THE DEMAND ENGINE

GROWTH HACKING STRATEGIES FOR SCALING DEMAND AT THE BoP

MIT D-Lab

BoP INNOVATION CENTER

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FOREWORD

Establishing demand for *social impact goods or services* is often a complex and resource-intensive process, as it frequently requires changing or establishing new behaviors. Scaling demand in base of the pyramid (BoP) markets is particularly difficult due to low margins, lack of formal marketing channels, and the costs of high-touch models that can involve additional personnel, such as last-mile sales agents and peer educators.

Social enterprises, large companies, and NGOs often struggle to make the leap and scale demand—and continue satisfying that demand in a sustainable and cost-effective manner—after successfully piloting new, impactful goods for low-income consumers.

As Erik Simanis points out in the Harvard Business Review (June 2012), Prahalad's "BoP promise," which posits that selling low-margin products in high volumes in BoP markets is profitable in the long run, has two conditions which are often not met. "One, the company can leverage an existing infrastructure that serves wealthier customers to offer a product or service to poor consumers; and two, the consumers already know how to buy and use the offering."[1] Experience shows that these assumptions are often wrong: suppliers need to invest in 1) new distribution channels to serve the last mile 2) awareness-raising and behavior change campaigns to make propositions understood, easy, desirable, rewarding, and, ultimately, to make them a habit (as explained in Unilever's Five Levers of Change[2]).

Based on these experiences, the 2018 MIT PIA Scaling Demand at the BoP Working Group sought to discover and learn from practices that scale up demand for products and services in BoP communities, with the goal of *achieving optimal balance between cost effectiveness and adoption.* The result of our efforts and learning is **The Demand Engine: Growth Hacking Strategies for Scaling Demand at the BoP,** a practitioner-focused framework for product and service providers seeking to "hack demand" at the BoP.

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April 2019

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THE DEMAND ENGINE SCOPE

The Demand Engine: Growth Hacking Strategies for Scaling Demand at the BoP builds on the research of several BoP marketing frameworks and publications, including Ted London's Co-create, Innovate, Embed framework;[3] the four scaling strategies described in the **Ready, Steady, Scale** publication co-written by MIT PIA, BoPInc, and Danone Communities; and BoP Innovation Center's ATEAR framework.

At what phase is this tool most relevant?

As outlined in London's Co-create, Innovate, Embed framework[4] (see top of following page), the Pilot phase of a BoP-focused venture is focused on testing specific hypotheses about whether and how the envisioned business model is creating mutual value (for the venture itself as well as for BoP communities). Enterprises prepare for and transition to scale over three phases.

The Demand Engine assumes that these hypotheses have been thoroughly tested and that the value proposition for BoP consumers has proven to be relevant, ensuring "mutual value creation," to use the terminology of Ted London. **The five strategies described in the Demand Engine describe strategies which may enable ventures to successfully scale demand at the BoP in the "Expand" phase.** Our framework, however, is marketing-focused; it is not a holistic venture management tool.

Although differentiating between the "Pilot" and "Expand" phases may appear straightforward, in practice it is often challenging to assess whether the business model is ready to exit the pilot phase. **Ready, Steady, Scale**[5] offers a practical, holistic checklist that BoP-focused ventures can use to determine whether they are ready to scale and which scaling strategy is most appropriate.

What do we mean by scaling?

In 2016, MIT PIA explored how to advance scale-readiness in social ventures and developed the *Ready, Steady, Scale* toolkit. Scale for an inclusive business means more than simply growing the size of the business. It means increasing a venture's impact at a greater rate, while also adding resources incrementally. There is no standard formula for successfully scaling inclusive businesses, but *Ready, Steady, Scale* outlines four scaling strategies to choose from:

SCALE DEEP

Being more efficient at what a company currently does for existing consumers, or with the same producers or entrepreneurs related to the products produced or services delivered.
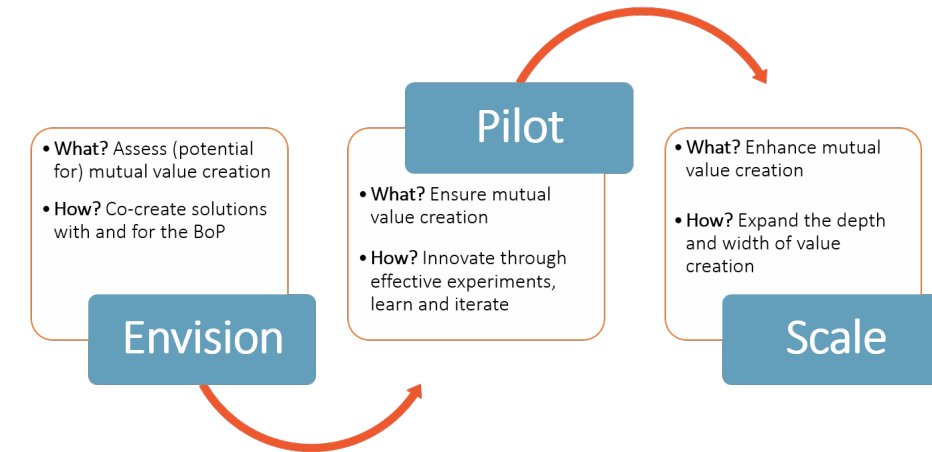
SCALE UP

Getting more customers, producers, or entrepreneurs for a company's regular business. Scale can be achieved by targeting new geographies or developing new distribution networks or pricing policies.

SCALE OUT

Developing new products for existing consumers or intensifying BoP engagement. Scaling out could entail introduction of new products in existing markets or the modification of existing products and services.

SCALE ACROSS

Developing new products for new consumers, or a new business proposition with new producers or entrepreneurs. This scaling strategy is similar to what business literature calls the diversification growth strategy.

SUMMARY OF THE FOUR SCALING STRATEGIES

	SAME BoP MARKET	NEW BoP MARKET
SAME PRODUCT/SERVICE	SCALE DEEP	SCALE UP
NEW PRODUCT/SERVICE	SCALE OUT	SCALE ACROSS

Adapted from Ted London's Co-Create, Innovate, Embed Framework

Envision
- **What?** Assess (potential for) mutual value creation
- **How?** Co-create solutions with and for the BoP

Pilot
- **What?** Ensure mutual value creation
- **How?** Innovate through effective experiments, learn and iterate

Scale
- **What?** Enhance mutual value creation
- **How?** Expand the depth and width of value creation

The 2018 PIA Scaling Demand Working Group set out to explore one of the four BoP market strategies in more detail: **scaling deep**. This strategy, as outlined above, explores proven product/service value propositions, *not* new offerings. **We asked ourselves: how do social enterprises, multinationals, and NGOs find cost-efficient ways to create more demand and improve adoption and retention in their current BoP market?** Even though the focus is on scaling deep, the framework can be relevant when scaling up to new markets that have similar characteristics.

How does this framework differ from other scaling and BoP marketing frameworks?

Within the topic of scaling deep, The Demand Engine focuses specifically on marketing strategies for scaling demand, not a holistic roadmap to scale.

Among the most well-known marketing frameworks for BoP markets is the 4 As framework originally developed in 2012 by C.K. Prahalad.[6] Inspired by the 4 Ps of marketing, the 4 As refer to:

Affordability: Target groups are (financially) capable of buying the product or service. The product is not too expensive and/or payment conditions and financing opportunities are appropriate.

Awareness: Target groups are aware of the product or service and its attributes. They know of its existence and understand its attributes and functionalities.

Availability: Target groups have actual access to the product or service; it is available for them to buy. They do not have to travel long distances to purchase it.

Acceptability: Target groups have no objections to adopting and using the product or service. There is a sufficient connection with their perceptions, customs, and behaviors to adopt the product or service.

The 4 As identify the most important prerequisites to successfully marketing to BoP customers, while the BoP Innovation Center's ATEAR framework[7] focuses on the process of relationship-building with BoP customers, from creating interest to maintaining a loyal customer base. ATEAR stands for the elements of a good marketing strategy: attracting **Attention**, building **Trust**, enabling **Experience**, triggering **Action**, and **Retaining** your customers. Each element contains a set of strategies commonly used in BoP markets to activate these different aspects of demand creation.

The Demand Engine provides value by describing strategies to **maximize effectiveness** across these different aspects of demand creation and **identifying cost-efficient ways** to reach economies of scale.

WHEN TO USE THIS TOOL

Leveraging the aforementioned scaling and marketing tools, The Demand Engine is most relevant for BoP-focused product and service providers who:

- Offer a market-based solution, with the aim of generating revenue from selling products and/or services to BoP consumers;
- Are preparing for or have already entered the "Expand" phase;
- Have validated their value proposition as relevant to the BoP communities they aim to serve, thus enabling mutual value creation for the enterprise and communities; and
- Are looking for effective and efficient marketing strategies to scale deep.
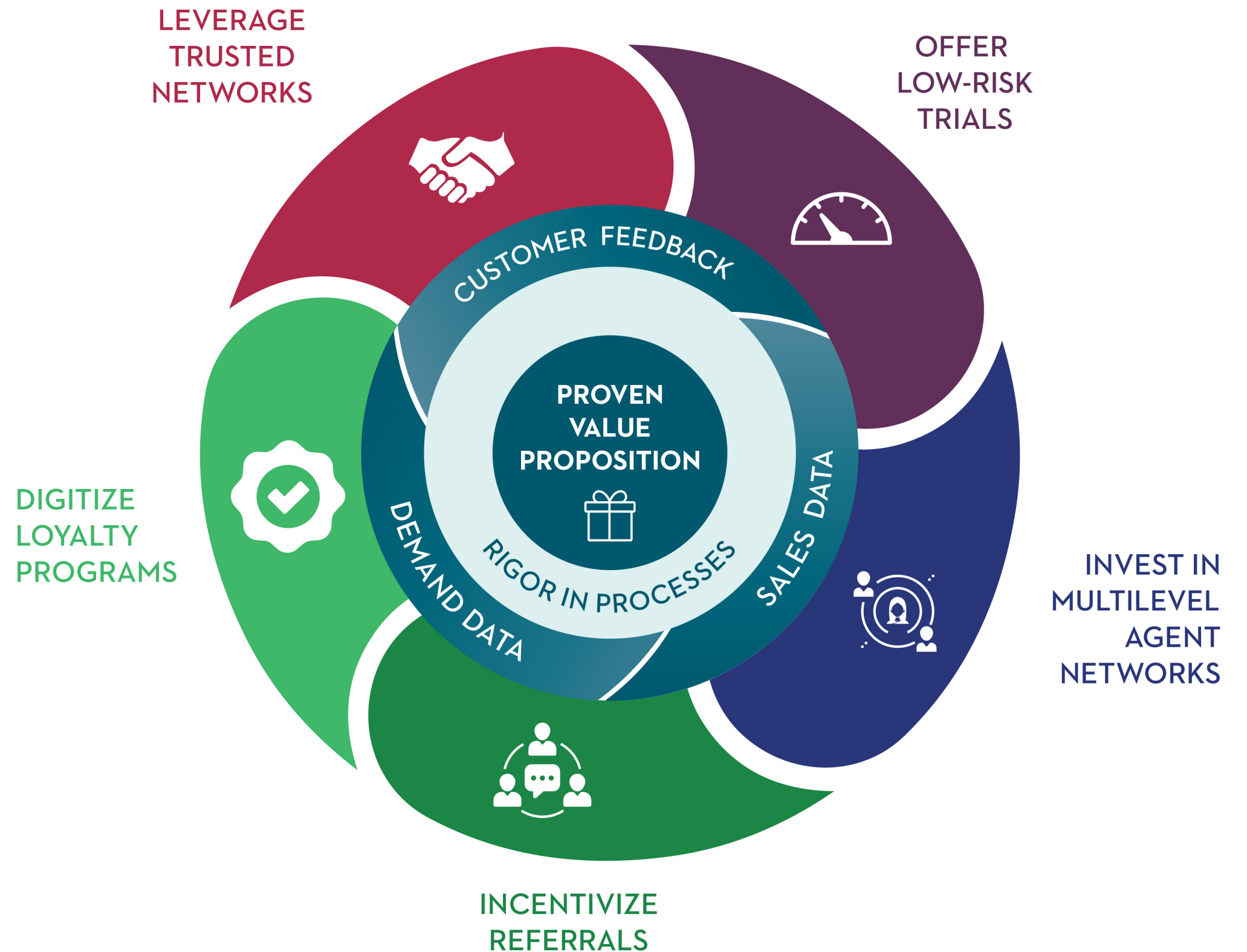
THE DEMAND ENGINE FRAMEWORK

The Demand Engine framework is meant to be read from the center outwards, with the blue innermost circles representing a business's core and required preconditions for considering how to scale demand at the base of the pyramid. The first requirement is a relevant and proven value proposition, and the second requirement is rigorous internal business processes. The outermost blue ring represents a business's data feedback loop, which propels and reinforces the business's core. By utilizing mechanisms that continuously collect information on demand, sales, and customers, a business can grow and increase its customer base and begin to consider five distinct marketing strategies for growth hacking demand at the BoP — represented in the graphic as the five multicolored blades.

At the heart of the framework is a **Proven Value Proposition**. The Demand Engine's five growth hacking strategies can be successful only if the BoP value proposition is proven to be understood, relevant, and attractive to the target consumers. This relevant value proposition is a business's engine for growth.

While the pilot phase focuses on testing and iterating the value proposition, and is characterized by high uncertainty and room for experimentation, BoP business models must ensure a level of standardization and **Rigor in Processes** before entering the scaling phase. Strong internal processes reinforce and strengthen a business's value proposition. The *Ready, Steady, Scale* publication specifies these processes in more detail, and its checklist can be used for assessing whether the business model has the level of rigor in processes necessary to enable scale.

A business's value proposition and internal processes are not static, but rather evolve and iterate as the business begins to grow based on the intake of new information and data from customers, sales, and markets. They require continuous improvement and adaptation to new markets and new circumstances, and it is crucial to build a data loop into the business model, represented in the above graphic by the outermost blue loop in The Demand Engine.

This data loop states that in order to inform its marketing strategy, a business requires **Continuous Customer Feedback** and **Analysis of Sales Data and Demand Data. Customer Feedback** is collected in various ways: for example, Triggerise allows for collecting data directly from the customer through its mobile solution after each transaction, but more traditional ways such as call centers or systematic collection of anecdotal evidence from vendors also provide valuable input for strategic decisions. Increasingly, there are digital solutions enabling collection and **Analysis of Sales Data** at the point of sales designed for last mile settings, such as FieldBuzz. **Demand Data** indicates changes in demand (e.g., market saturation, changes in availability of competing solutions) as well as potential demand in new markets. One of the best practices emerged from the Working Group's case studies was having demand-related data among the criteria to choose new markets (e.g. purchasing power), rather than focusing only on development-related data (e.g. potential to partner with governments and NGOs in the new area).

LEVERAGE TRUSTED NETWORKS

OFFER LOW-RISK TRIALS

DIGITIZE LOYALTY PROGRAMS

CUSTOMER FEEDBACK

PROVEN VALUE PROPOSITION

DEMAND DATA

RIGOR IN PROCESSES

SALES DATA

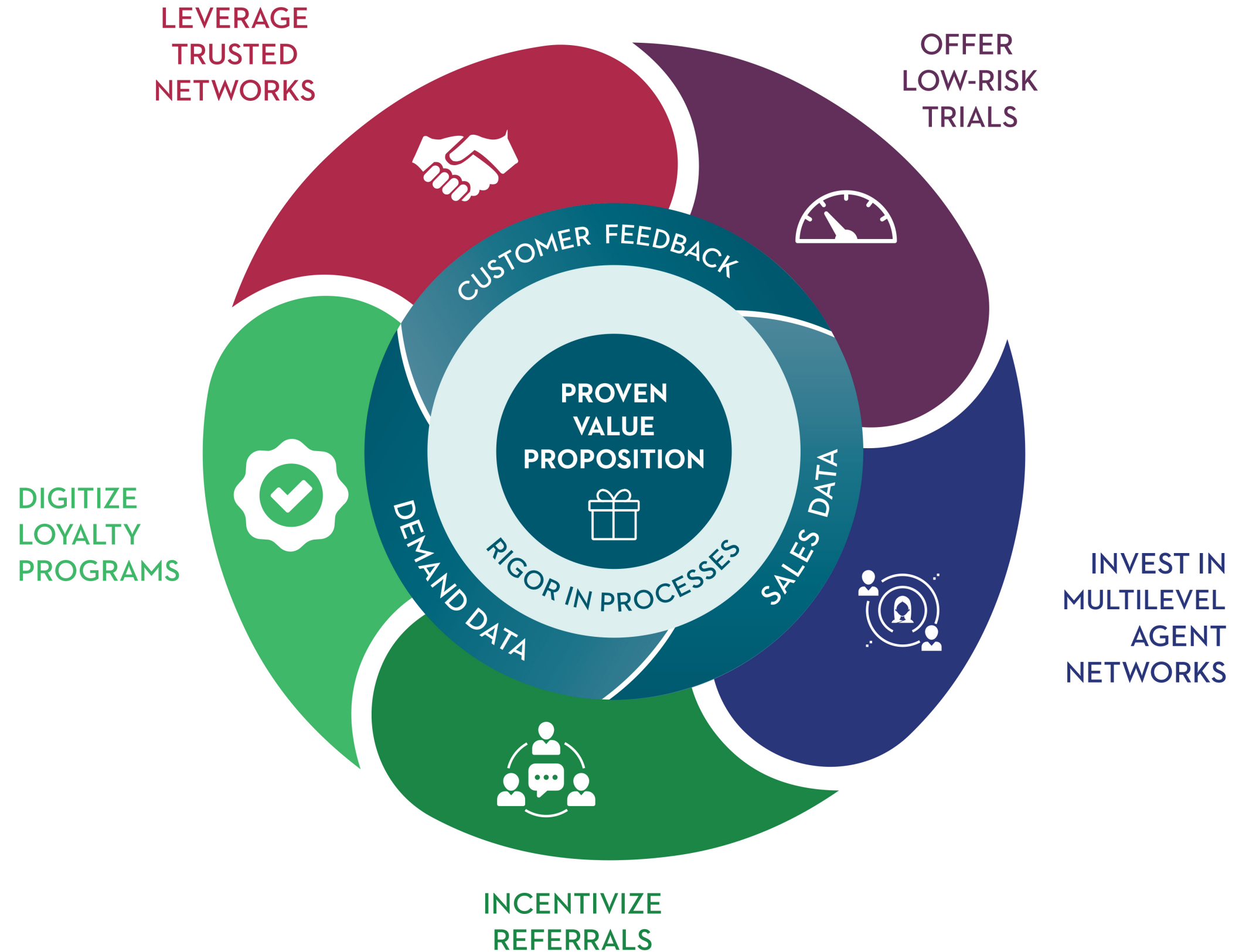INVEST IN MULTILEVEL AGENT NETWORKS

INCENTIVIZE REFERRALS

THE DEMAND ENGINE FRAMEWORK, cont.

Lastly, the outermost circle represents The Demand Engine's five growth hacking strategies:

1. **Leverage Trusted Networks**
2. **Offer Low-Risk Trials**
3. **Invest in Multilevel Agent Networks**
4. **Incentivize Referrals**
5. **Digitize Loyalty Programs**

The 2018 MIT PIA Scaling Demand at the BoP Working Group identified these five strategies from case studies as ways to scale demand and increase adoption in a cost-efficient manner. It is not an exclusive or exhaustive list of scaling demand strategies, but rather a collection of best practices identified through the Working Group case studies. Each of these five strategies builds upon the previously mentioned well-known marketing frameworks for BoP markets, such as the four As and ATEAR, and present businesses with ways to propel and accelerate demand creation. They can stand alone or be leveraged jointly with complementary benefits. With more than one growth hacking strategy in place, it is easier for a business to grow while driving down its costs, increasing its performance, and reaching economies of scale.

The following section describes these five strategies in detail and discusses examples from social enterprises and multinationals offering products and services to BoP communities. These case studies were generously shared by the businesses who presented to the 2018 PIA Scaling Demand at the BoP Working Group.

LEVERAGE TRUSTED NETWORKS

OFFER LOW-RISK TRIALS

DIGITIZE LOYALTY PROGRAMS

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CUSTOMER FEEDBACK

SALES DATA

DEMAND DATA

RIGOR IN PROCESSES

PROVEN VALUE PROPOSITION

DEEP DIVE INTO FIVE AREAS OF GROWTH HACKING

1. LEVERAGE TRUSTED NETWORKS

As a marketer, establishing trust in your proposition is one of the key challenges. Trust indicates confidence that the proposition will deliver the promised value. It is important in all markets, but it is of special importance in BoP markets, where customers require the highest value for money and where they are unlikely to invest in a new solution just to "try it out and see what happens" (see HYSTRA report, 2013[8]).

How to establish trust? You could invest in a network of community agents to go door-to-door with a social marketing toolkit, explain your solution, show a demo, spend quality time, and develop personal relationships with your potential clients. However, while this method is often necessary to activate demand in underserved markets, it quickly becomes too expensive during growth.

A more cost-effective strategy is to leverage existing networks of trust, such as a network of health centers, a network of community saving groups, or, as in Ecofiltro's example, a network of schools. In addition to accelerating trust building, this growth hacking strategy also lowers the cost of creating product and/or service awareness by leveraging existing, well-known networks, rather than building new ones.

CASE: ECOFILTRO

Ecofiltro is a Guatemala-based social enterprise whose mission is to provide clean drinking water to 1 million rural Guatemalans by 2020. Its filtering unit, known as Ecofiltro, is based on a ceramic pot filtering technology. The organization started as a traditional non-profit, but CEO Philip Wilson realized that the challenge of providing access to clean water at scale required self-sustainable, market-based solutions rather than a "philanthropist" approach. He decided to adopt a hybrid approach in which urban sales of high-margin, high-end filters would subsidize the distribution of rural filters at an affordable price.
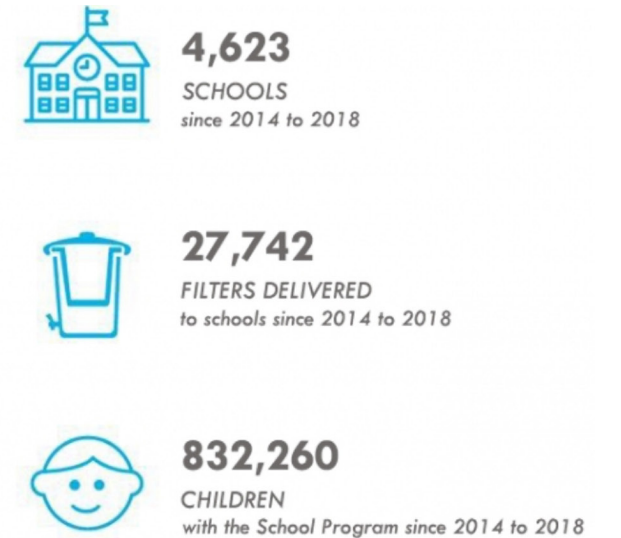
Ecofiltro got its foot in the door of rural households through schools. **As the CEO put it, "We followed the same strategy as Microsoft." As kids start to use the Ecofiltro at school, they get used to it, develop a preference for the taste, and become advocates within their families to buy filters.** Ecofiltro has donated over 25,000 filters to rural schools as a way to provide filtered water for kids and raise familiarity and trust in their product.

Ecofiltro field representatives contact schools and identify the most motivated schools with active parent participation. Upon the delivery of the filters (one filter per classroom, plus one in the kitchen), Ecofiltro presents its product's value proposition and benefits, and **the school is responsible for ensuring that enough parents participate in that awareness-building event.** Parents have the option to buy an Ecofiltro through a monthly payment plan (Q100 during delivery and 4 monthly payments of Q50).

As the social enterprise replicates its model in other Latin American countries, Ecofiltro's school distribution model is still the preferred entry point, as it has proven to be the appropriate channel for establishing and scaling demand.

Partnerships with schools also contributed to the success story of d.light in Tanzania.[9] Just like teachers and headmasters, health professionals — doctors, pharmacists, and health agents — are also trusted members of the community. Companies, social enterprises, and NGOs often engage these professionals in sales and behavioral change activities. Examples include Protein Kissée-La, which distributes infant fortified porridge flour through pharmacies to improve children's nutrition in Côte d'Ivoire (HYSTRA report, 2014[10]), and SC Johnson, which sells mosquito repellents through peer educators to prevent malaria in Rwanda.[11]

4,623 SCHOOLS since 2014 to 2018

27,742 FILTERS DELIVERED to schools since 2014 to 2018

832,260 CHILDREN with the School Program since 2014 to 2018

Between 2014 and 2018, Ecofiltro partnered with over 4,500 schools and reached over 800,000 children through its School Program.[12]

However, marketers should be mindful of the fit between a value proposition and a trusted network, as well as the customer's journey, when initiating such partnerships to establish and scale demand. This was an important lesson learnt in PSI's project aiming to improve the access and uptake of sexual and reproductive health (SRH) products among adolescent girls in Mozambique. The project aimed to leverage the assumed trusted network of pharmacists. After a session about SRH with a peer educator, girls were recommended to visit a pharmacy and engage with these assumed trusted sources, by, for example, requesting to receive oral contraceptives (OCs) and clarify any questions they might have on the product. However, in the first trial period, only one-third of the girls actually visited the pharmacy, and out of this group, only a few visited the pharmacy a second time. The project discovered that pharmacists and adolescents are not a love marriage: pharmacists were not keen to provide a consultative service to adolescent girls and girls did not view the pharmacy as being a safe space. For pharmacists, adolescent girls represented a very small segment of a pharmacy's current client portfolio and also a low purchasing power client that required too much of the pharmacists' time to explain the use of products such as OCs. In the eye of the pharmacists, taking too much time with one customer would result in complaints from other customers' — with potentially higher purchasing power — a situation pharmacy business owners wanted to avoid. On the other hand, adolescent girls felt pharmacists were unapproachable and the whole situation was too intimidating. Learning from these insights, PSI decided to keep focus on youth focused programs in clinics rather than pharmacies to overcome these barriers and find a better fit for their target group.

SC JOHNSON IN RWANDA[13]

SC Johnson is the leading manufacturer of household pest control products. SC Johnson's Base of the Pyramid Group enables mosquito-borne disease prevention in global communities by delivering affordable offerings that meet the needs of users at the base of the economic pyramid. Malaria disproportionately affects people in remote areas, where access to interventions can be quite limited.

To increase access, SC Johnson partnered with EKOCENTER™, the Coca-Cola Company's partnership-drive Social Business initiative that creates solar-powered, multi-use marketplaces in hard-to-reach communities. SC Johnson is currently participating in 30 EKOCENTERS in Rwanda and 7 in Vietnam, providing malaria prevention products and education to families in remote, difficult-to-reach areas that may benefit the most from health interventions.

In Rwanda, SC Johnson partnered with a local NGO, Society for Family Health Rwanda, who hired, trained, and equipped peer educators to conduct community health events. In a midline evaluation, they found the educational events at EKOCENTERS were highly effective. Awareness of all malaria interventions increased — up to 53% for interventions like personal repellents.

This high rate of awareness resulted in increased demand, even in areas not yet served by EKOCENTERS. To bridge the distribution gap in these unserved areas, SC Johnson tried leveraging the peer educators as a distribution network. This was effective as another distribution channel but expensive as they were on salary — and still did not create the level of broad access necessary for public health value.

In an effort to create a more sustainable business model, SC Johnson leveraged a trusted network: community health workers (CHWs). CHWs are village-level volunteers who serve as liaisons between the community and the national health system. They are very involved — and highly regarded — within their communities.

The SC Johnson program builds on CHWs' existing work. The CHWs continue to educate their communities. They are provided with some of the same educational tools as peer educators (including booklets illustrating symptoms, prevention, and treatment of malaria), which helps them be more effective in promoting behavior change. They also distribute malaria prevention products and receive a 7% commission. When surveyed, CHWs were highly appreciative of the opportunity to supplement their incomes without detracting from their health work.

SC Johnson's success in Rwanda is based on strong awareness-building mechanisms (EKOCENTERS, peer educators) and solid distribution channels to encourage trial and repeat business (EKOCENTERS, CHWs). This program was piloted in 30 sectors, but the CHWs exist across Rwanda. By partnering with the CHWs, SC Johnson has tapped into a trusted network—and also created a path to scale.

BEST PRACTICES

Make sure that the **first contact with your product occurs through trusted channels** such as schools, health institutions, churches, or saving groups.

To increase efficiency, identify and **engage with key points of contact that enable leveraging a whole network**, such as by building partnerships with an association of schools to enter several schools.

To avoid the cost of investing in a partnership without good returns, set indicators to assess whether a potential partner can contribute to scaling demand. For example, Ecofiltro sets a minimum number of parents that need to be present at their awareness-raising events.

Create a **step-by-step playbook for leveraging trusted networks** that you can replicate in new neighborhoods, new departments, and new countries (with some limited iteration). Your proven demand creation strategy can then become a scaling demand strategy, and the cost of process design can be reduced.

PITFALLS

Avoid assuming that certain networks are trusted just because it seems logical that they would be. Instead, perform brief, small-scale qualitative research to validate your assumption that the chosen channel is regularly visited and trusted by your specific target group, and that it fits naturally in an already-established user journey.

Just because a strategy is proven to be replicable across markets does not mean that it requires a significantly smaller investment each time. If your goal is to create a financially self-sustainable model, you need to think about how to recover the costs of this recurring investment.

2. OFFER LOW-RISK TRIALS

Scaling demand at the BoP is often difficult because of the heavy costs of making the first sale. This is due to the previously described issue of trust—making the first sale, especially of durables (such as solar products) and fortified food products at a premium, is difficult not because the BoP customer is not willing to pay at all, but because he/she wants to ensure maximum value for the money spent.

Instead of extending costly, high-touch educational campaigns, many social enterprises offer low-risk trials to their clients and let the product/service "speak" for itself, convincing the client that it is worth the investment. This growth hacking strategy enables customer experience and triggers the ability to act on a purchase, all in a more cost-effective way for the enterprise.

CASE: ECOFILTRO

Ecofiltro provides a 30-day free trial before making the first sale to a household. This strategy has proven to be very successful for the social enterprise in driving rural sales. "The first objective of our rural mobile salesforce is to get the filter inside the home (...) After 30 days it is very obvious that they don't spend a lot of money on firewood because they are not burning anymore, that kids don't get sick anymore and the water tastes great."

What makes this way of building trust and brand awareness efficient is that it does not require a set of additional activities parallel to "business as usual," unlike educational and promotional campaigns. The sales representatives would go to the rural households with products anyway, the difference being that they can offer the option of a trial as well.

Offering such a risk-free 30-day trial was especially relevant when Ecofiltro was not yet a well-known brand in the community. In areas where the brand is already well-established, they have now begun to offer a 10% discount if customers buy the product upfront without the trial.

Offering ways to reduce risks for BoP consumers is a strategy used not only by Ecofiltro, but also by initiatives such as Cemex's Patrimonio Hoy, where all clients pay a 26% premium to receive a comprehensive package of building materials and services, providing them protection from a set of potential risks of not completing the extra room they want. Another example is Toyola Energy Limited, whose customers choose to forgo a 10% discount in favor of a free product trial to test before buying.[14]

BEST PRACTICES

As a product or service provider, you should answer the following questions:

- What questions do your clients ask most about your product or services?
- What are they most worried about?
- What would it take for you to be 100% sure that these worries will not materialize, and that your client will succeed?
- What would it take for your clients to see 100% of the value you bring them, and be convinced that it is risk-free?[15]

PITFALLS

Risk-free trials are **not the same as free distribution**. On the contrary, products and services offered for free at the BoP may lose their value in the eyes of the consumers.

The costs of offering risk-free trials, even if successful, will only be covered later. If you decide to implement this strategy, you need to **take this into account when forecasting your cash flow.**

Avoid assuming that the biggest factor keeping BoP consumers from buying your product or service is price. Several cases show that BoP consumers look for the best value for money rather than the cheapest options.

3. INVEST IN MULTILEVEL AGENT NETWORKS

In BoP markets, often it is not sufficient to simply leverage existing distribution infrastructure to reach and service these new customers. **Product and service providers must invest in new distribution channels, and often this occurs through direct sales agents.** This network of sales agents is on the front lines of a product's distribution in BoP markets, and the agents, often women, have backgrounds ranging from existing business owners to newly trained entrepreneurs. The ability to scale demand for a product is heavily reliant on this distributed network of agents.

However, establishing and scaling these direct sales agent networks is expensive for businesses given the investment needed to recruit, train, finance, and monitor the agents' sales and performance. Agents are often themselves members of the target BoP community, and require a unique blend of training and incentives to build their business acumen and confidence. **Introducing multilevel agent networks, where a business focuses on incentivizing high-performing and motivated agents, is a strategy that allows a business to optimize its return on investment in agent training and development.** In addition to cost-effectiveness, multi-level agent networks allow a business to grow its sales reach while improving the performance of its agents, such as through achieving a higher volume of sales per high-performing agent. Furthermore, as reaching a higher level of sales "unlocks" additional benefits for the agents, this multilevel structure serves as a smart incentive to improve agent performance. Investment in a rigorous data feedback loop allows a business to monitor this performance on an ongoing basis and adapt or invest in its network model accordingly.

CASE: KOPERNIK

Founded in 2010, Kopernik is an Indonesian-based social enterprise on a mission to "find what works to reduce poverty in the last mile." As part of the enterprise's last-mile distribution practice, Kopernik operated a women's empowerment program in Eastern Indonesia called Wonder Women Eastern Indonesia (WWEI). WWEI connected last-mile communities to clean energy technology, while also aiming to improve the livelihood and standard of living of the women micro-entrepreneur sales agents, or "wonder women."

Operating from 2014 to 2018, the Wonder Women program saw significant gains in the scale of its clean energy technologies. The WWEI program made a significant investment to support the wonder women (WW) agents through targeted business and marketing training, as well as visits and coaching from local Kopernik field staff as the women progressed in their selling tiers. While resource-intensive for Kopernik, the investment in mentorship and targeted sales support had a direct return on the agents' performance and confidence levels to expand their sales activities.

Key components of Kopernik's WW agent model included:

- A 15% recommended profit margin, with average margins in excess of $22/month;
- A cash-up-front sales model where WW bought products up front, but in reality often pre-sold to the user and then paid Kopernik for the product;

- Emphasis on the social impact of Kopernik products in messaging to sales agents and their contributions to their communities' economic development via clean technology; and

- Sales and marketing phase training support (opposite page). In the first circle, training was focused on financing, bookkeeping, and savings capacity. In the second and third circles, entered when higher-performing agents progressed to more advanced sales, Kopernik provided accompaniment to markets and offered training on sales strategies, detailed product knowledge, relationship building, and how to sell in new locations.

Data for the period of September 2014-December 2017

512 WONDER WOMEN	**$22.56** AVERAGE MONTHLY MARGIN FOR WONDER WOMEN
31,946 TECHNOLOGIES DISTRIBUTED BY WONDER WOMEN	**164,140** PEOPLE REACHED

By 2017, Kopernik noticed that, despite investment in its agents, **only 16% of the agents recruited were still active in the WWEI program,** with some reporting challenges to participation related to time management and transportation access. Based on this data, Kopernik tested a number of incentives and campaigns aimed at evaluating agent performance. Kopernik introduced a one-time competition to evaluate door-to-door sales agent effectiveness as compared to traditional media marketing, such as newspapers and social media. Acknowledging the agents' attrition rates, **this experiment allowed Kopernik to identify which of the agents were more motivated, and the competition prizes served as an incentive to improve agent performance.** The agent who won the sales promotion competition would receive a motorbike, while the runners-up, identified by number of products sold, would receive one free technology to add to their product basket. Kopernik found that this sales-based incentive offered a higher return on their investment than newspaper advertising (nearly double). Based on the results of the experiment, Kopernik was able to optimize the ROI of its initial investment to acquire, mentor, and retain the Wonder Women by identifying and focusing on its highest tier of agents. A multi-tiered agent network allowed Kopernik to reduce its cost inefficiencies and the risk of investing in agents who may or may not have remained in the program.
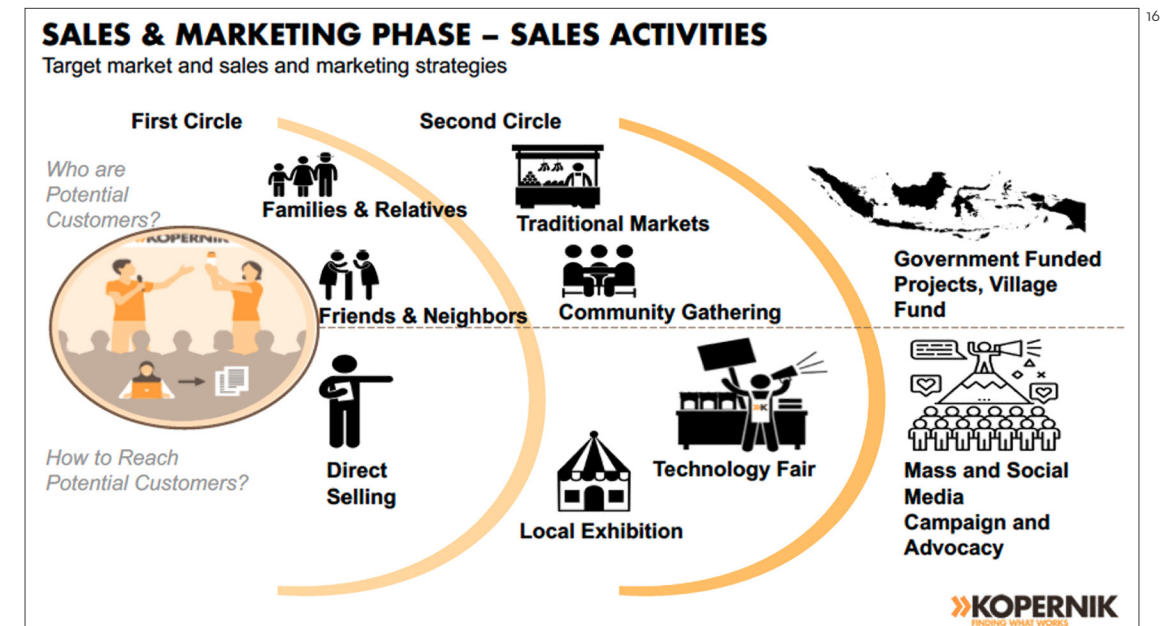
BEST PRACTICES

Invest in high-performing agents. There is a natural self-selection of high-performing agents, but consider multilevel systems of agents by which your business links increased investment to increased sales or performance targets. Kopernik conducted a series of surveys with the WW and found that inactive agents spent fewer hours per week on their business, and as a result saw a smaller monthly profit. However, **active agents, by putting in an additional 2 hours/week, saw a 4.5% higher average monthly margin,** which was good for the agents and good for Kopernik's sales.[17]

PITFALLS

Avoid making assumptions regarding agent motivations and pain points. Invest in strong monitoring and evaluation systems to capture sales and agent performance data. Retention of sales agents is driven by understanding what their barriers might be, and may require iteration and adaption.

Not all incentives are economic, capacity building and social impact should not be undervalued. 85% of WW reported feeling that they had fulfilled an aspiration to improve the lives of their community members through these technologies.[18]

4. INCENTIVIZE REFERRALS

Loyal customers and agents are a built-in referral network to spread awareness on the benefits of your products, to drive retention, and to leverage existing networks of trust. Acquiring new BoP consumers is expensive given the high upfront costs associated with building awareness of your offering, whether through social media and marketing or in person through door-to-door agents. **Similarly, the costs of recruiting new sales agents can be high,** especially for businesses that are not yet well-established in a community, and therefore need locally embedded partners to assist with recruitment efforts.
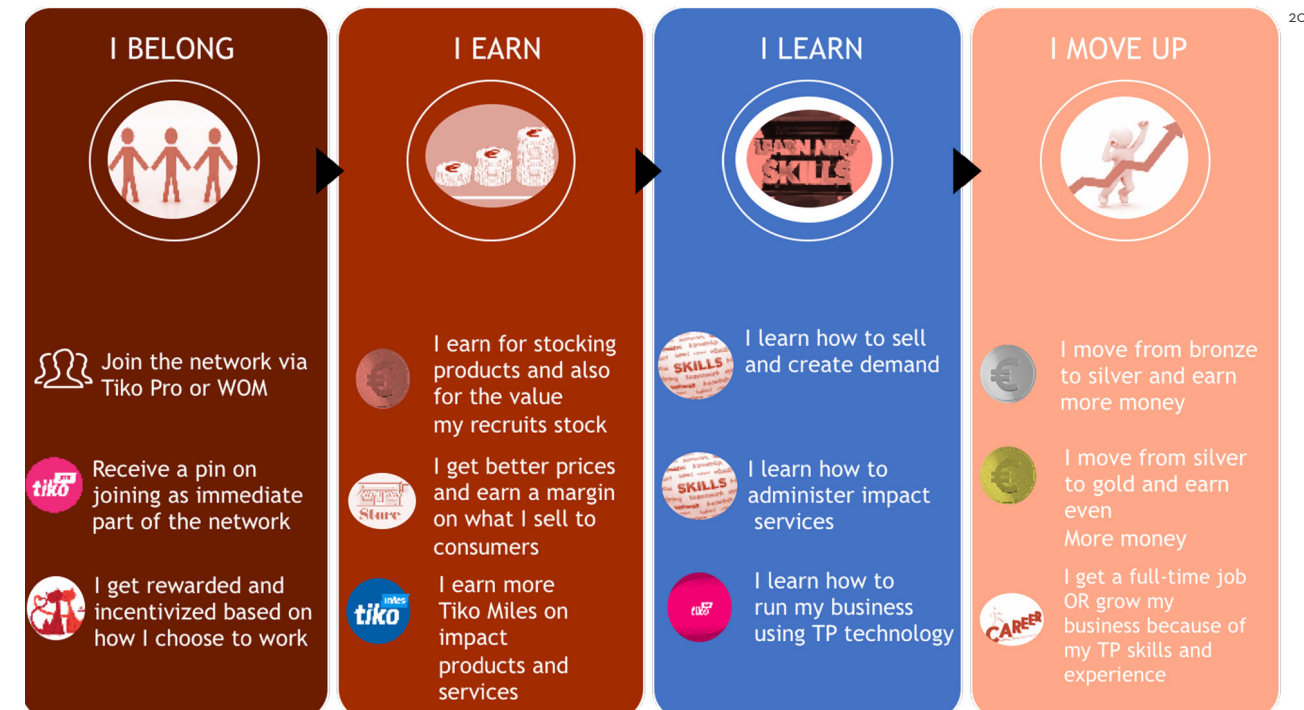
Aside from simply attracting attention to your product, there is also a need to establish trust, which is easier to do by using referrals because you can leverage existing trust within communities. Furthermore, the introduction of referral incentives, such as digital money, free merchandise, or vouchers, can increase retention of your current customers. These same referral incentives can also be effective in leveraging sales agent retention. Agents and customers are incentivized not only to increase their performance and purchasing power, but also to spur that of new customers.

CASE: TRIGGERISE

Launched in 2014, Triggerise is a nonprofit that harnesses technology and behavioral economics to drive local economic development and health outcomes. Its mission is to build "user-centric motivation platforms that trigger positive behaviors while strengthening local economies." Based in the Netherlands, Triggerise works across 11 markets in sub-Saharan Africa and India in partnership with funders and implementers as the provider of a unifying technology platform.

Triggerise's Tikosystems are platforms built upon a central "Tiko" rewards system and bring together local suppliers, entrepreneurs, service providers, and beneficiaries to drive the eventual adoption of a particular positive behavior. Triggerise incentivizes agent referrals through the "Tiko pro" product, which is an open peer-to-peer network of micro-entrepreneurs who serve as agents and retailers for a particular Triggerise project, with the goal of "boosting last-mile distribution while increasing existing programmes' or processes' efficiency through referral monitoring and rewards-based methodology."[19] By enrolling a peer, agents receive digital discounts, a process that reduces the costs of Triggerise to grow their market base while also increasing agent sales.

Anyone can become a Tiko pro agent, but agents are incentivized based on their performance once they enroll through the platform, and acquire "Tiko Miles" as reward points. **In particular, agents receive rewards for enrolling peers. Triggerise tracks these referrals, and those agents registering their peers receive points** that act as a virtual currency with which to purchase stock. In Kenya, the reward is a fixed amount, but in other markets it can be based on the volume of the stock that the newly enrolled peer orders. Building on growth-hacking strategy 3 of multi-level agent networks, Tiko pro has a four-tier system targeted at motivating and retaining the highest-performing agents. The points agents receive for peer enrollment of customers are deposited directly into their virtual wallet (which in Kenya is operated through m-pesa), and agents use these points to buy actual products. This model allows agents to restock directly, while also reducing the costs to Triggerise of tracking product stocking. It also promotes the retention of high-performing agents.

[20]

I BELONG	I EARN	I LEARN	I MOVE UP
Join the network via Tiko Pro or WOM	I earn for stocking products and also for the value my recruits stock	I learn how to sell and create demand	I move from bronze to silver and earn more money
Receive a pin on joining as immediate part of the network	I get better prices and earn a margin on what I sell to consumers	I learn how to administer impact services	I move from silver to gold and earn even More money
I get rewarded and incentivized based on how I choose to work	I earn more Tiko Miles on impact products and services	I learn how to run my business using TP technology	I get a full-time job OR grow my business because of my TP skills and experience

Tiko Pro's Agent Engagement Journey

BEST PRACTICES

Ensure that accessing referral incentives is easy and actionable. If customers or agents receive points per referral, it is important that they be able to redeem those special offers in a convenient and timely manner.

Make **entry barriers very low** for newly enrolled clients and/or agents (e.g., allow the first purchase to be of very low value), and make the process of referral as simple as possible (e.g., texting a mobile number, such as in Copia's case. *Read more in the Copia case.*)

PITFALLS

Peer enrollment and acquisition through referrals can create an imbalance among who enrolls, and might not be perfectly aligned with your target group. In Kenya, for example, Triggerise ended up with a disproportionate number of maize distributors, when in actuality it desired a diversified vendor offering.

The **concept of intangible, virtual rewards may be unfamiliar among BoP customers,** complicating the adaption of peer referrals for such rewards.

5. DIGITIZE LOYALTY PROGRAMS

BoP communities can be dispersed over large geographic boundaries and costly for door-to-door sales agents to reach on foot or by road. One strategy to combat these challenges, while also reducing costs, is through the introduction of digital loyalty programs.

Mobile penetration and usage is often ubiquitous in BoP markets, with many customers already relying on cell phones for their day-to-day transactions. **Digital loyalty programs provide cost savings to product and service providers, while also triggering customer action to purchase and driving customer retention.** They can improve agents' sales performance by offering rewards,

improve the lifetime value of potential customers by incentivizing customers' repeat purchases, and allow providers to push marketing and awareness campaigns via the digital program more frequently and without having to invest in outside media or marketing campaigns. **By offering rewards, digital loyalty programs also incentivize customers to become repeat customers, maximizing cost effectiveness.** They can optimize an enterprise's investment in its current customer base while also contributing to new customer acquisition.

CASE: TRIGGERISE

Triggerise's Tiko explore is a beneficiary-focused brand. It is membership-based and offers access to pre-negotiated digital offers for beneficiaries, while also charting a

customer journey towards the desired behavior change, adapting the "5 Levers for Change" to four principles: **"I'm aware, I commit, I'm heard, and I use it."**
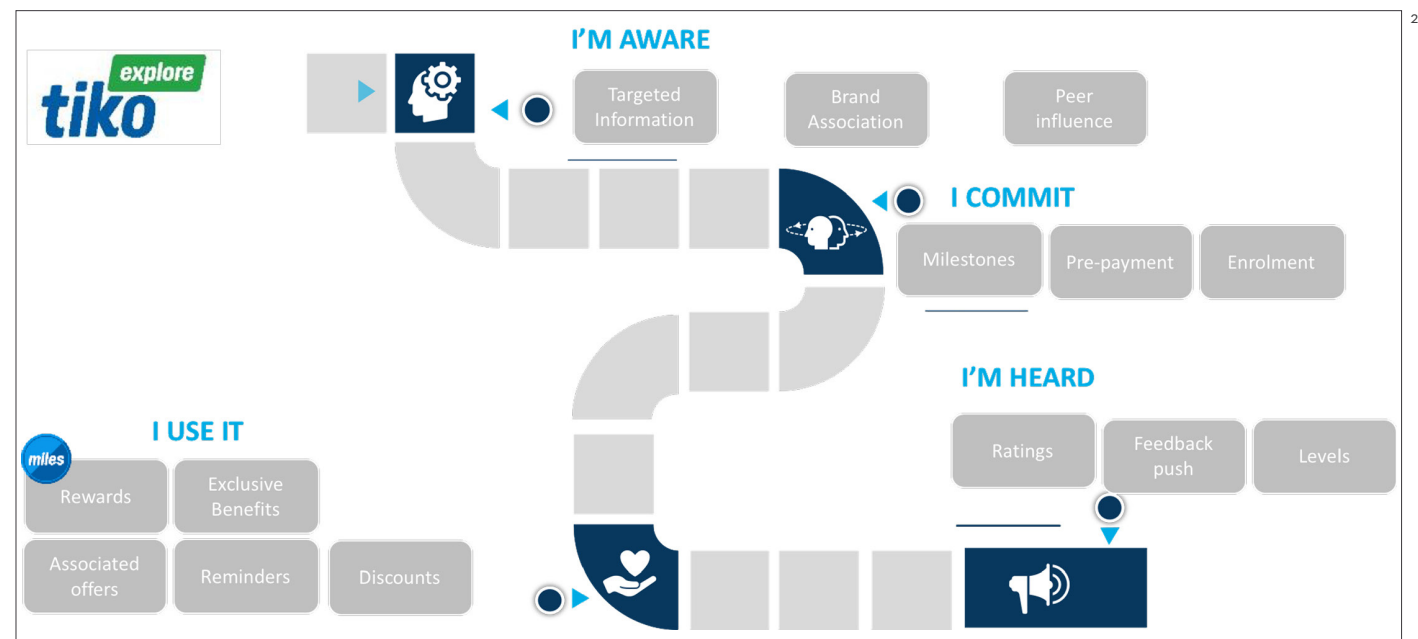
Triggerise Tiko Explore's Behavior Change Pathways

As part of the process towards adopting target behaviors, Tiko explore provides users with a number of digital rewards:

Lifestyle benefits: Offers beneficiaries discounts for free trainings or classes related to the behavior, such as free skills training courses, support in starting a business. and more.

Pre-negotiated vendor loyalties: Before a platform is set up, Triggerise works with project donors and local private sector partners to finance and negotiate discounts and compile a package of offers attractive to the specific target population, such as offers to local businesses like salons and shops.

Points and levels: Users are incentivized to use the platform, accumulating points and progressing to tiered rewards levels based on their usage. The more users engage with the platform, the more "points" they earn and the more they can spend.

Triggerise's Tiko explore allows for the capturing of real-time data on its digital platform. Through surveys and ratings in the platform, users provide continuous feedback on the program. Triggerise uses this data to iterate and optimize on an ongoing basis and employ additional customer outreach through call centers and targeted visits as needed.

Triggerise's digital loyalty platform also drives cost efficiencies through the following.

Driving customer retention: Customer acquisition is expensive and requires a significant level of effort to attract new customers. Tiko explore invests in retaining current customers by offering rewards and other incentives. Triggerise also bundles these digital offers geographically: if they already have users or customers in one area, they seek to add a complementary intervention on top of this to leverage existing communications and sales events.

Easing the burden of supervising and tracking products and offers: All partners in the ecosystem, from businesses to pharmacies to beneficiaries, enroll in the platform. Customers also redeem offers digitally, verifying each offer they redeem directly in the platform. This allows for a digital information trail, which spares Triggerise the cost of supervising activities through in-person visits or paper data collection.

BEST PRACTICES

Digital rewards and offers require both a high degree of customization per end-user group and an ongoing investment to ensure that content and rewards remain relevant for customers' current motivations.

Invest in leveraging a network of bundled offers and/or partners as a means of reducing communications and customer acquisition costs.

PITFALLS

Avoid assuming that free is always better. Triggerise experimented with offering free maternal health services with a higher upfront enrollment cost. They discovered customers would rather pay more (up front and per service) so as to feel they were being treated as paying customers who would receive higher-quality care.

Digital rewards ecosystems can incorporate numerous partners and stakeholders into one central system, but tracking reward redemption can be costly without proper monitoring and evaluation (M&E), especially if you are working with third-party suppliers not within your business's supply chain. **If you decide to implement this strategy, introduce an e-redemption mechanism that spares additional costs and inefficiencies from paper or in-person M&E.**

THE DEMAND ENGINE IN PRACTICE: COPIA

Copia Global is a self-sustaining social enterprise with a profit-seeking goal. The first rural e-commerce business in Kenya, Copia started five years ago as a pilot in one central county. Since 2012, the company has validated its core value proposition to its customers as well as its sales agents, and managed to scale up. Copia operates in eight counties across Kenya and currently serves over 180,000 consumers in rural areas, creating additional revenue for over 3,500 agents. The e-commerce business provides access to a wide portfolio of products, including personal care, energy, construction, and baby products.

Putting the pieces of The Growth Engine together, the following case study demonstrates how Copia uses all five growth-hacking strategies to scale demand at the BoP.
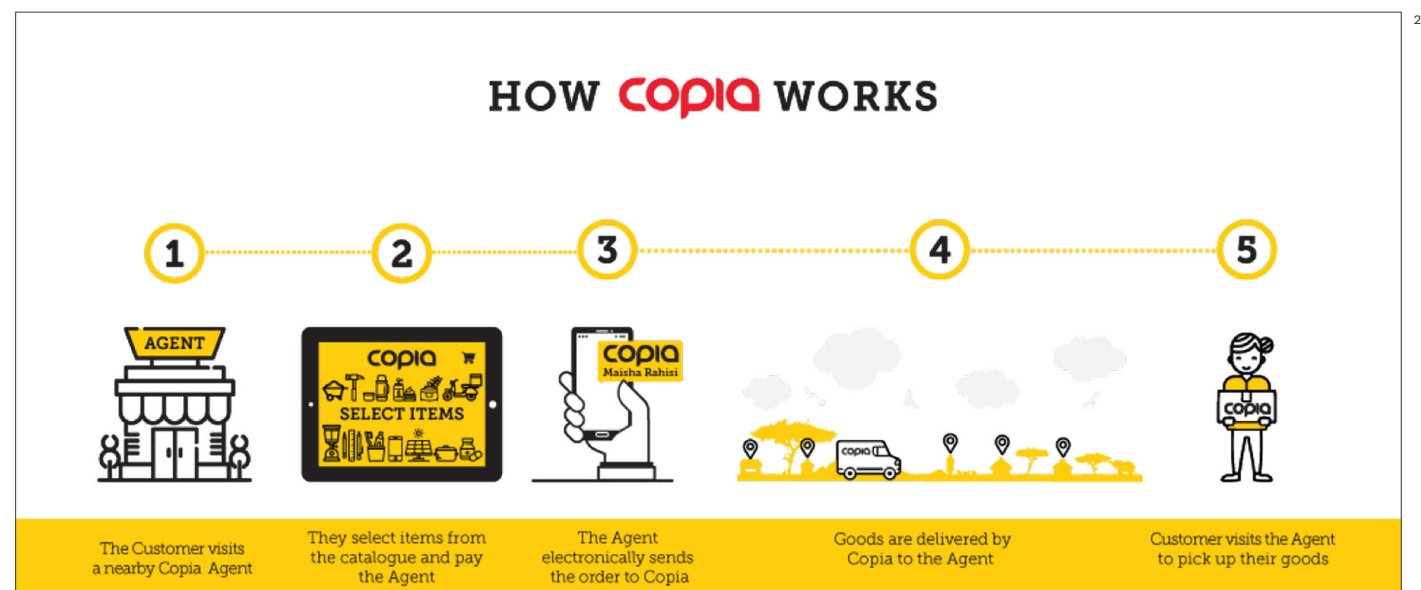
RELEVANT VALUE PROPOSITION & SCALING: HOW COPIA WORKS

Before Copia, customers were overpaying for products due to their living far away from Nairobi. Nairobi is a retail hub, and products are distributed to peri-urban and rural areas through middlemen, who take additional margins from customers on product sales. Copia cuts out the middlemen and sells directly to the customer, improving affordability and ease of access to desired products.

Before moving to a new area, Copia assesses whether an area's **population density** reaches a level to be potentially viable for serving the local community. If so, it looks at the agricultural activities and harvest cycles present in the area, so as to identify the periods during which potential customers will have **disposable income** for purchasing Copia products.

Once a new geographic area is identified, Copia reaches out to current business owners and other potential agents who have access to groups of customers, such as through their chama group or tea buying center. Copia asks these groups whether they are interested in selling Copia products as a new income-generation stream. If the answer is yes, recruits go through a series of agent trainings. Agents are equipped with a physical and/or digital catalogue. The agents' customers go through the catalogues and select the products they wish to order. The agent then places an order through SMS or a tablet, specifying the product and quantity. Copia delivers the order to agents in two to four days, and customers then pick up their goods from the agent.

HOW **COPIA** WORKS

1	2	3	4	5
The Customer visits a nearby Copia Agent	They select items from the catalogue and pay the Agent	The Agent electronically sends the order to Copia	Goods are delivered by Copia to the Agent	Customer visits the Agent to pick up their goods

LEVERAGING TRUSTED NETWORKS

For Copia, its real engine for growth is its agent base. "We never had an issue growing our customer base (...) We have put more feet on the ground and recruited more agents, which translates to more customers." The primary characteristic of a potential Copia agent is being a trusted member of the community. Originally, Copia was targeting only existing business owners, such as shopkeepers and hair salon owners, but they realized that they were missing opportunities to serve large groups, such as the groups of ~5,000 people living on one large farm. Copia realized that in order for an agent to access potential Copia customers, he/she did not have to be a current business owner, but simply a trusted figure in a group of rural customers.

As a result, Copia now leverages trusted networks, such as chamas and tea buying centers to scale its business.

Chamas: A chama is an informal saving and/or credit group, typically women, who pull their money together to buy products such as tools that could generate income for them. As such groups are built on mutual trust and tend to purchase collectively, they are an ideal structure for Copia to introduce their products through a "chama agent," an existing member of such a group.

Tea Buying Centers: Local tea farmers go to a tea collection center to sell their tea. Copia has recognized the opportunity to have agents at these centers who can make additional income by providing products to the farmers at an affordable price.

Even though Copia does some B2C marketing communication, these marketing costs are low because they can rely on their trusted network of agents to effectively grow and retain their customers. In other words, the agent's "personal brand" is already established and strengthens the Copia brand.

LOW-RISK TRIALS

Copia is a good example of how low-risk trials can work not only for durable goods, such as water filters and cookstoves, but also for services and fast-moving consumer goods. Copia ensures that new customers have the opportunity to try their service without significant investment through one simple policy: there is no minimum order value. In the words of Samantha Roblin, Copia's former Director of Marketing, "We train our agents so that when they pitch to new customers, they ask no commitment, only to try it out - you can even order a bag of salt! This is worth five cents. We want them to test the product without the risk of having a larger order value."

MULTILEVEL AGENT NETWORKS

As described above, Copia's scaled customer base has been driven mostly by its agents rather than its direct scaling demand activities for end customers. Thus, the strategy of incentivizing sales agents is key.

The tools to incentivize Copia sales agents include a royalty program, commissioning, and incentivizing competition among agents.

Agent royalty program: Agents receive a t-shirt when they reach a certain sales amount. Their reward grows with their sales amount, with the most valuable gift being a free tablet.

Commission: Previously, the agent's commission depended solely on the unique products sold. This structure was changed so that the commission percentage per product would vary based on monthly sales.

The product mix sold by agents has not changed as a result of this new system, but agents who are less motivated to grow quit their collaboration with Copia much more quickly, allowing the enterprise to focus its efforts on the agents with the most (sales) potential. This gradual investment in agent development also saves costs for Copia, as it is less likely that the company will have to spend on agents who are not motivated and engaged enough to drive long-term sales.

INCENTIVIZE REFERRALS

Among other scaling demand activities, Copia incentivizes end customers to make referrals. Through their Referral Program, a customer can SMS their friend's phone number to Copia to receive a 100 kes ($1) voucher once the friend purchases twice and spends at least 2,000 kes ($20).

DIGITIZE LOYALTY PROGRAMS

Kenya's high mobile penetration allows Copia to leverage several digital marketing tools addressing customer demand to improve loyalty and retention. One of them is **a reward program for recurring customers that offers digital money.**

Copia started a loyalty program for customers offering rewards ranging from branded merchandise to physical vouchers. In the process, Copia learned that the gifts did not always make their way into the hands of the customers because agents or drivers kept them or they were lost. At the beginning of 2018, Copia decided to introduce digital money as a solution. In the words of Samantha Roblin, Copia's former Director of Marketing, "It was first a challenge, as such an intangible reward was a new concept for our customers. By now, they really got it and it drives retention that increased."

ENDNOTES AND REFERENCES

1   E. Simanis. (June 2012). Reality Check at the Bottom of the Pyramid. Harvard Business Review. https://hbr.org/2012/06/reality-check-at-the-bottom-of-the-pyramid

2   Unilever. (2011). Five Levers of Change https://www.unilever.com/Images/slp_5-levers-for-change_tcm244-414399_en.pdf

3   T. London. (2016). The Base of the Pyramid Promise: Building Businesses with Impact and Scale. Stanford University Press

4   T. London. (2016). Building Business with Impact and Scale: Highlights from the Max Havelaar Lecture. https://www.rsm.nl/fileadmin/Images_NEW/Faculty_Research/Partnership_Resource_Centre/Max_Havelaar/article_Ted_London.pdf

5   S. Benhayoune, N. Chevrollier, V. Mazon. (2017). MIT D-Lab. https://d-lab.mit.edu/resources/publications/ready-steady-scale

6   C.K. Prahalad. (2012). Bottom of the Pyramid as a Source of Breakthrough Innovations. Journal of Product Innovation Management, 29(1), 6-12.

7   B. van der Hilst (2015). BoP Innovation Center. http://www.bopinc.org/updates/blog/marketing-essentials-for-targeting-low-income-consumers

8   J. Graf, O. Kayser, L. Klarsfeld. (2013). HYSTRA. Marketing innovative devices for the base of the pyramid. http://hystra.com/marketing-devices

9   d.Light. (2012). https://www.one.org/international/blog/d-lights-approach-to-the-energy-poverty-challenge/

10   O. Kayser, L. Klarsfeld., S. Brossard. (2014). HYSTRA. Marketing Nutrition for the Base of the Pyramid: Introducing successful practices for improved access to nutritious complementary foods. http://hystra.com/marketing-nutrition

11   SC Johnson. (2018). https://www.scjohnson.com/en/press-releases/2018/july/sc-johnson-improves-access-to-health-care-through-partnership-with-rwanda-ministry-of-health

12   Ecofiltro. Impact Statistics. https://www.ecofiltro.com/en/impact-statistics

13   SC Johnson. (2018). PIA Working Group Presentation – SC Johnson.

14   SC Johnson. (2018). https://www.scjohnson.com/en/press-releases/2018/july/sc-johnson-improves-access-to-health-care-through-partnership-with-rwanda-ministry-of-health

15   J. Graf, O. Kayser, L. Klarsfeld. (2013). HYSTRA. Marketing innovative devices for the base of the pyramid. https://hystra-consulting.squarespace.com/marketing-devices

16   L. Klarsfeld. (2018). HYSTRA. PIA Working Group Presentation – Hystra and Ecofiltro

17   A. Baranova, R. Putri, T. Hamakawa. (2018). Kopernik. PIA Working Group Presentation – Kopernik

18   L. Kristanto. (2018). Just Two Extra Hours Per Week Could Make or Break a Clean Energy Technology Micro-business. Kopernik Insights. https://kopernik.info/en/insights-reports/kinsights/just-two-extra-hours-per-week-could-make-or-break-a-clean-energy-technology-microbusiness

19   L. Kristanto. (2019). Leveraging The Potential of Women Microentrepreneurs: The Wonder Women Eastern Indonesia Program. Kopernik. https://v1.kopernik.info/documents/publication/1548211652346_8450.pdf

20   Triggerise. The Pro Network. https://triggerise.org/pro/

21   B. Renard. (2018). Triggerise. PIA Working Group Presentation – Triggerise

22   B. Renard. (2018). Triggerise. PIA Working Group Presentation – Triggerise

23   Copia. How Copia Works. https://copiaglobal.com/corporate/

MIT Practical Impact Alliance

The MIT Practical Impact Alliance harvests the power of collaborative action and peer learning to increase, accelerate, and sustain impact on global poverty. Organized by MIT D-Lab, PIA is a membership organization of leaders from diverse organizations with aligned missions who learn, collaborate, and develop best practices together. PIA working groups focus on addressing a knowledge gap of the group and in the field, with the goal of generating outputs that will serve as relevant, practical tools for PIA members and a broader inclusive business audience.

BoP Innovation Center

The BoP Innovation Center (BoPInc) is a social enterprise supporting start-ups, SMEs, and multinationals in creating commercially and socially viable business models and activities that include the people in the Base of the Pyramid (BoP) as consumers, producers, and entrepreneurs. Their services are based on three pillars of expertise: marketing and distribution, inclusive innovation, and inclusive business empowerment. Co-creating aspirational and cost-effective marketing activities for BoP markets at the core of their work, BoPInc experiments, learns, and publishes on this subject with its collaborators, including MIT D-Lab.

2018 PIA Scaling Demand at the BoP Working Group

PIA formed a working group in 2018 focused on practices to scale demand for products and services in BoP communities with the goal of achieving optimal balance between cost effectiveness and adoption. Co-led by BoP Innovation Center, MIT D-Lab, and SC Johnson, this working group included representatives from World Vision, Pact, PSI, Johnson & Johnson, Danone, and Siemens Stiftung (Empowering People Network). Based on lessons learned from the cases examined throughout the year, the group developed a practical growth-hacking framework with five illustrative scaling strategies.

Acknowledgments

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