- Accounting
- Recordkeeping
- Business regulation in the DRC
- Marketing
- Business community and organization
- Sustainability
- Investment and reinvestment
- Business impact on the community

In addition to utilizing the co-working space for meetings between mentors and mentees, the space will also be used for training sessions. The training portion of the program will last for one year and will begin with a three-day workshop as outlined in the training curriculum below.

Additionally, trainings on financial reporting and other business topics will be conducted in the co-working space.

Appendix 3. Managerial Skills Workshop Outline and Itinerary

The Goal of the Training Curriculum is for entrepreneurs to learn and understand the following regarding businesses:

- Generating business ideas
- Choosing a marketing strategy
- Using a balance sheet
- Creating a business plan
- Creating a cash flow budget
- Taking and repaying loans
- Keeping business records
- Managing the use of profits for personal use

By doing so, Wakisha trainees will have the skill sets to run their entrepreneurial businesses to become more successful.

Materials: The business training should be a hands-on experience. Therefore, the following materials are recommended:

- A timetable for hanging on the wall.
- A flip chart with paper and pens.
- Pieces for moving around on the flip chart.
- Tape or other ways to hang things on the wall.
- Big beans or seeds. (At least one for each participant.)
- A handful of smaller beans for each table.
- A printed set of papers for each participant, including timetable, business tree, money plan, business plan.
- A ball pen, pencil, pencil sharpener and rubber for each participant.
- A questionnaire for each participant.
- A personalized certificate for each participant for handing out at the end of the training.
- Lunch and water for the participants and yourself.

Note to trainers: The Wakisha Training Program adopts many concepts from the Lorika Model. Said model uses trees and the environment as a visual metaphor and motif. For example, the following metaphors are employed:

- Tree - Business
- Seeds - Ideas
- Water - Money
- Branches – Activities
- Roots – Sources
- Withering – Lose
- Drought – Bad Times

- Flowers – Marketing
- Fruits – Results
- Soil - Market

According to the Lorika Model, the tree is a good way to explain the dynamics of business and it connects to multiple activities mentioned above. Additionally, the tree can link business endeavors to community and environmental topics in a natural way. Trainers should employ these metaphors visually throughout the training.

Note to trainers: Please take this three-day workshop as a template & framework for all lessons and add your own cultural context and interpretation for the attendees.

Pre-training assignment

Participants must review and answer the following:

- Who is your main target customer? What do you know about them?
- Why will they buy or use your product/service? What is your compelling story - why buy from you instead of someone else?
- What is your product/service?
- Who is your customer (be specific)?
- Why would your customer buy it?

Day 1: Understanding Business

(Length of First Day is six hours with a one-hour lunch break)
Purpose: Learning about what are the fundamentals of business.
Activities:

Welcome- 30 minutes

- Participants and the instructors should become acquainted with one and another.
    - The Wakisha Team should introduce themselves.
- Instructor should welcome the participants and make clear the purpose of this training. That purpose should be about learning how to start and run a business. If some participants have already started one, the goal should be how to improve their activities.
    - Instructors will explain the structure and length of the program.
    - Expectations of the participants will be stated as well.
- After introductions, the first activity will be for participants to introduce themselves and making a one-minute pitch explaining what they want to do for their businesses.
    - Participants should utilize their answers from the pre-training assignment.

What is a business? One Hour

- The purpose of this activity is for participants to understand what a business is; this includes buying and selling goods as well as providing services.
- A flip chart will be required.
- Put participants in groups of three to five for each flip chart.
- Ask each group to create a team name, preferably a tree native within the DRC

- Each team should draw tree representing a business. The drawing should show what it takes to grow a tree, each part represents an aspect of business.
- Ask the groups what is a business, what makes something a business? For example, some businesses buy things and sell them at a higher price. Others produce things like growing fruit while others offer services like building homes.
- First 20 minutes, trainers should talk about the nature metaphors in order for teams to frame how they will draw their trees. By doing so, all participants should have an understanding concepts like Ideas (Seeds), Money (Water), Results (Fruit), and many more as referred to in the Note to Trainers.
- Teams should have 20 minutes brainstorming and drawing their tree.
- For the next 15 minutes, teams will present their trees answering what a business is.
- Trainers should summarize the lessons learned in the last five minutes before proceeding to the next activity.

Profit & Loss- One Hour

- The purpose is to understand what causes profit and loss, and when it happens. To learn the difference between making profit and the total profit in a business. Finally, participants should understand the relation between profit and loss, and how a profit turns into a loss, and a loss turns into a profit.
- Trainers should utilize the flip chart and draw a business tree. The goal is to show how inputs and outputs (gains and loses) impact the health of the tree which is also the status of a business.
- Carefully explain the definition of profit and loss. Participants should learn how they are not the same thing. State how a loss is like the removal of soil (digging a hole) while profit is adding soil (building a hill).
- After explaining various terms, ask various participants about profit and loss to ensure they understand.
- For the activity, devise a story of a business owner with a simple amount of goods. The purpose is for participants to determine how much of a loss or profit has incurred. Start off with a balance. Participants could use seeds and other materials to visualize whether a loss or profit has taken place.
- For example: Butoto sells beads. He has two units of cash. He buys new beads for one unit and sell them for 2 units. Tim gains a profit of one unit.
- Use the last ten minutes to facilitate a discussion on profit and loss.

Credit- 30 min

- The purpose is understanding what credits are, and how they influence business. To understand when the profit and loss occurs, and the difference between customer credits and supplier credits. In this activity, loans and interests are not covered.
- Trainers start by lecturing on what credit is. Credit allows a customer to pay later. In the incidence, a customer takes a credit. That customer now owes you money and you owe the right to be paid later. You can also get a credit from supplier which occurs when you get some goods for your business, but you can pay later.
- Ask if participants can give examples of credit. If not, trainers should come up with some real-life examples of their own for participants to relate.
- For the activity, continue the story from the last lesson and add credit to it.

- Afterwards, ask if participants know the definition is for deposit. Explain deposits are when someone pays and receives the good later. Ask how a deposit for a supplier would look different from a customer.
- Use the last ten minutes to facilitate a discussion on giving and getting credit. Explain the risks of giving out credit because you may never get it back. Give credits to people you only trust.

Lunch Break- One Hour

Money for Living- 30 min

- Purpose for this activity to learn how profit can be either reinvested or used, and how this affect the growth of the business. Also learn how to avoid taking out too much money out of the business for personal use.
- Explain why some businesses remain small while others grow. This relates to how businesses handle their profits.
- For the activity, trainers will work with participants through two scenarios where businesses stay small and where they grow.
- The purpose is for trainees to see a pattern which should help shape how they run their businesses.
- Trainers will continue to use the story scenario which was used in the last two activities.
- Once participants gain good understanding, ask them whether they would like to have a small business or a large one. Have them explain their answers.
- To close up the activity, ask for a volunteer to summarize the lesson learned.

Avoiding Failure- 30 min

- The purpose is to learn about common ways that businesses fail, and how to avoid them
- Trainer should draw a dead tree to symbolize a dead business and explain once a tree dies, it can no longer grow.
- For the next five minutes, ask participants for examples of businesses in their communities that have failed. Most reasons for failure have to do with people running out of money because the expenses are larger than the income.
- Tell trainees that they can avoid business by making sure their income is big enough to cover their expenses.
- Using the same activity incorporate scenarios where the business owner cannot sell enough (income is too small), too much loss (too many expenses), running out of money (giving out too much credit).
- Afterwards, ask participants how they can make sure that their businesses will not close.

Business Community- One Hour

- The goal is to understand how different businesses depend on each other, and how a thriving community economy will benefit all the local businesses. Participants should learn how money in a community can either circulate or leak out, and what causes this.
- Ask participants if they can plant and grow a seed in the desert. The answer is obviously no as it would quickly die from the lack of water. In the same way, no business can exist on its' own because it depends on other businesses and the money that circulates. A health business community will make it much easier for you to run your own business.

- For a majority of this activity, trainees will participate in a community represented by a circle of chairs.
- The purpose is to demonstrate how a healthy business community functions and what happens when money leaves.
- Each person should sell various goods at a predetermined price. Seeds will represent money. A trainer will act as a business owner from outside of the community. They keep the money away from the circle.
- During the game, participants can sell goods and services to each other; including the trainers who are outside the community.
- At the end of the game, count how much money is left in the community.
- The lesson is each time someone bought outside the community, a little money was leaking out the community. Less and less money was circulating on the inside, which makes businesses harder for everyone
- Repeat the lesson, but this time the trainers will be sellers from within the community. This time the money circulates within the community.
- For the last fifteen minutes, have participants reflect on the lessons from this activity.

Concluding Activity - 10 min
- What did participants enjoy about they first day of the workshop.
- What were their favorite activities?
- What did they learn?

Homework
- Trainees need to get an understanding of their customers.
- Participants will introduce themselves, state what their purpose is, and try to get input on how to improve their businesses.
- Example questions could include the following:
    - How much would you pay for meat?
    - How much extra would you pay for a chair and table?
    - Who else would like to eat at this restaurant? Why are they not eating here now?
    - How often would you use our services?

For trainers, please take 30 minutes to assess and brainstorm the following:
- What did trainees comprehend well?
- What did trainees not understand?
- How can trainees improve upon concepts they struggle with?

Day 2: Planning your Business

(Length of First Day is six hours with one lunch hour break)
Purpose: How to plan out a business and financial literacy.
Activities

Opening- 30 min
- Trainers should employee energizers to get trainees excited for Day 2.

- Afterwards, trainers should ask about what trainees learned from the first day of the program.
- Ask if there are any concepts that trainees do not understand well.
- Participants will state some of their findings from the homework assignment.

The Business Plan - One hour
- The goal is for participants to understand what a business plan is, and how it can be useful.
- Start the lesson by asking participants what is a business plan and how it can be useful. Afterwards, lecture to participants that these plans can include a description of what you do, how you will start it, and how to avoid unpleasant surprises.
- Business plans can help participants make decisions on whether to get loan, when to do what & when, explain their business ideas to others.
- Trainers will try work with a small group of trainees or one on one to help develop a business plan template which includes a money plan.
- Have participants begin with their idea and then answer these questions.
    - What product or service will you offer?
    - Who will be your customers?
    - Why will customers buy from your business versus your competitors?
    - Will you plan ahead for days, weeks, or months?
    - What important equipment do you need and how much does it cost?
    - What is your estimated sales and expenses for each period?
    - How much money is needed to start the business and keep it going until it gains a profit?
    - Once participants have their plans developed, have them present to each other. This will be a good opportunity for participants to receive feedback from their peers.

Marketing - One Hour
- The goal is to learn how to attract customers.
- This requires being able to choose the appropriate marketing mix for their specific business, prioritizing price, product, place and promotion.
- For the first half of the activity, trainees with receive a sheet of paper either saying flower, egg, meat, or some other determined by the trainers.
- The goal is for participants to think about how to market their product and then make a 30-second pitch to other attendees.
- Factors participants should consider include price, the product, the place, and the promotion. All four play varying levels of importance.
- After each presentation, everyone in attendance should provide feedback.
- The next step is for everyone to make a 30-second advertisement pitch for their own businesses.
- In the last 15 minutes, participants should update their business plan with the lessons learned.

The Money Plan Part One - One Hour

- The purpose is to learn how to use the money plan to look ahead and see how money will flow in and out of businesses.
- Ask participants what happens when a tree runs out of water. Of course, they will say the tree could die. The same lesson applies to businesses, both big and small.
- Therefore, each participant's money plan should be used as a way to avoid running out of money, by looking ahead.
- Lecture to participants about how they use money will impact the day to day, week to week, month to month, and year to year survival of their businesses.
- It is recommended to employ a game for participants where they are given a 12-day scenario. Here, the person operates a business. Each day they are given a different amount of expenses and sales. It is up to the participants to determine how to move forward with their hypothetical business.
- Afterwards, participants will update their money plan as part of their business plan.

Lunch Break

Money Plan Part Two (What you need)- One Hour
- The goal is to build upon the prior lesson with their money plans. Participants should try to learn and realize how much money will be needed to keep their businesses running until it is profitable.
- Participants need to consider how their businesses will look from the weeks and months from its inception, what equipment and supplies are needed and how much, and how long until the business becomes profitable.
- For the last portion of the activity, participants should present on their Money Plans in order to receive feedback from both trainers and trainees.

Loans - One Hour
- The purpose is to understand what loans, interests, and repayments are. By doing so, trainees can incorporate the concept of loans into their money plan.
- For this lesson, trainers can either have participants work with real numbers and interests to calculate their loans or use a list of pre-calculated examples of loans and repayment. Participants have to understand the risks of taking a loan and therefore be able decided whether they should take one or not.
- For an activity, participants could receive a sheet for a hypothetical situation and have them determine how long it would take to repay their loan along with other expense incurred.
- Afterwards, instructors should review with different types of loans with the trainees. These include bank loans, micro-loans, or family loans. Ask attendees what the risks and benefits with each are.

Concluding Activity - 10 min
- What did participants enjoy about they first day of the workshop?
- What were their favorite activities?
- What did they learn?

Homework

- Participants should continue to survey their potential customers to understand how their businesses will function and thrive.
- For trainers, please take 30 minutes to assess and brainstorm the following:
- What did trainees comprehend well?
- What did trainees not understand?
- How can trainees improve upon concepts they struggle with?

Day 3: Running your Business

Purpose: To utilize everything participants have learned in the last few days and make their final business presentation.
Activities:

Opening- 30 min
- Trainers should employee energizers to get trainees excited for Day 3.
- Afterwards, trainers should ask about what trainees learned from the second day of the program.
- Ask if there are any concepts that trainees do not understand well.

Presentations - Two Hours
- Participants will utilize what they have learned over the previous two workshop lessons and present their “Business Thesis” (what is your product, who is your customer, and why would we buy it?)
- What did you think, what did you do, what did you learn, and what will you do next?
- Every participant will receive constructive criticism.

Goodbye and what you learned - One Hour
- The purpose is to say your goodbyes
- There should be a 30-minute reflection and discussion where they discuss what participants learned and how it will help their business.
- Final reflections: Everyone should their thoughts on the entire program and workshop.
- Trainers should come up with final game for participants to enjoy and have fun.

Appendix 4. Accounting and Bookkeeping Syllabus Outline

1) Basic Dual-Entry Principles
    a) Preparation of transactional evidence (i.e. receipts, invoices, bills of sale)
    b) Learning the accounting equation: Assets = Liabilities + Owner’s Equity
    c) Preparation of Ledgers
    d) Learning basic guiding principles (i.e. historicity, materiality, prudence and conservatism)
2) Preparation of Control Accounts
    a) Aggregating all individual accounts into master account by type.
    b) Reconciliation between individual and aggregate accounts.
    c) Corrections of Errors
    d) Preparation of Journals

        e) Preparation of Trial Balance
3) Preparation of Financial Statements
    a) Cash Flow
    b) Income Statement
    c) Balance Sheet
    d) Formatting differences based on business type.
        i) Sole proprietorships
        ii) Partnerships
        iii) Limited liability companies (biggest type of SME usually)
        iv) Managerial vs Manufacturing operations
    e) Adjusting for errors
4) Analytics
    a) Accounting Ratios and Performance Indicators
        i) Acidity Ratio, Inventory Turnover Rate, Margins, etc.
    b) Basic descriptive statistics
        i) Mean, Median, Mode, Standard Deviation
    c) Data-driven decision-making
    d) Using app / bkper integration.
        i) Linking Bkper to Google Sheets and Google Forms
            (1) Setting up accounts and ledgers on Bkper.
            (2) Using built in analytical tools.
        ii) Zapier
            (1) Creating automatic invoice system.

Appendix 5. Tech Literacy Syllabus Outline

1) Google Drive Functions
    a) Creating your own Gmail Account and Google Drive.
    b) Creating Folders.
    c) Setting up permissions and account authorities for Folders.
    d) Effective file management.
    e) Security against malware.
2) Google Suite Integrations
    a) Setting up permissions and account authorities for Files and File Collaborations.
    b) Google Docs
        i) Writing and formatting documents.
    c) Google Sheets
        i) Setting up datasets.
        ii) Basic descriptive statistics.
        iii) Playing around with charts and analytical functions.
        iv) Using string functions (i.e. Vlookup)
        v) Learning pivot tables.
    d) Google Forms
        i) Creating questionnaires and surveys
        ii) Linking Google Forms to Google Sheets
    e) Google Calendar
        i) Scheduling events and meetings.

        f) Google Slides
            i) Using presentation software as visual aids (i.e. for pitches).
3) Google Addons (To be done concurrently with Module 4 of Bookkeeping and Accounting component)
    a) Bkper
    b) Zapier
    c) Google Analytics

Appendix 6. Co-Working Space Details

Location:
The Wakisha co-working space is located in the central business district of Beni, North Kivu, DRC.

Hours of Operation:
The Wakisha co-working space is open Monday through Friday from 7am to 4pm.

Services:
Co-working: All entrepreneurs in Beni will have access and are currently welcome to the co-working space and workshops training. Leopard's Lair winners also receive funding and mentorship (local and international). Entrepreneurs will benefit from an environment which promotes a sense of community that provides an extended network of professional contacts in the form of mentorship, an engaging environment, and shared skills and resources. The Wakisha co-working space will also provide access to space for classes, and workshops presented in our model.

Classes and Workshops: Participants of the Wakisha co-working space under the business package contract will receive a variety of classes and workshops in better business practices, presentations skills, project management, data collection, money management, and technology literacy.

Consulting services: Members of the Wakisha co-working space under the business package contract will receive assistance and employee training from EC3-Wakisha mentors and employees on the ground. The EC3 Model will provide services such as marketing, brainstorming sessions, and branding.

Wakisha Co-Working Space Amenities:
The Wakisha co-working space provides computers and computer support, free internet access, and a printer-copier. Wakisha also provides the necessary amenities required to run a functioning co-working office space such as conference tables and chairs.

Transition from Pro Bono to Fee-for-Service Co-Working Space
After three years, the Wakisha co-working space will commence a gradual transition from a free and open service location to a fee-for-service co-working space by providing promotional offers to both members of the Wakisha business package and members with individual packages who have used the services of the working space. By introducing monthly/annual membership plans, Wakisha will create a promotion offering 6 months of member benefits for $2 per month

(compared to $5/month for new members). The weeks leading to this promotion will consist of providing different payment options to members of the EC3-Wakisha co-working space.

Wakisha Business Package:
The Wakisha business package will be offered to winners of the Leopard's Lair competition. The business package includes internet access and telephone access for conference calls with Wakisha's international mentors. With this package, Wakisha-funded businesses will have their profiles displayed in our co-working space and on our website. Wakisha-funded businesses will have an opportunity to request specific programming they want us to offer and influence the resources we provide. Entrepreneurs will be assigned a mentor to support them throughout the consulting process and will have the opportunity to attend workshops and classes.

Wakisha Individual Package:
An individual with no contractual ties to EC3 and Wakisha will have access to the Wakisha co-working space as long as they are willing to:

1. Share information for assessment and data collection purposes
2. Pay a fee to have access to specific products provided in the office space
    a. Computer and internet access
    b. Open space for training

<u>Member Segment:</u>
At the Wakisha co-working space, we anticipate members of our working space being entrepreneurs, independent business owners, students, and professionals with nontraditional office needs. Wakisha co-working space members will be divided into two groups. Our selection criteria for each group will be based on familiarity with the internet and technology. The first group will have individuals who are familiar with technology and want to improve and the second group will have individuals who are not familiar with the internet and technology and are waiting for the right opportunity to learn.

<u>Data Collection and Assessment:</u>
Basic Questions:

1. Hours spent in the co-working space:
2. Wakisha member: Yes or no
3. Individual member: Yes or no
4. Field of work:
5. Number of classes attended:
6. Number of workshops attended:
7. What service do you plan on using today?

Appendix 7. Econometric Proofs, . Difference-in-Difference and Equations

a) Outcome of Treatment Group before Treatment = $a + b_1$
b) Outcome of Treatment Group after Treatment = $a + b_1 + b_2 + b_3$
c) Outcome of Control Group before Treatment = a
d) Outcome of Control Group after Treatment = $a + b_2$

Diff-in-Diff impact = (b-a) - (d-c) = $b_2 + b_3 - b_2 = b_3$

References

Blanchard, O., Dell'Ariccia, G., & Mauro, P. (2010). Rethinking macroeconomic policy. *Journal of Money, Credit and Banking, 42*, 199-215.

Kotsopoulos, N., & Connolly, M. P. (2014). Is the gap between micro- and macroeconomic assessments in health care well understood? The case of vaccination and potential remedies. *Journal of Market Access & Health Policy,* 2.

Lemmon, G. T. (2012). Entrepreneurship in post conflict zones. Council on Foreign Relations.

Kolk, A., & Lenfant, F. (2015). Cross-sector collaboration, institutional gaps, and fragility: The role of social innovation partnerships in a conflict-affected region. Journal of Public Policy & Marketing, 34(2), 287-303.

Anugwom, E. E. (2011). “Wetin We for Do?” Women Entrepreneurs and the Niger Delta Conflict. Journal of Small Business & Entrepreneurship, 24(2), 243-25

Bayram, Ahmad. (2017). Entrepreneurship in Conflict Zones: Insights on the Startups in Syria.

Cyprusinno (2016). Entrepreneurship in Conflict Regions Part 1 and 2: Lebanon, Syria, Gaza, Nigeria & Egypt

Brown, O., & Crawford, A. (2012). Conservation and peacebuilding in Sierra Leone. II f. S. Development (Ed.). Manitoba, Canada.

Butsic, V., Baumann, M., Shortland, A., Walker, S., & Kuemmerle, T. (2015). Conservation and conflict in the Democratic Republic of Congo: The impacts of warfare, mining, and protected areas on deforestation. Biological Conservation, 191, 266-273.

Hochleithner, S. (2017). Beyond Contesting Limits: Land, Access, and Resistance at the Virunga National Park. Conservation and Society, 15(1), 100.

Kanyamibwa, S. (1998). Impact of war on conservation: Rwandan environment and wildlife in agony. Biodiversity & Conservation, 7(11), 1399-1406.

Maekawa, M., Lanjouw, A., Rutagarama, E., & Sharp, D. (2015). Mountain gorilla ecotourism: Supporting macroeconomic growth and providing local livelihoods. Livelihoods, Natural Resources, and Post-Conflict Peacebuilding. New York, Routledge, 167-186.

Milburn, R. (2014). The roots to peace in the Democratic Republic of Congo: conservation as a platform for green development. International Affairs, 90(4), 871-887.

Roulin, Alexandre, et al. (2017) "‘Nature Knows No Boundaries’: The Role of Nature Conservation in Peacebuilding." Trends in ecology & evolution 32.5 (2017): 305-310.

Verweijen, J., & Marijnen, E. (2016). The counterinsurgency/conservation nexus: guerrilla livelihoods and the dynamics of conflict and violence in the Virunga National Park, Democratic Republic of the Congo. The Journal of Peasant Studies, 1-21.

Wilkie, D., et al. (2000). Roads, development, and conservation in the congo basin.*Conservation Biology, 14*(6), 1614-1622.

Hochleithner, S. (2017). Beyond Contesting Limits: Land, Access, and Resistance at the Virunga National Park. Conservation and Society, 15(1), 100.

BBC (2017) Democratic Republic of Congo profile - Timeline., December 06). Retrieved March 02, 2018

Wakisha Congo Initiative. (n.d.). Retrieved from https://congoinitiative.org/wakisha/