

Kenya

Preparatory Survey on
BOP business for "Healthy Kiosk"
to Prevent Non-communicable Diseases
in Kenya

Final Report

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1 Overview

1.1 Background and Objectives

Non-Communicable Diseases has become one of the top-priority issues in the international community. Kenya is not an exception: Kenya Health Sector Strategic and Investment Plan puts focus on “preventing the spread of NCDs”. Its basic strategies include awareness raising activities for behavioral change for NCDs prevention, with special emphasis on outreaching to the country’s rural population with limited access to medical and healthcare services, as well as promoting the public-private partnership approach.

Despite such policy-level prioritization for NCDs prevention in Kenya, the challenges remain difficult to be addressed only by the governmental intervention. Cancer Scan Co., Ltd. (hereinafter the “Company”) found through the preparatory survey in a rural area of the country including blood pressure test, questionnaire, and simple health checkup that the targeted BOP population was largely still at risk of developing NCDs. The survey results showed that 20 % of the surveyed were with mild or worse high blood pressure and with BMI 30 or higher, and most of them answered “I did not know myself is at high risk for NCDs” (unawareness) or “I have heard and known about the risk but my condition is still safe” (overconfidence).

The Company developed the assumption through the preparatory surveys that the causal factors for the spread of NCDs can be categorized into the below three major issues:



Figure 1-1 Assumption of major causal factors for the spread of NCDs in Kenya

The Company set up the local subsidiary, AfricaScan, in Kenya in 2014 with the corporate mission of bringing marketing innovation to the African traditional distribution chain and has managed a rural kiosk business in Kenya until today. The Company’s kiosks record every transaction through its point-of-sales (POS) system, which enables the Company to analyze consumer purchasing behavior. Combining the experience of the local business with the above-mentioned surveys and studies, the “Healthy Kiosk” BOP business model was developed, which makes kiosk chain as a platform for providing periodical health checkup and follow-up and selling healthy products with suggestions/promotions based on individual’s health status.

The objective of this survey was to study the effectiveness (development impact) and the business feasibility (profitability and scalability) of the “Healthy Kiosk Model.”

1.2 Study Area

The study area was Naivasha Sub-county in Nakuru County where the Company operates its kiosk chain, located approximate 70 km northwest of Kenya’s capital Nairobi. The pilot of the proposed business models were implemented in Kihoto and Kamere, which were selected from communities in the sub-county.

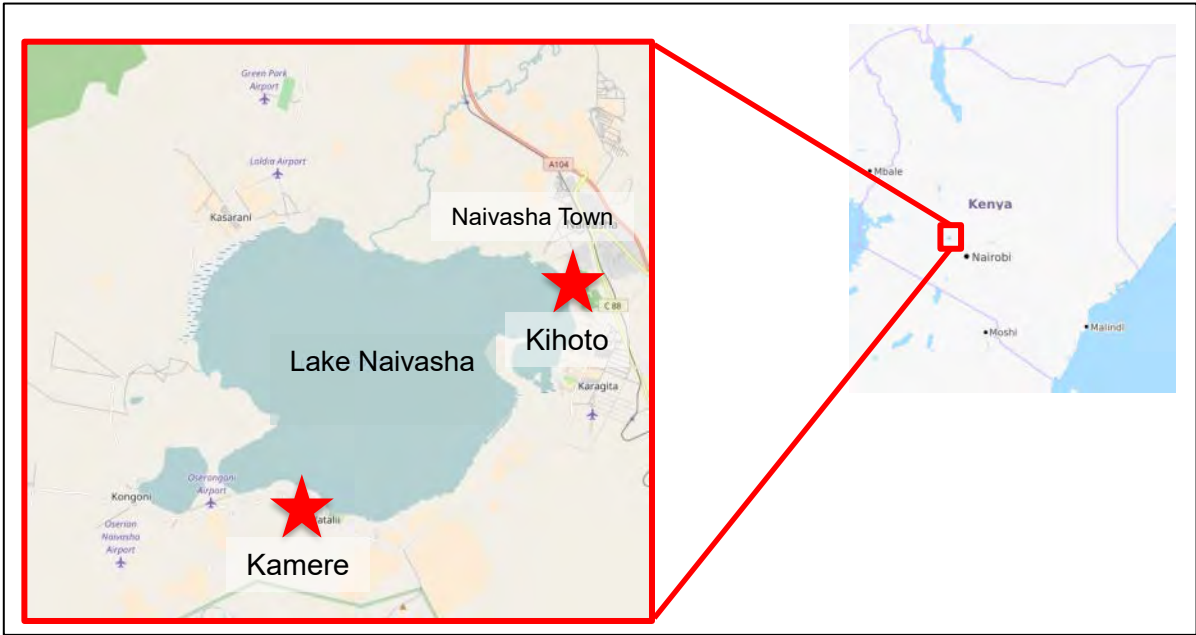


Figure 1-2 Study area

1.3 Method, Target and Period of Study

Based on the above-mentioned assumption of major causal factors for the spread of NCDs in Kenya, the Company developed the original concept of the “Healthy Kiosk” to tackle the targeted issues through the scenario that “Healthy Kiosk” first implements the simple health checkup, then conduct health education on the importance of regular exercise and healthy diet, and then provides individual follow-up, aiming to help customers create healthy habits for their healthier lives.

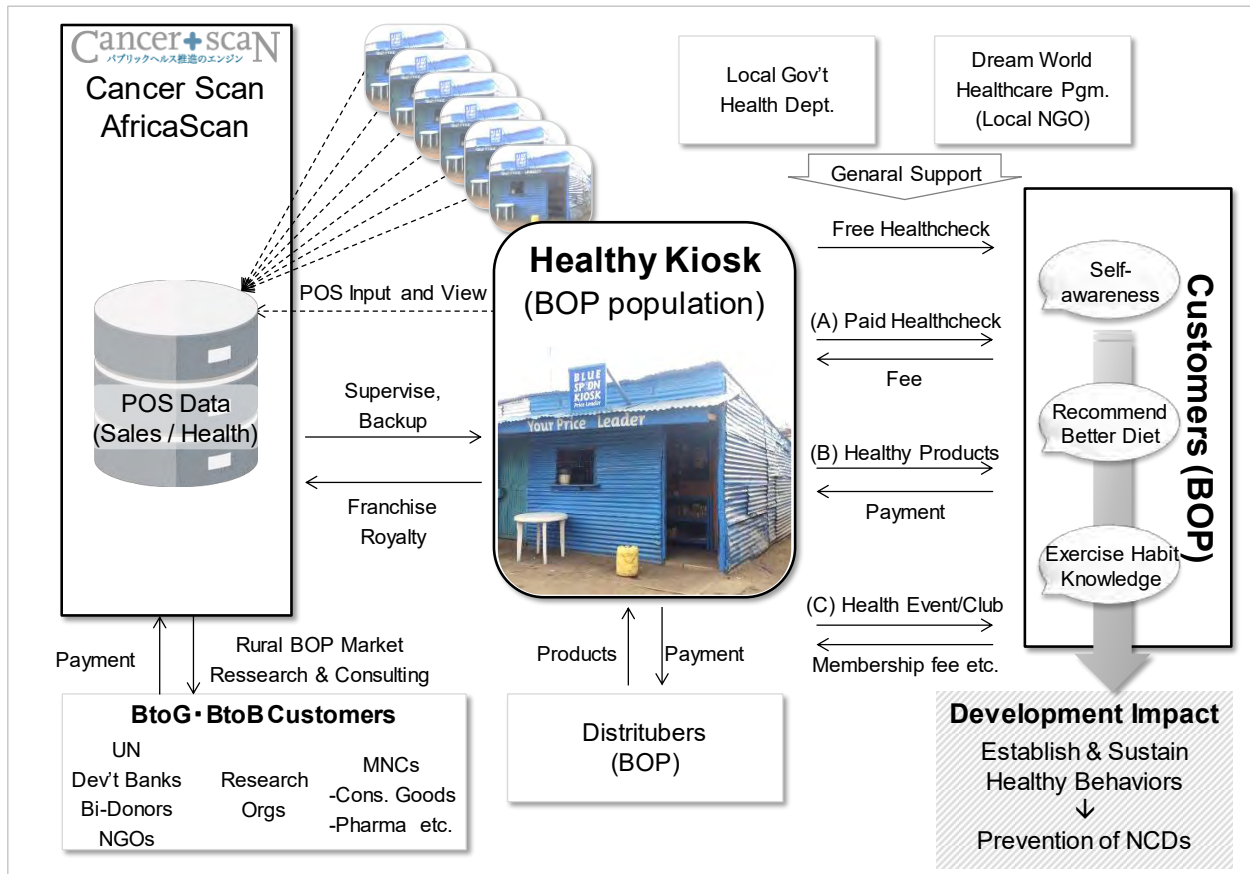


Figure 1-3 “Healthy Kiosk” business model (original concept)

To achieve the objective of this survey, the Company had studied and found the different business models, and planned to verify their feasibilities through the pilot implementation of each model in the target communities of Naivasha Sub-county. The planned key indicators of the models are shown in the table below.

Table 1-1 Business models of Healthy Kiosk verified through the survey

	Paid Health Checkup Model	Healthy Products Model	Health Event Model
Monetizing	Charge for Health Checkup Service (Body fat test, BMI test, Dental / ophthalmologic checkup)	Healthy Products Promotion and Sales Based on the Individual Results of Free Simplified Health Checkup	Hosting of sports club and health events - membership fee and sales of amenity or products
Key Indicators	20Ksh ¹ × 100 attendees per session	10+ % sales of the healthy products among the whole substitutable	20 % of the clients of a kiosk to be newly registered to the club per event

The survey period and conducted activities are shown in the table below

¹ Ksh: Kenyan Shillings (Ksh 1 = 1.04 Japanese Yen as of 2017/8/14)

Table 1-2 Survey period and conducted activities

		2016												2017							
		5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8				
Activities	1 Basic Research	■																			
	2 Detail Design of Proposed Business Model			■																	
	3 Preparation of Pilot Baseline Survey			■																	
	4 Pilot Implementation							■													
	5 Evaluation and Analysis of Pilot																■				
	6 Restructuring of Business Model																	■			
	7 Study of Possilbe Collaboration with JICA																	■			
	8 Compiling Final Report																	■			

2 Summary of Survey Results

2.1 Conclusion on Business Feasibility

The final conclusion through the survey of the proposed profit models are as follows.

Table 2-1 Conclusion of business feasibility and strategy for way forward of business models

	Paid Health Checkup Model	Healthy Products Model	Health Event Model
Judgement	x ("Not Feasible" for Business for the BOP Population)	✓	✓
Strategy for way forward	Explore possibilities of "Whole-Pyramid Approach" consists of (i) paid health checkup for middle – high income population and (ii) low-cost or free health checkup for BOP (to be studied under the JICA "SME ODA F/S" scheme)	Judged feasible when these two models operated in collaboration with Diet Coaching business <ul style="list-style-type: none"> ✓ Encouraging NCDs high-risk group to join health events and to purchase healthy products at kiosk is effective to increase kiosk's sales and profit ✓ It is possible to make Healthy Kiosk business profitable by integrating the two models, but it is not expected to be profit center of the Company's business in Kenya ✓ As number of stores increases, they can be used as platform in launching other business. 	

2.2 Feasibility Assessment of the Proposed Profit Models

2.2.1 Paid Health Checkup Model

Judgement of Business Feasibility: *Not Feasible (for business for the BOP population)*

In the selected communities in the study area, Kihoto and Kamere, free health checkups were conducted in partnership with Department of Health Service of Naivasha Sub-county Government in November 2016. In the course of preparing the pilot, from the discussion with the health department and hearing from local people, the following facts were confirmed.

- ✓ Health Department of Naivasha Sub-county government strongly opposed to the idea of charging fee of health checkup. This is because of their vision that health checkup should be accessible to as many local residents as possible.
- ✓ Conducting health checkup in partnership with private hospitals would cost much higher than doing with public, thus charges on participants would be higher.
- ✓ Local residents had a common mindset that "health checkup is free of charge" because local NGOs in Naivasha often conduct free health checkups.

The Company conducted a questionnaire survey on how much local residents are willing to pay for health checkup (N = 293). The average willing-to-pay price was only Ksh 311, although implementation cost of one health checkup event was more than Ksh 1,700² per person.

² The checkups include Lifestyle Assessment, BMI, Blood Pressure, Total Co, TG, HDL/LDL-Co +, Blood Glucose

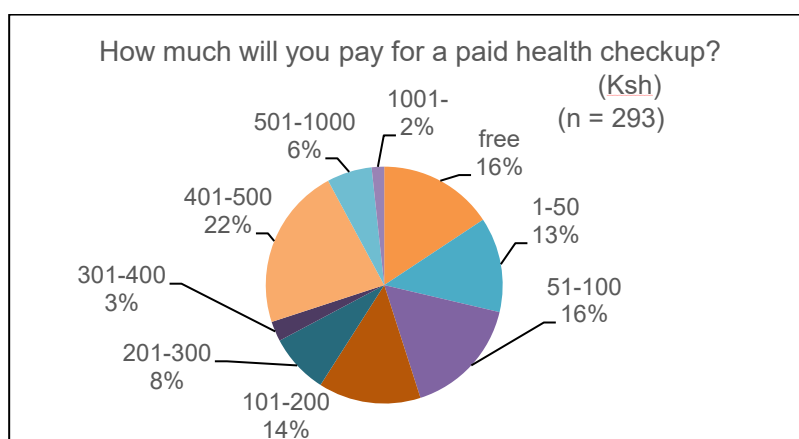


Figure 2-1 Willing-to-pay price for paid health checkup

It was found, even without implementing a pilot, that considering this result, monetizing health checkup services would be quite difficult and unrealistic. Thus this model was judged not feasible, especially when it comes to the BOP population.

On the other hand, according to the result of a concept test conducted in Nairobi city, there was high demand for the paid health checkup even at higher price. The test found that more than 45 % of the respondents who are middle to high income residents showed strong purchase intent of health checkup at the price of even Ksh 1,500 to 3,000. 75 to 92% of the respondents showed high or moderate purchase intent. Due to the wide penetration of smartphone among the middle or high income population in the country, mobile applications will be an effective approach for customer education and attraction with low customer acquisition cost. Another strategy may be communicating through an app with NCDs high-risk residents identified at health checkup and monetizing by inserting advertisement in the app.

2.2.2 Healthy Products Model

□ Judgement of Business Feasibility: *Feasible*

(in collaboration with Diet Coaching business and Health Event Model)

<Overview of pilot implementation>

- ✓ Sales of healthy products at the Healthy Kiosk in Kihoto (November 2016-)
- ✓ Sending SMS promotion message to the customers of the kiosk (March – April 2017)
- ✓ As a revised approach, introducing healthy products to customers by community health volunteer (CHV) in collaboration with Diet Coaching business and Health Event Model (April 2017 -)

<Sales of healthy products at Healthy Kiosk>

The piloted kiosk first prepared a special shelf for health-oriented foods including Brown Ugali (more nutrient compared to normal white ugali) and Weetabix (a UK-made whole grain wheat cereal). Later more locally-fresh-made foods such as green smoothie and fruit juice were found to be potential products and then sold for a certain period during the pilot implementation.

Typical products included:

- ✓ Alternatives to sugary tea (chai): Slimming Tea (Ksh 35); Herb Tea (Ksh 10)
- ✓ Nutrient Grain: Ugali Afya³ (Ksh 75 / kg)
- ✓ Green smoothie / Fresh juice (Ksh 15 - 20)

³ Ugali product mixed with dried traditional vegetable powder and fish meal



Picture 2-1 Green smoothie (left) and healthy product shelf

<SMS promotion message to the customers>

SMS messages to promote healthy products were sent to the Kiosk customers for several times, utilizing the Company’s social marketing know-hows. The recipients of SMS were selected considering their health conditions from the result of the free health checkups which were previously conducted at the kiosk. The contents of the messages were developed based on their health data.



Picture 2-2 Example of SMS Promotion Message

Since no big impact on store sales and number of customers were observed after sending promotion messages 12 times, it was judged not to continue this method. This is probably because most of the customers perceive SMS messages from private companies as not important or trustable. One of the attendees for the in-depth interview after the pilot answered that since she had always received many promotion messages from various organizations to her phone, she came to ignore them anytime she notice a reached message is for promotion.


<Collaboration with Diet Coaching business and community health volunteers (CHVs)>

Apparently more efficient and effective approach was needed for this model.. As the Company had just launched another business Diet Coaching in Kenya, the locally-involved CHVs were asked to introduce to the residents healthy products sold at Healthy Kiosks when they leaded or joined hosting a health event.

This strategy to appoint CHVs as “healthy products promoter” and “coach for promoting behavioral change of clients” was developed from the insight that they are local influencers concerning health issues, and the local government had the same opinion and thus invited the Company to utilize them in grassroots-level health intervention. In fact, most of them are in the middle to upper-middle income class (comparatively richer group in rural areas) and themselves or their families often run kiosk shops or have land for it.

Since more and more CHVs have smartphones recently, the Company developed (outside this survey) a smartphone application for weight management, and launched “Diet Coaching” business. CHVs can approach high-risk individuals in the community and conduct health coaching easily and efficiently with the app.

Main features of the app are below.



- ✓ Manage individual weight management data of CHVs' clients
- ✓ Calculate BMI from height, weight and waist and suggest personalized weight management goal
- ✓ Propose personalized weight management plan based on weight management goal, period, and simulated energy consumption and intake
- ✓ Set daily calorie reduction goal with the formula localized to Kenyans' daily life style
- ✓ Designed to CHVs to become a professional health coach. Easy to manage various clients, conduct close-monitoring, and follow-up through a call or SMS

Figure 2-2 “SIMWAY” a smartphone application for Diet Coaching

The primary purpose of connecting Diet Coaching to Healthy Products model was to put more focus on those with high motivation for or interest in improving own health conditions who were making some efforts for their health. The other advantage of this collaboration was to send them the promotion messages from the influencers who were respected by residents as reliable leaders on health issues.

In this reconstructed approach, the health event (the detail of which will be explained later) was co-hosted with CHVs and the event announcement was mainly done for those registered in Diet Coaching app. The event included not only physical exercise but also nutrition education by the CHVs, in which they introduced Healthy Kiosk’s green smoothie as an example of available healthy products for healthy diet.

This approach seemed to have made a visible impact on the sales of the healthy product at Healthy Kiosk. The sales of green smoothie at the kiosk increased to 4 to 10 times since CHVs had begun introducing the healthy products in their nutrition education at the health event.

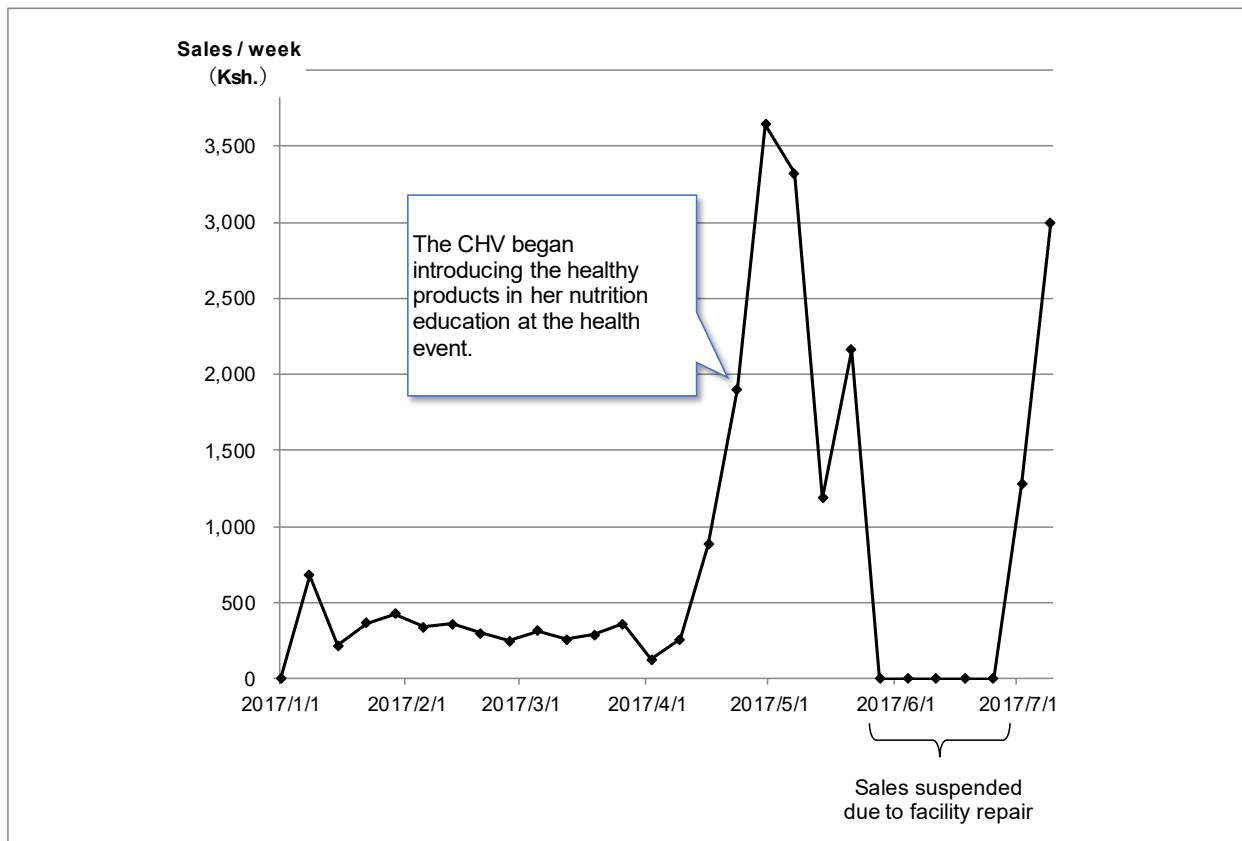


Figure 2-3 Sales of green smoothie in during the pilot implementation

The daily sale of healthy products such as green smoothie was Ksh 423 on average during the pilot period. With this result, it is expected that healthy products sales can bring additional profit of 4,230Ksh per month to stores. Given that the royalty fee charged to the Company’s franchisee kiosks is currently on average Ksh 3,000, it can be increased to Ksh 5,000 to 7,000 in the future if Healthy Kiosks put more focus on increasing healthy products’ sales. And it will make the Healthy Kiosk alone as profitable business.

From the above-it was judged that Healthy Products Model would be feasible when it is implemented in collaboration with Diet Coaching business and Health Event Model.

2.2.3 Health Event Model

- Judgement of Business Feasibility: *Feasible*
(in collaboration with Diet Coaching business and Healthy Products Model)

<Overview of pilot implementation>

- ✓ Event sessions hosted: 1 – 2 sessions per week from Dec 2016 to March 2017; 25 sessions in total
- ✓ Venue: a church premises in Kamere community
- ✓ Demographic of the targeted customers: women, BMI 25 or higher
- ✓ Number of participants: 15 to 30 people per session, 17.3 on average, 89 in total, 37 repeated

<Contents provided in the event session>

- ✓ Instructor-guided exercise
- ✓ Exercise menu included normal aerobics, dance fitness activities, and rope jumping among others
- ✓ Weight check and nutrition education after exercise
- ✓ Trial promotion of healthy products: introducing slimming tea and other products with kiosk coupons

<Results of the first pilot implementation>

The participants of the health events were generally active and passionate. It shows increasing demand for weight management in the target area. However, idea of charging fee to the participants, which had originally been expected to be the main revenue source of this model, was not accepted by residents and the health department of Naivasha Sub-county government. Giving discount coupons of healthy products to participants did not have impact as well, not making any impact on increasing store traffic or product sales during the pilot period.



Picture 2-3 Exercise in Health Event

<Additional pilot implementation by introducing better method>

After the first pilot which was unsuccessful, the Company made an improvement to this model and implemented an additional pilot test in Kihoto community. The improved model was done in collaboration with Diet Coaching business and its partner CHVs as mentioned above. The health events was periodically co-hosted with the CHVs at their home premises once a week. They gave speeches or lectures in the event as a co-host. Another way to collaborative with CHVs was to focusing on inviting registered members of Diet Coaching to health events.. It contributed to the increase in repeat participation.

Free trial events were conducted twice in April 2017, then participants started to be required to pay fee of Ksh 20 per event session. The result was that 10 to 15 people participated in every paid session in this pilot, which shows the feasibility of paid health event at suitable site. As mentioned above, a large number of Kamere residents had been opposed to being charged for health events.. Income level of Kihoto community is relatively higher than that of Kamere, which may be why Kihoto residents were more willing to pay for the event than Kamere.

The cost of conducting one session of health event was between Ksh 1,000 to 1,500. It was not realistic to cover all the cost with the revenue from participation fee alone. However, the above-mentioned improved approach of co-hosting health events with CHV enabled effective promotion of healthy products through CHV's nutrition education for health event participants. With this scenario it is expected that to make Healthy Kiosk profitable is possible.

It was found that the Company's Diet Coaching business would be effective as strategy to invite enough number of participants to health events. In the Diet Coaching operation, those who are identified as overweight or obese at free health checkup at Healthy Kiosk will be registered as "dieter." Local CHVs, as "diet coaches," manage and help dieters' weight and diet management through the smartphone application "SIMWAY". CHVs can communicate with their dieters through the message function of the app. Answers of the respondents of post-pilot impact survey indicate that this scenario was effective. The major reason why they participated in health events was that CHVs, their diet coaches, are the one who invited or encouraged to join health event after registration to Diet Coaching.

From the above-it was judged that Health Event Model would be feasible if it is done in collaboration with Diet Coaching business and Healthy Products Model.

2.3 Restructured Business Model

2.3.1 Revised Strategy of the Company's business in Kenya

At the beginning of this survey, the Company had an assumption that its Kenyan business portfolio would consist of (i) Healthy Kiosk, the profit models of which this survey had been planned to study and (ii) research and consulting service for multinational companies and international development donors through using the POS data on individual (but anonymous) Healthy Kiosk customers' purchase records and health information, and the Healthy Kiosk stores network. Although the business model of Healthy Kiosk seems to be viable with the above mentioned approach, the Company decided to suspend the research and consulting service and to focus its management resource to businesses for NCDs prevention.

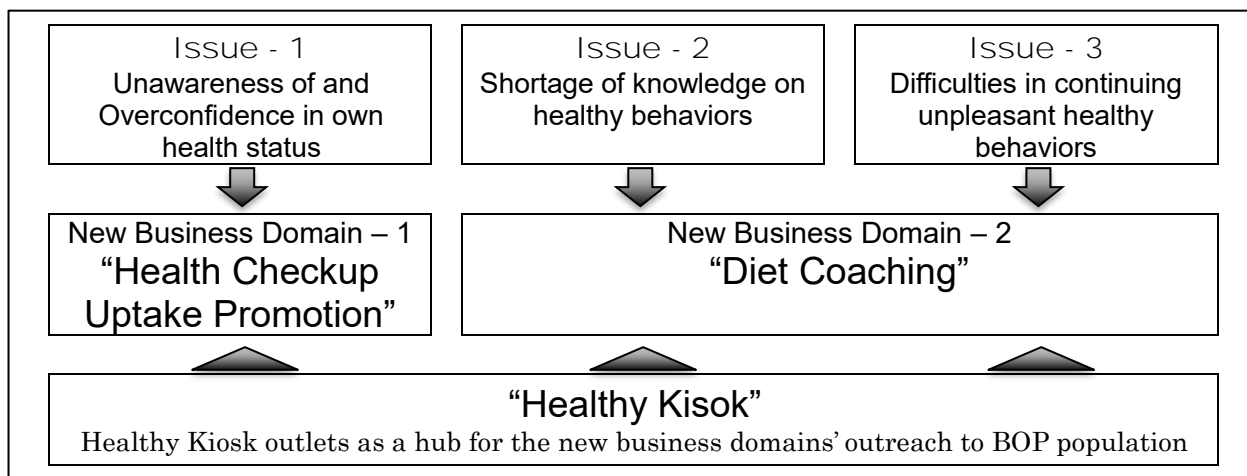


Figure 2-4 Major causal factors for the NCDs in Kenya and the Company's business lineup

2.3.2 New Business Domain – 1 “Health Checkup Uptake Promotion”

The purpose of “Health Checkup Uptake Promotion” is to increase uptake of health check-ups and life-style intervention. The Company provides the health checkup uptake promotion program, developed with social marketing know-hows, to private enterprises and private/public health insurance associations.

The Company has over 10 years of successful track record in Japan in increasing health check-ups uptake. The promotion programs have been installed to more than 250 local municipal government. Introducing such knowledge and experience gained in Japan, the Company plans to start with the middle class in Nairobi and then expand the target to BOP population in collaboration with public health insurance.

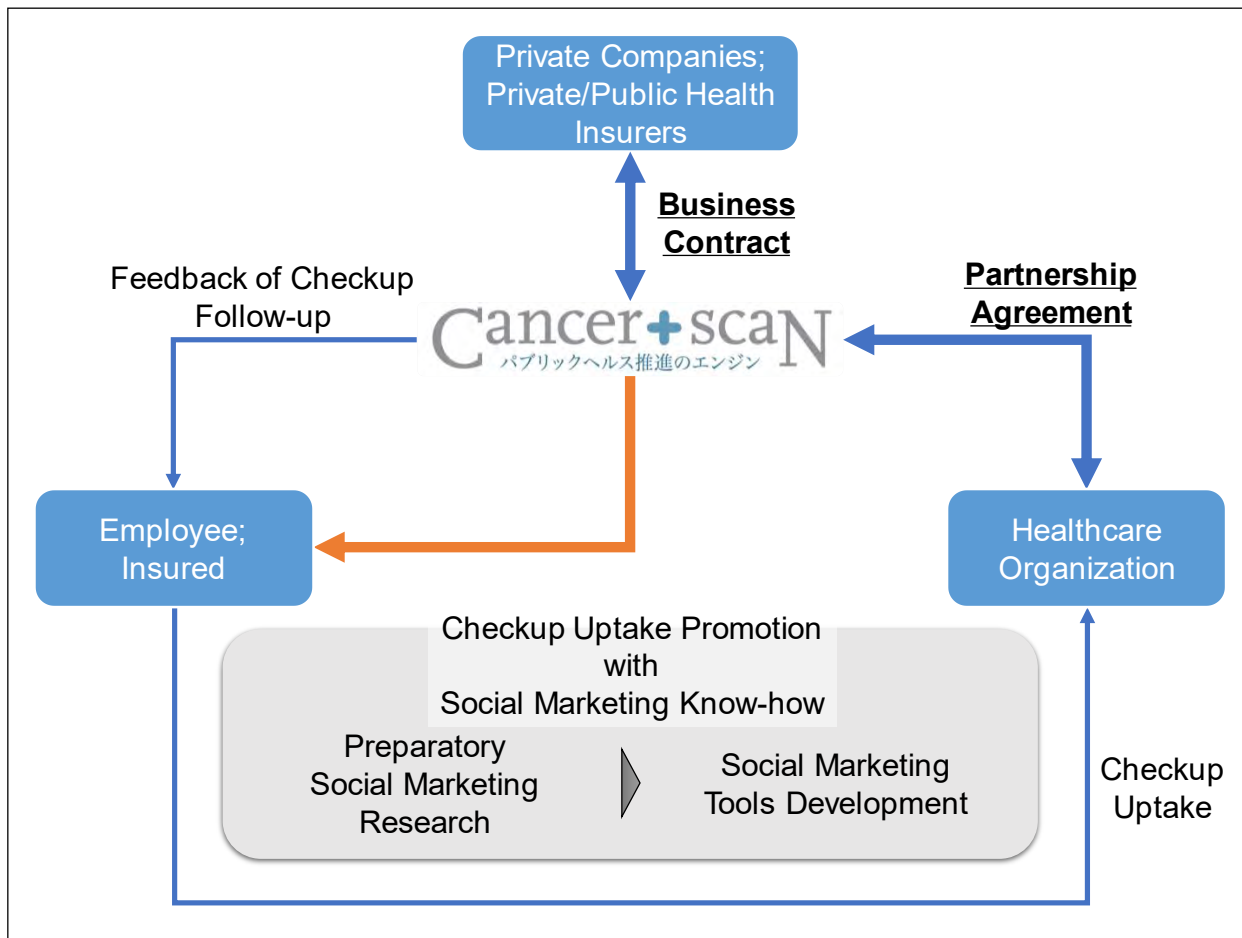


Figure 2-5 New Business Domain – 1 “Health Checkup Uptake Promotion”

2.3.3 New Business Domain – 2 “Diet Coaching”

Diet Coaching is a mobile-application-based weight management intervention. The application named Simway enables Community Health Volunteers (CHV) to approach high-risk individuals in the community and conduct health coaching easily and efficiently with the app.

A high-risk resident is registered by CHV to the application. The application has a function for personalized simulation. It suggests personalized weight reduction plan for each client. The client chooses diet behaviors for calorie reduction which are fully customized for Kenyan lifestyle. The client can self-monitor diet behavior goal every day, and easily communicate with CHV through a messaging function. CHV can track which one of their clients is doing / not doing / not reporting their behavior goals in real time, using the CHV application, and communicate with those clients through a messaging function.

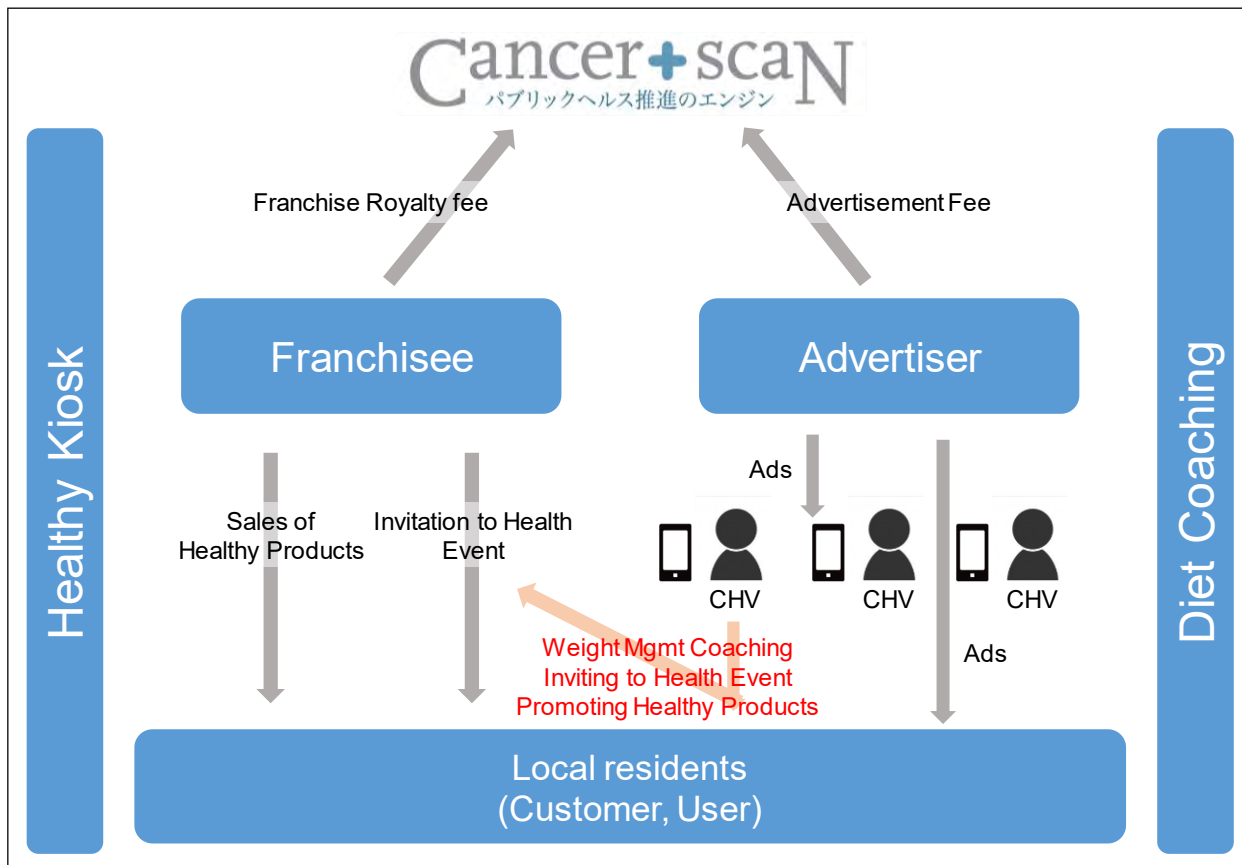


Figure 2-6 Business Model of Healthy Kiosk and Diet Coaching

2.3.4 Synergistic linkage between the Company's three business domains in Kenya

Both Healthy Kiosk and Diet Coaching are targeted to the BOP population and tightly linked to each other. Diet Coaching is also integrated to Health Checkup Uptake Promotion.

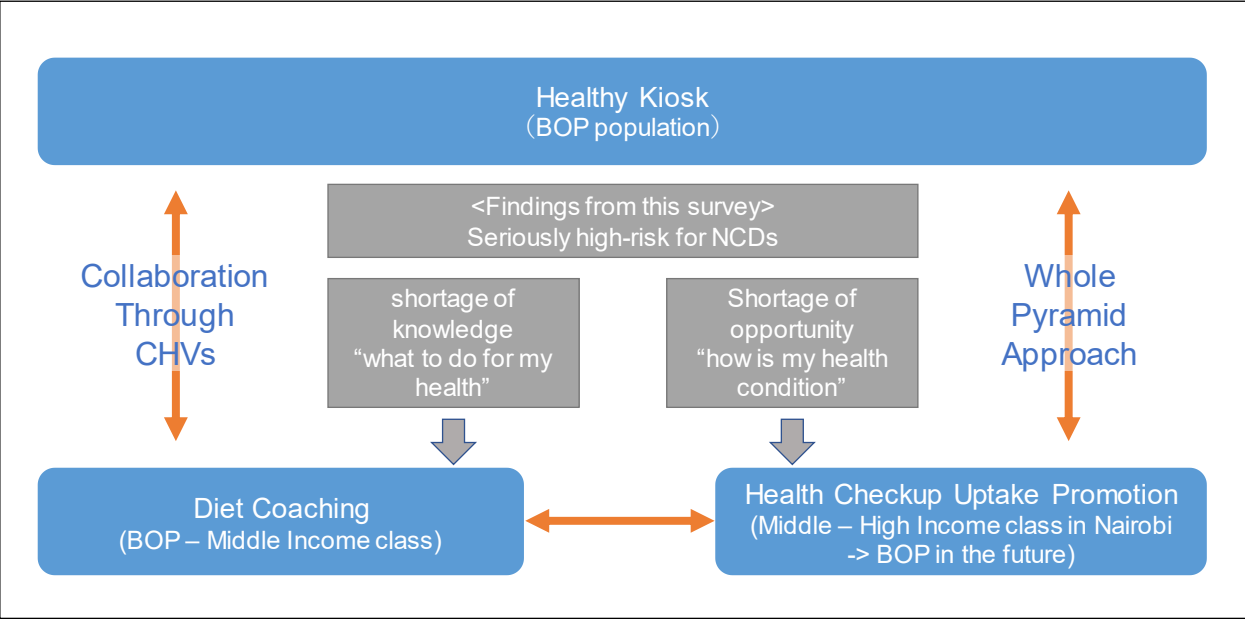


Figure 2-7 Synergistic linkage between the Company’s three business domains in Kenya

In the longer term, the Company’s business in Kenya will take “Whole-pyramid approach” in order to expand its coverage to the BOP population. When Health Checkup Uptake Promotion comes to approach to the BOP, Healthy Kiosk stores will be a hub for the linked business and interventions.

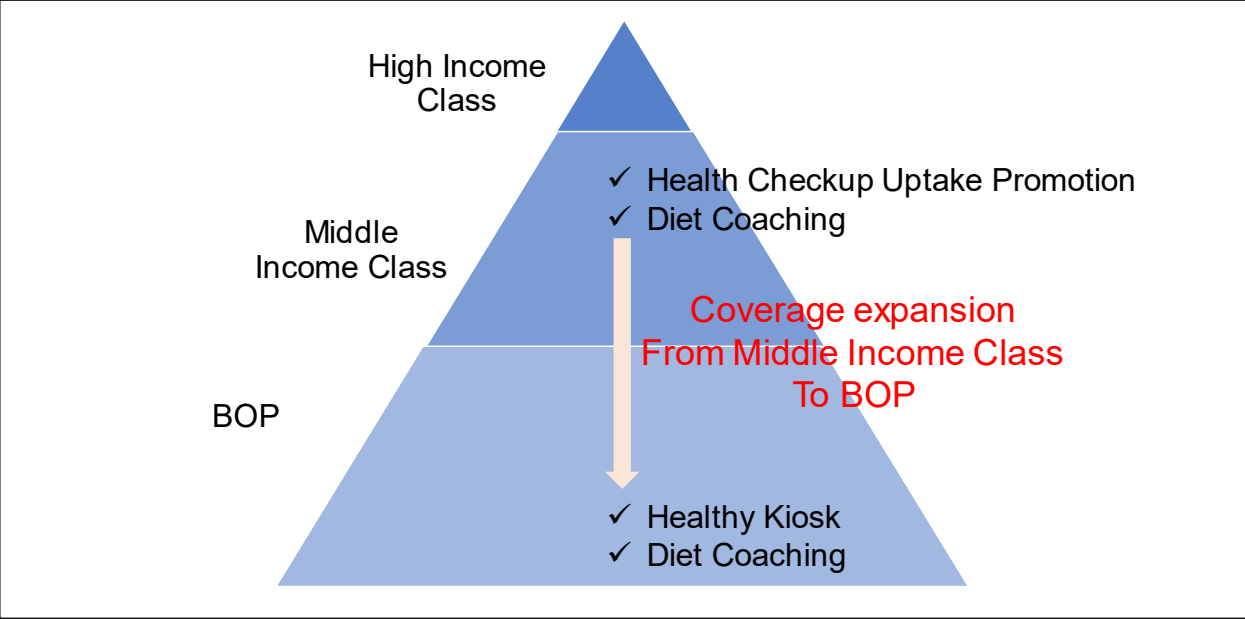


Figure 2-8 Whole-pyramid Approach

2.4 Remaining Challenges and Action to Be Taken

2.4.1 Paid Health Checkup Model

To take the whole-pyramid approach in the future, providing low-cost or free checkups is a key challenge. The Company is planning to verify the possibilities for that by collaborating with county governments, Ministry of Health, and public health insurance associations, utilizing the JICA scheme “SME ODA F/S.”

2.4.2 Healthy Products Model

The increase of the sales of healthy products is an immediate challenge for Healthy Kiosk to be profitable by itself. It is because only such sales increase can be a good reason for raising Healthy Kiosk's franchise royalty.

During the pilot implementation, smoothies and flesh juice were well sold, but there would be more if opportunity losses from a kiosk store's insufficient production capacity had been prevented. Store operation optimization for such products will have an impact on sales increase.

Additionally, functional foods could be additional eye-catcher of Healthy Kiosk, which contributes to expanding and stabilizing of this model.

2.4.3 Health Event Model

More effective approaches must be developed and installed to ordinary operation for CHV's promotion of health event and healthy products. The Company plans to conduct a 5-month pilot with limited number of CHVs and kiosks, and then applies its result to other areas.

2.5 Possibilities of collaborating with JICA projects

2.5.1 Health Sector Policy Loan for Attainment of the Universal Health Coverage

This loan is a policy-based program loan provided in the form of general budget support upon the achievement of high-priority policy actions which are necessary for the Government of Kenya to attain Universal Health Coverage (UHC) by 2030. The policy actions for this loan are: (i) drafting UHC-related policy documents, (ii) preparing manuals for UHC programs and securing the national budget for the Free Maternity Services, and (iii) strengthening the health system with county governments as service providers.

The UHC programs consist of Free Maternity Services, Health Insurance Subsidy Program, which promotes health insurance enrollment among the poor, and Result-Based Financing for primary care facilities. Among them the Company's business portfolio has potential to make a synergy impact collaborating with Health Insurance Subsidy Program and Result-Based Financing for primary care facilities.

2.5.2 Master's Degree and Internship Program of African Business Education Initiative for Youth (ABE Initiative)

The Company received as intern a Kenyan participant of this initiative for two weeks in August 2015. She conducted a research about Kenyans' recognition on NCDs. Another ex-participant worked on an internship for AfricaScan, the Company's subsidiary in Kenya, during the survey period. Her assignment was a research on needs and demand for NCDs prevention business in Nairobi.

The Company plans to receive participants of the initiative in 2017 and 2018 with a view to retaining as employee if the requirements are met.

2.5.3 Health Checkup Uptake Promotion (Verification Survey with the Private Sector for Disseminating Japanese Technologies)

The Company's Health Checkup Uptake Promotion business will accelerate in rolling out to the public sector if Ministry of Health of Kenya is a partner. For this idea, the Company will conduct a project formulation survey under the JICA's ODA F/S for SME scheme. The formulation survey includes optimizing and localizing the Company's uptake promotion program, selecting counterpart organizations, and formulating the detail design of the project.

The draft design of the project is described as below.

Table 2-2 Draft design of Health Checkup Uptake Promotion as ODA project

Objectives	To decrease NCDs morbidity in the pilot area through the increase of health checkup uptake.
Activities	1) Setting up a working group for planning of uptake promotion program 2) Selecting pilot area for the program 3) Demonstrating the program for middle class with private (insurance) companies 4) Introducing uptake promotion program for BOP as a trial
Inputs	Japanese experts (public health, marketing, nursing, laboratory technician)
Counterpart Organizations	Ministry of Health, National Hospital Insurance Fund